

Final

March 2015

Naval Base Coronado Coastal Campus

Environmental Impact Statement

U.S. Department of the Navy

Commander, Naval Special Warfare Command and Commanding Officer Naval Base Coronado

Volume 2 of 2: Appendices D and E



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Lead Agency:
Department of the Navy

Action Proponents:
Commander, Naval Special Warfare Command and
Commanding Officer Naval Base Coronado

Volume 2 of 2: Appendices D and E

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APPENDIX D

TRAFFIC AND CIRCULATION ANALYSIS

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**TRAFFIC ANALYSIS
DETAILED TABLES AND FIGURES**

Table D-1
Year 2024 (1 CVN) No Action Conditions –
Peak-Hour Intersection LOS Summary

Intersection		Traffic Control	2024 (1 CVN) No Action Alternative	
			AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	One-Way Stop	44.1 (E)	18.7 (C)
2	Fourth St (SR-75) & Pomona Ave	One-Way Stop	24.7 (C)	320.2 (F)
3	Orange Ave (SR-75) & Third St (SR-75)	Signalized	28.0 (C)	40.3 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	Signalized	37.3 (D)	59.6 (E)
5	Silver Strand Blvd/Orange Ave (SR-75) & Pomona Ave	Signalized	15.1 (B)	15.8 (B)
6	Silver Strand Blvd (SR-75) & Avenida De Las Arenas	Signalized	12.6 (B)	19.4 (B)
7	Silver Strand Blvd (SR-75) & Rendova Rd	Signalized	18.0 (B)	12.3 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	Signalized	50.2 (D)	70.7 (E)
9	Strand Way and Guadalcanal Road	Two-Way Stop	10.9 (B)	39.5 (E)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	Signalized	3.0 (A)	70.7 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Driveway	One-Way Stop	27.5 (D)	21.3 (C)
12	Silver Strand Blvd (SR-75) & Leyte Rd	Signalized	32.6 (C)	8.6 (A)
13	Silver Strand Blvd (SR-75) & Attu Ave	One-Way Stop	28.2 (D)	10.0 (A)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	Signalized	6.9 (A)	3.4 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	All-Way Stop	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	Signalized	25.8 (C)	10.6 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	Signalized	Does not exist under this scenario	
18	Silver Strand Blvd (SR-75) & Rainbow Dr	Signalized	79.7 (E)	25.0 (C)
19	7th St & Silver Strand Blvd (SR-75)	Signalized	114.9 (F)	67.1 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	Signalized	8.1 (A)	10.7 (B)
21	Driveway/Silver Strand Blvd & Palm Ave	Two-Way Stop	13.1 (B)	20.3 (C)
22	3rd St & Palm Ave	All-Way Stop	11.1 (B)	20.3 (C)

Intersection		Traffic Control	2024 (1 CVN) No Action Alternative	
			AM	PM
23	Palm Ave & Rainbow Dr	One-Way Stop	35.5 (E)	26.5 (D)
24	7th St & Palm Ave	Signalized	8.4 (A)	5.8 (A)
25	Delaware St & Palm Ave	One-Way Stop	12.0 (B)	12.7 (B)
26	9th St & Palm Ave (SR-75)	Signalized	40.1 (D)	48.4 (D)
27	Florida St & Palm Ave (SR-75)	Signalized	8.2 (A)	9.2 (A)
28	13th St & Palm Ave (SR-75)	Signalized	37.1 (D)	47.3 (D)
29	16th St & Palm Ave (SR-75)	Signalized	14.2 (B)	18.6 (B)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	Signalized	50.9 (D)	175.5 (F)
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	Signalized	32.2 (C)	45.6 (D)
32	I-5 NB Ramps & Palm Ave (SR-75)	Signalized	11.4 (B)	9.4 (A)
33	Silver Strand Blvd & YMCA Driveway	One-Way Stop	8.5 (A)	8.6 (A)

Note: Table reflects intersection delay (LOS). Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a one-way or two-way stop-controlled intersection, delay refers to the worst movement. LOS calculations are based on the methodology outlined in the 2000 Highway Capacity Manual and performed using Synchro 8.0. **Bold** values indicate intersections operating at LOS E or F.
SB=southbound; NB=northbound

Table D-2
Year 2024 (2 CVNs) No Action Conditions –
Peak-Hour Intersection LOS Summary

Intersection		Traffic Control	2024 (2 CVNs) No Action Alternative	
			AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	One-Way Stop	62.2 (F)	20.0 (C)
2	Fourth St (SR-75) & Pomona Ave	One-Way Stop	27.7 (D)	550.7 (F)
3	Orange Ave (SR-75) & Third St (SR-75)	Signalized	47.6 (D)	43.9 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	Signalized	38.3 (D)	106.1 (F)
5	Silver Strand Blvd/Orange Ave (SR-75) & Pomona Ave	Signalized	16.2 (B)	15.8 (B)
6	Silver Strand Blvd (SR-75) & Avenida De Las Arenas	Signalized	12.8 (B)	19.6 (B)
7	Silver Strand Blvd (SR-75) & Rendova Rd	Signalized	18.4 (B)	12.4 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	Signalized	50.7 (D)	72.4 (E)
9	Strand Way and Guadalcanal Road	Two-Way Stop	10.9 (B)	39.5 (E)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	Signalized	3.0 (A)	77.3 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Driveway	One-Way Stop	28.3 (D)	22.0 (C)
12	Silver Strand Blvd (SR-75) & Leyte Rd	Signalized	36.3 (D)	9.7 (A)
13	Silver Strand Blvd (SR-75) & Attu Ave	One-Way Stop	29.1 (D)	10.0 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	Signalized	7.1 (A)	3.4 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	All-Way Stop	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	Signalized	28.5 (C)	10.5 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	Signalized	Does not exist under this scenario	
18	Silver Strand Blvd (SR-75) & Rainbow Dr	Signalized	85.1 (F)	25.6 (C)
19	7th St & Silver Strand Blvd (SR-75)	Signalized	114.0 (F)	67.0 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	Signalized	8.0 (A)	10.7 (B)
21	Driveway/Silver Strand Blvd & Palm Ave	Two-Way Stop	13.1 (B)	20.3 (C)
22	3rd St & Palm Ave	All-Way Stop	11.1 (B)	20.3 (C)

Intersection		Traffic Control	2024 (2 CVNs) No Action Alternative	
			AM	PM
23	Palm Ave & Rainbow Dr	One-Way Stop	35.5 (E)	26.5 (D)
24	7th St & Palm Ave	Signalized	8.4 (A)	5.8 (A)
25	Delaware St & Palm Ave	One-Way Stop	12.0 (B)	12.7 (B)
26	9th St & Palm Ave (SR-75)	Signalized	40.3 (D)	49.0 (D)
27	Florida St & Palm Ave (SR-75)	Signalized	8.2 (A)	9.1 (A)
28	13th St & Palm Ave (SR-75)	Signalized	37.3 (D)	48.1 (D)
29	16th St & Palm Ave (SR-75)	Signalized	14.4 (B)	18.8 (B)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	Signalized	51.6 (D)	179.4 (F)
31	Palm Ave (SR-75) & I-5 SB Exit Ramp	Signalized	36.3 (D)	46.8 (D)
32	I-5 NB Ramps & Palm Ave (SR-75)	Signalized	11.8 (B)	9.4 (A)
33	Silver Strand Blvd & YMCA Driveway	One-Way Stop	8.5 (A)	8.6 (A)

Note: Table reflects intersection delay (LOS). Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a one-way or two-way stop-controlled intersection, delay refers to the worst movement. LOS calculations are based on the methodology outlined in the 2000 Highway Capacity Manual and performed using Synchro 8.0. **Bold** values indicate intersections operating at LOS E or F.
SB=southbound; NB=northbound

Table D-3
Year 2040 (1 CVN) No Action Alternative Conditions –
Peak-Hour Intersection LOS Summary

Intersection		Traffic Control	2040 (1 CVN) No Action Alternative	
			AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	One-Way Stop	44.7 (E)	18.8 (C)
2	Fourth St (SR-75) & Pomona Ave	One-Way Stop	24.9 (C)	325.8 (F)
3	Orange Ave (SR-75) & Third St (SR-75)	Signalized	28.1 (C)	40.3 (B)
4	Orange Ave (SR-75) & Fourth St (SR-75)	Signalized	37.4 (D)	60.4 (E)
5	Silver Strand Blvd/Orange Ave (SR-75) & Pomona Ave	Signalized	32.2 (C)	19.0 (B)
6	Silver Strand Blvd (SR-75) & Avenida De Las Arenas	Signalized	14.5 (B)	23.5 (C)
7	Silver Strand Blvd (SR-75) & Rendova Rd	Signalized	24.0 (C)	13.6 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	Signalized	59.1 (E)	103.9 (F)
9	Strand Way and Guadalcanal Road	Two-Way Stop	11.5 (B)	174.4 (F)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	Signalized	3.2 (A)	107.6 (F)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Driveway	One-Way Stop	35.3 (E)	25.0 (C)
12	Silver Strand Blvd (SR-75) & Leyte Rd	Signalized	68.5 (E)	10.4 (B)
13	Silver Strand Blvd (SR-75) & Attu Ave	One-Way Stop	37.7 (E)	10.3 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	Signalized	11.3 (B)	4.2 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	All-Way Stop	7.9 (A)	7.9 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	Signalized	60.5 (E)	10.3 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	Signalized	Does not exist under this scenario	
18	Silver Strand Blvd (SR-75) & Rainbow Dr	Signalized	125.4 (F)	32.4 (C)
19	7th St & Silver Strand Blvd (SR-75)	Signalized	149.1 (F)	81.9 (F)
20	Silver Strand Blvd (SR-75) & Delaware St	Signalized	8.2 (A)	11.0 (B)
21	Driveway/Silver Strand Blvd & Palm Ave	Two-Way Stop	13.3 (B)	21.0 (C)
22	3rd St & Palm Ave	All-Way Stop	11.3 (B)	21.2 (C)

Intersection		Traffic Control	2040 (1 CVN) No Action Alternative	
			AM	PM
23	Palm Ave & Rainbow Dr	One-Way Stop	37.8 (E)	28.1 (D)
24	7th St & Palm Ave	Signalized	8.5 (A)	5.8 (A)
25	Delaware St & Palm Ave	One-Way Stop	12.1 (B)	12.8 (B)
26	9th St & Palm Ave (SR-75)	Signalized	47.6 (D)	52.7 (D)
27	Florida St & Palm Ave (SR-75)	Signalized	8.8 (A)	9.2 (A)
28	13th St & Palm Ave (SR-75)	Signalized	39.1 (D)	53.9 (D)
29	16th St & Palm Ave (SR-75)	Signalized	15.3 (B)	21.5 (C)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	Signalized	76.0 (E)	212.7 (F)
31	Palm Ave (SR-75) & I-5 SB Exit Ramp	Signalized	48.6 (D)	75.7 (E)
32	I-5 NB Ramps & Palm Ave (SR-75)	Signalized	12.9 (B)	10.3 (B)
33	Silver Strand Blvd & YMCA Driveway	One-Way Stop	8.5 (A)	8.6 (A)

Note: Table reflects intersection delay (LOS). Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a one-way or two-way stop-controlled intersection, delay refers to the worst movement. LOS calculations are based on the methodology outlined in the 2000 Highway Capacity Manual and performed using Synchro 8.0. **Bold** values indicate intersections operating at LOS E or F.
SB=southbound; NB=northbound

Table D-4
Year 2040 (2 CVNs) No Action Alternative Conditions –
Peak-Hour Intersection LOS Summary

Intersection		Traffic Control	2040 (2 CVNs) No Action Alternative	
			AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	One-Way Stop	63.1 (F)	20.1 (C)
2	Fourth St (SR-75) & Pomona Ave	One-Way Stop	27.9 (D)	558.4 (F)
3	Orange Ave (SR-75) & Third St (SR-75)	Signalized	48.1 (D)	43.9 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	Signalized	38.3 (D)	107.3 (F)
5	Silver Strand Blvd/Orange Ave (SR-75) & Pomona Ave	Signalized	35.8 (D)	19.0 (B)
6	Silver Strand Blvd (SR-75) & Avenida De Las Arenas	Signalized	14.8 (B)	24.1 (C)
7	Silver Strand Blvd (SR-75) & Rendova Rd	Signalized	26.8 (C)	13.9 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	Signalized	60.4 (E)	107.4 (F)
9	Strand Way and Guadalcanal Road	Two-Way Stop	11.5 (B)	174.4 (F)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	Signalized	3.3 (A)	114.6 (F)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Driveway	One-Way Stop	36.5 (E)	25.9 (D)
12	Silver Strand Blvd (SR-75) & Leyte Rd	Signalized	74.2 (E)	10.5 (B)
13	Silver Strand Blvd (SR-75) & Attu Ave	One-Way Stop	39.2 (E)	10.3 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	Signalized	12.2 (B)	4.3 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	All-Way Stop	7.9 (A)	7.9 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	Signalized	66.8 (E)	10.3 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	Signalized	Does not exist under this scenario	
18	Silver Strand Blvd (SR-75) & Rainbow Dr	Signalized	132.3 (F)	35.1 (D)
19	7th St & Silver Strand Blvd (SR-75)	Signalized	148.0 (F)	81.7 (F)
20	Silver Strand Blvd (SR-75) & Delaware St	Signalized	8.2 (A)	11.0 (B)
21	Driveway/Silver Strand Blvd & Palm Ave	Two-Way Stop	13.3 (B)	21.0 (C)
22	3rd St & Palm Ave	All-Way Stop	11.3 (B)	21.2 (C)

Intersection		Traffic Control	2040 (2 CVNs) No Action Alternative	
			AM	PM
23	Palm Ave & Rainbow Dr	One-Way Stop	37.8 (E)	28.1 (D)
24	7th St & Palm Ave	Signalized	8.5 (A)	5.8 (A)
25	Delaware St & Palm Ave	One-Way Stop	12.1 (B)	12.8 (B)
26	9th St & Palm Ave (SR-75)	Signalized	49.7 (D)	53.6 (D)
27	Florida St & Palm Ave (SR-75)	Signalized	8.8 (A)	9.1 (A)
28	13th St & Palm Ave (SR-75)	Signalized	39.4 (D)	55.0 (E)
29	16th St & Palm Ave (SR-75)	Signalized	15.6 (B)	22.1 (C)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	Signalized	78.1 (E)	216.7 (F)
31	Palm Ave (SR-75) & I-5 SB Exit Ramp	Signalized	54.5 (D)	77.0 (E)
32	I-5 NB Ramps & Palm Ave (SR-75)	Signalized	13.2 (B)	10.4 (B)
33	Silver Strand Blvd & YMCA Driveway	One-Way Stop	8.5 (A)	8.6 (A)

Note: Table reflects intersection delay (LOS). Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a one-way or two-way stop-controlled intersection, delay refers to the worst movement. LOS calculations are based on the methodology outlined in the 2000 Highway Capacity Manual and performed using Synchro 8.0. **Bold** values indicate intersections operating at LOS E or F.
SB=southbound; NB=northbound

Table D-5
“North Only” Construction Scenario – Alternative 1
Intersection Traffic Analysis Summary with 2 CVNs

INTERSECTION		2015		2016		2017	
		AM	PM	AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	60.5 (F)	19.8 (C)	60.6 (F)	19.8 (C)	61.7 (F)	19.9 (C)
2	Fourth St (SR-75) & Pomona Ave	26.7 (D)	ECL (F)	26.7 (D)	ECL (F)	26.8 (D)	ECL (F)
3	Orange Ave (SR-75) & Third St (SR-75)	45.3 (D)	41.1 (D)	45.3 (D)	41.1 (D)	46.8 (D)	42.4 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	38 (D)	105.8 (F)	38 (D)	105.8 (F)	38.2 (D)	105.7 (F)
5	Silver Strand Blvd (SR-75)/Orange Ave & Pomona Ave	12.7 (B)	14.3 (B)	12.9 (B)	14.4 (B)	13.2 (B)	14.7 (B)
6	Silver Strand Blvd (SR-75) & Avenida de las Arenas	11.8 (B)	17.3 (B)	11.9 (B)	17.5 (B)	12.1 (B)	17.8 (B)
7	Silver Strand Blvd (SR-75) & Rendova Rd	16.8 (B)	11.2 (B)	17 (B)	11.3 (B)	16.9 (B)	11.5 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	46.5 (D)	57.2 (E)	46.9 (D)	58.6 (E)	47.5 (D)	60.4 (E)
9	Strand Wy & Guadalcanal Rd	10.5 (B)	18 (C)	10.5 (B)	18.4 (C)	10.8 (B)	19.6 (C)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	2.8 (A)	57.1 (E)	2.8 (A)	59 (E)	3 (A)	62.0 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	24.7 (C)	19 (C)	24.9 (C)	19.2 (C)	25.5 (D)	20.7 (C)
12	Silver Strand Blvd (SR-75) & Leyte Rd	23.8 (C)	8.2 (A)	24.8 (C)	8.2 (A)	25.2 (C)	8.4 (A)
13	Silver Strand Blvd (SR-75) & Attu Ave	25 (D)	9.9 (A)	25.3 (D)	9.9 (A)	25.7 (D)	10.1 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	5.9 (A)	3.3 (A)	5.9 (A)	3.3 (A)	6 (A)	3.3 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.7 (A)	7.7 (A)	7.7 (A)	7.7 (A)	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	19.7 (B)	10.5 (B)	20.1 (C)	10.5 (B)	20.7 (C)	10.3 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	8 (A)	ECL (F)	9.1 (A)	ECL (F)	39.5 (E)	ECL (F)
	with signal improvement	12 (B)	6.5 (A)	8.8 (A)	12.5 (B)	8.8 (A)	18.9 (B)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	30.1 (C)	22.6 (C)	39.9 (D)	26.4 (C)	55.0 (D)	34.2 (C)

INTERSECTION		2015		2016		2017	
		AM	PM	AM	PM	AM	PM
19	7th St & Silver Strand Blvd (SR-75)	85.5 (F)	59.8 (E)	94.4 (F)	62.1 (E)	96.0 (F)	63.8 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	7.5 (A)	10.6 (B)	7.3 (A)	10.9 (B)	7.3 (A)	12.2 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	13.1 (B)	19.7 (C)	13.1 (B)	19.7 (C)	13.1 (B)	19.9 (C)
22	3rd St & Palm Ave	10.9 (B)	19.1 (C)	10.9 (B)	19.1 (C)	10.9 (B)	19.3 (C)
23	Palm Ave & Rainbow Dr	32.4 (D)	25.2 (D)	32.5 (D)	25.3 (D)	32.8 (D)	25.4 (D)
24	7th St & Palm Ave	8.4 (A)	5.8 (A)	8.4 (A)	5.8 (A)	8.4 (A)	5.8 (A)
25	Delaware St & Palm Ave	11.9 (B)	14.9 (B)	12.1 (B)	16.7 (C)	12.1 (B)	17.1 (C)
26	9th St & Palm Ave (SR-75)	40.5 (D)	46.6 (D)	43.1 (D)	48.5 (D)	48.2 (D)	51.3 (D)
27	Florida St & Palm Ave (SR-75)	7.5 (A)	8.4 (A)	7.7 (A)	8.2 (A)	7.8 (A)	7.9 (A)
28	13th St & Palm Ave (SR-75)	37.4 (D)	46.3 (D)	38.4 (D)	49.3 (D)	39.7 (D)	52.1 (D)
29	16th St & Palm Ave (SR-75)	13.9 (B)	18.8 (B)	14.4 (B)	20.1 (C)	15.2 (B)	22.4 (C)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	45.8 (D)	175.4 (F)	48.9 (D)	ECL (F)	53.7 (D)	ECL (F)
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	32 (C)	34.1 (C)	35.7 (D)	35.8 (D)	41.1 (D)	38.4 (D)
32	I-5 NB Ramps & Palm Ave (SR-75)	11.2 (B)	8.7 (A)	11.4 (B)	8.9 (A)	11.8 (B)	9 (A)
33	Silver Strand Blvd & YMCA Dwy	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction.
The signal improvement at intersection 17 include an exclusive southbound right-turn lane and extension of the existing northbound right-turn lane.

Table D-5
“North Only” Construction Scenario – Alternative 1
Intersection Traffic Analysis Summary with 2 CVNs (cont.)

INTERSECTION		2018		2019		2020	
		AM	PM	AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	62.2 (F)	20 (C)	67.5 (F)	20.3 (C)	63.8 (F)	20.1 (C)
2	Fourth St (SR-75) & Pomona Ave	26.9 (D)	ECL (F)	27.5 (D)	ECL (F)	27.2 (D)	ECL (F)
3	Orange Ave (SR-75) & Third St (SR-75)	47.8 (D)	43 (D)	55.6 (E)	50.1 (D)	49.9 (D)	44.9 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	38.3 (D)	105.7 (F)	39.4 (D)	105.6 (F)	38.6 (D)	105.5 (F)
5	Silver Strand Blvd (SR-75)/Orange Ave & Pomona Ave	13.4 (B)	15 (B)	16.7 (B)	16.7 (B)	13.9 (B)	15.4 (B)
6	Silver Strand Blvd (SR-75) & Avenida de las Arenas	12.2 (B)	18.1 (B)	13.1 (B)	20.5 (C)	12.5 (B)	18.8 (B)
7	Silver Strand Blvd (SR-75) & Rendova Rd	17 (B)	11.6 (B)	17.3 (B)	12.9 (B)	17.1 (B)	12.1 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	47.9 (D)	61.8 (E)	51.6 (D)	73.9 (E)	49 (D)	66.3 (E)
9	Strand Wy & Guadalcanal Rd	10.9 (B)	28.4 (D)	12.2 (B)	44.0 (E)	11.2 (B)	32.8 (D)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	3.1 (A)	64.3 (E)	3.8 (A)	79.2 (E)	3.4 (A)	69.6 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	25.9 (D)	21.4 (C)	28 (D)	28.5 (D)	26.7 (D)	23.6 (C)
12	Silver Strand Blvd (SR-75) & Leyte Rd	26.2 (C)	8.5 (A)	32.6 (C)	10.2 (B)	28.2 (C)	8.7 (A)
13	Silver Strand Blvd (SR-75) & Attu Ave	26.1 (D)	10.2 (B)	28.8 (D)	11.2 (B)	27.1 (D)	10.5 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	6 (A)	3.4 (A)	6.3 (A)	3.7 (A)	6.1 (A)	3.4 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	21.5 (C)	10.3 (B)	28.1 (C)	10.1 (B)	23.5 (C)	10.2 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	97.5 (F)	ECL (F)	ECL (F)	ECL (F)	ECL (F)	ECL (F)
	with signal improvement	8.2 (A)	19.3 (B)	15.4 (B)	36.5 (D)	16.1 (B)	80.0 (F)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	61.1 (E)	37.9 (D)	84.9 (F)	54.5 (D)	141.1 (F)	113.1 (F)

INTERSECTION		2018		2019		2020	
		AM	PM	AM	PM	AM	PM
19	7th St & Silver Strand Blvd (SR-75)	98.2 (F)	64.6 (E)	108.9 (F)	69.8 (E)	148.5 (F)	107.2 (F)
20	Silver Strand Blvd (SR-75) & Delaware St	7.2 (A)	12.8 (B)	7.4 (A)	14.2 (B)	7.4 (A)	41.2 (D)
21	Dwy/Silver Strand Blvd & Palm Ave	13.1 (B)	19.9 (C)	13.3 (B)	20.4 (C)	13.1 (B)	20.1 (C)
22	3rd St & Palm Ave	11 (B)	19.4 (C)	11.1 (B)	20.1 (C)	11 (B)	19.6 (C)
23	Palm Ave & Rainbow Dr	33.1 (D)	25.5 (D)	34.9 (D)	26.6 (D)	33.6 (D)	25.8 (D)
24	7th St & Palm Ave	8.4 (A)	5.8 (A)	8.5 (A)	5.8 (A)	8.4 (A)	5.8 (A)
25	Delaware St & Palm Ave	11.9 (B)	16.9 (C)	12 (B)	12.7 (B)	12 (B)	25.3 (D)
26	9th St & Palm Ave (SR-75)	50.5 (D)	52.4 (D)	59.9 (E)	67.7 (E)	105.6 (F)	90 (F)
27	Florida St & Palm Ave (SR-75)	7.9 (A)	7.9 (A)	8.2 (A)	7.9 (A)	8.5 (A)	9.3 (A)
28	13th St & Palm Ave (SR-75)	40.2 (D)	53.5 (D)	41.8 (D)	67.4 (E)	58 (E)	81.1 (F)
29	16th St & Palm Ave (SR-75)	15.6 (B)	23.4 (C)	16.7 (B)	28.4 (C)	28.8 (C)	58.0 (E)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	54.3 (D)	ECL (F)	66.6 (E)	ECL (F)	90.4 (F)	ECL (F)
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	43.2 (D)	39.3 (D)	54.4 (D)	54 (D)	91.0 (F)	44.0 (D)
32	I-5 NB Ramps & Palm Ave (SR-75)	11.9 (B)	9.1 (A)	12.6 (B)	9.5 (A)	12.8 (B)	9.3 (A)
33	Silver Strand Blvd & YMCA Dwy	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction.
The signal improvement at intersection 17 include an exclusive southbound right-turn lane and extension of the existing northbound right-turn lane.

Table D-5
“North Only” Construction Scenario – Alternative 1
Intersection Traffic Analysis Summary with 2 CVNs (cont.)

INTERSECTION		2021		2022		2023	
		AM	PM	AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	64.9 (F)	20.2 (C)	66.6 (F)	20.3 (C)	67.5 (F)	20.3 (C)
2	Fourth St (SR-75) & Pomona Ave	27.3 (D)	ECL (F)	27.5 (D)	ECL (F)	27.5 (D)	ECL (F)
3	Orange Ave (SR-75) & Third St (SR-75)	51.8 (D)	46.4 (D)	54.2 (D)	48.9 (D)	55.6 (E)	50.1 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	38.8 (D)	105.4 (F)	39.2 (D)	105.4 (F)	39.4 (D)	105.6 (F)
5	Silver Strand Blvd (SR-75)/Orange Ave & Pomona Ave	15.9 (B)	15.8 (B)	16.3 (B)	16.3 (B)	16.7 (B)	16.7 (B)
6	Silver Strand Blvd (SR-75) & Avenida de las Arenas	12.7 (B)	19.3 (B)	13 (B)	20 (C)	13.1 (B)	20.5 (C)
7	Silver Strand Blvd (SR-75) & Rendova Rd	17.1 (B)	12.2 (B)	17.1 (B)	12.5 (B)	17.3 (B)	12.9 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	49.9 (D)	68.5 (E)	50.7 (D)	71.9 (E)	51.6 (D)	73.9 (E)
9	Strand Wy & Guadalcanal Rd	11.6 (B)	35.3 (E)	12.0 (B)	40.1 (E)	12.2 (B)	44.0 (E)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	3.6 (A)	72.9 (E)	3.7 (A)	76.4 (E)	3.8 (A)	79.2 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	27.1 (D)	25.5 (D)	27.5 (D)	28.2 (D)	28 (D)	28.5 (D)
12	Silver Strand Blvd (SR-75) & Leyte Rd	29.5 (C)	8.8 (A)	30.9 (C)	9.1 (A)	32.6 (C)	10.2 (B)
13	Silver Strand Blvd (SR-75) & Attu Ave	27.6 (D)	10.7 (B)	28.1 (D)	11 (B)	28.8 (D)	11.2 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	6.2 (A)	3.5 (A)	6.2 (A)	3.6 (A)	6.3 (A)	3.7 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	24.8 (C)	10.1 (B)	26.4 (C)	10.1 (B)	28.1 (C)	10.1 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	ECL (F)	ECL (F)	ECL (F)	ECL (F)	ECL (F)	ECL (F)
	with signal improvement	10.8 (B)	72.5 (E)	10.1 (B)	37.0 (D)	9.6 (A)	29 (C)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	135.7 (F)	106.8 (F)	97.3 (F)	65.7 (E)	84.9 (F)	54.5 (D)

INTERSECTION		2021		2022		2023	
		AM	PM	AM	PM	AM	PM
19	7th St & Silver Strand Blvd (SR-75)	144 (F)	102.2 (F)	112.8 (F)	74.7 (E)	108.9 (F)	69.8 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	7.3 (A)	35.1 (D)	7.3 (A)	16 (B)	7.4 (A)	14.2 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	13.2 (B)	20.2 (C)	13.2 (B)	20.3 (C)	13.3 (B)	20.4 (C)
22	3rd St & Palm Ave	11 (B)	19.8 (C)	11.1 (B)	19.9 (C)	11.1 (B)	20.1 (C)
23	Palm Ave & Rainbow Dr	33.8 (D)	25.9 (D)	34.3 (D)	26.4 (D)	34.9 (D)	26.6 (D)
24	7th St & Palm Ave	8.4 (A)	5.8 (A)	8.5 (A)	5.8 (A)	8.5 (A)	5.8 (A)
25	Delaware St & Palm Ave	12 (B)	21.6 (C)	12 (B)	14.6 (B)	12 (B)	12.7 (B)
26	9th St & Palm Ave (SR-75)	100.4 (F)	85.7 (F)	69.2 (E)	75.3 (E)	59.9 (E)	67.7 (E)
27	Florida St & Palm Ave (SR-75)	8.5 (A)	9 (A)	8.3 (A)	8 (A)	8.2 (A)	7.9 (A)
28	13th St & Palm Ave (SR-75)	55.1 (E)	81.1 (F)	43.7 (D)	70.8 (E)	41.8 (D)	67.4 (E)
29	16th St & Palm Ave (SR-75)	26.6 (C)	54.2 (D)	17.9 (B)	33.6 (C)	16.7 (B)	28.4 (C)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	88.0 (F)	ECL (F)	71.1 (E)	ECL (F)	66.6 (E)	ECL (F)
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	86.6 (F)	47 (D)	60.3 (E)	51 (D)	54.4 (D)	54.0 (D)
32	I-5 NB Ramps & Palm Ave (SR-75)	12.8 (B)	9.4 (A)	12.5 (B)	9.5 (A)	12.6 (B)	9.5 (A)
33	Silver Strand Blvd & YMCA Dwy	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction.
The signal improvement at intersection 17 include an exclusive southbound right-turn lane and extension of the existing northbound right-turn lane.

Table D-6
“Construction North, Operations South” Construction Scenario –
Alternative 1 Intersection Traffic Analysis Summary with 2 CVNs

INTERSECTION		2015		2016		2017	
		AM	PM	AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	60.5 (F)	19.8 (C)	60.6 (F)	19.8 (C)	61.3 (F)	19.9 (C)
2	Fourth St (SR-75) & Pomona Ave	26.7 (D)	ECL (F)	26.7 (D)	ECL (F)	26.8 (D)	ECL (F)
3	Orange Ave (SR-75) & Third St (SR-75)	45.3 (D)	41.1 (D)	45.3 (D)	41.1 (D)	46.2 (D)	42.1 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	38.0 (D)	105.8 (F)	38.0 (D)	105.8 (F)	38.1 (D)	105.8 (F)
5	Silver Strand Blvd (SR-75)/Orange Ave & Pomona Ave	12.7 (B)	14.3 (B)	12.9 (B)	14.4 (B)	13.2 (B)	14.6 (B)
6	Silver Strand Blvd (SR-75) & Avenida de las Arenas	11.8 (B)	17.3 (B)	11.9 (B)	17.5 (B)	12.1 (B)	17.7 (B)
7	Silver Strand Blvd (SR-75) & Rendova Rd	16.8 (B)	11.2 (B)	17.0 (B)	11.3 (B)	16.9 (B)	11.4 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	46.5 (D)	57.2 (E)	46.9 (D)	58.6 (E)	47.4 (D)	60.2 (E)
9	Strand Wy & Guadalcanal Rd	10.5 (B)	18.0 (C)	10.5 (B)	18.4 (C)	10.8 (B)	19.6 (C)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	2.8 (A)	57.1 (E)	2.8 (A)	59.0 (E)	3.0 (A)	61.8 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	24.7 (C)	19.0 (C)	24.9 (C)	19.2 (C)	25.5 (D)	20.3 (C)
12	Silver Strand Blvd (SR-75) & Leyte Rd	23.8 (C)	8.2 (A)	24.8 (C)	8.2 (A)	25.3 (C)	8.4 (A)
13	Silver Strand Blvd (SR-75) & Attu Ave	25.0 (D)	9.9 (A)	25.3 (D)	9.9 (A)	25.7 (D)	10.0 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	5.9 (A)	3.3 (A)	5.9 (A)	3.3 (A)	6.0 (A)	3.3 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.7 (A)	7.7 (A)	7.7 (A)	7.7 (A)	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	19.7 (B)	10.5 (B)	20.1 (C)	10.5 (B)	20.7 (C)	10.4 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	8.0 (A)	ECL (F)	9.1 (A)	ECL (F)	9.2 (A)	ECL (F)
	with signal improvement	12.0 (B)	6.5 (A)	8.8 (A)	12.2 (B)	10.2 (B)	13.0 (B)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	30.1 (C)	22.6 (C)	39.6 (D)	26.2 (C)	43.8 (D)	32.4 (C)

INTERSECTION		2015		2016		2017	
		AM	PM	AM	PM	AM	PM
19	7th St & Silver Strand Blvd (SR-75)	85.5 (F)	59.8 (E)	94.4 (F)	62.1 (E)	94.9 (F)	62.5 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	7.5 (A)	10.6 (B)	7.4 (A)	10.9 (B)	8.2 (A)	11.3 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	13.1 (B)	19.7 (C)	13.1 (B)	20.1 (C)	14.6 (B)	59.0 (F)
22	3rd St & Palm Ave	10.9 (B)	19.1 (C)	10.9 (B)	19.5 (C)	13.4 (B)	45.1 (E)
23	Palm Ave & Rainbow Dr	32.4 (D)	25.2 (D)	32.7 (D)	25.6 (D)	45.3 (E)	38.9 (E)
24	7th St & Palm Ave	8.4 (A)	5.8 (A)	8.4 (A)	5.8 (A)	8.5 (A)	5.7 (A)
25	Delaware St & Palm Ave	11.9 (B)	14.9 (B)	12.1 (B)	16.8 (C)	12.2 (B)	19.2 (C)
26	9th St & Palm Ave (SR-75)	40.5 (D)	46.6 (D)	43.1 (D)	48.5 (D)	49.0 (D)	51.7 (D)
27	Florida St & Palm Ave (SR-75)	7.5 (A)	8.4 (A)	7.6 (A)	8.2 (A)	7.8 (A)	7.9 (A)
28	13th St & Palm Ave (SR-75)	37.4 (D)	46.3 (D)	38.4 (D)	49.3 (D)	39.8 (D)	52.6 (D)
29	16th St & Palm Ave (SR-75)	13.9 (B)	18.8 (B)	14.5 (B)	20.1 (C)	15.2 (B)	22.8 (C)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	45.8 (D)	175.4 (F)	48.9 (D)	ECL (F)	54.4 (D)	ECL (F)
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	32.0 (C)	34.1 (C)	35.7 (D)	35.8 (D)	41.5 (D)	38.7 (D)
32	I-5 NB Ramps & Palm Ave (SR-75)	11.2 (B)	8.7 (A)	11.4 (B)	8.9 (A)	11.8 (B)	9.0 (A)
33	Silver Strand Blvd & YMCA Dwy	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)	8.7 (A)	9.6 (A)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction.
The signal improvement at intersection 17 include an exclusive southbound right-turn lane and extension of the existing northbound right-turn lane.

Table D-6
“Construction North, Operations South” Construction Scenario –
Alternative 1 Intersection Traffic Analysis Summary with 2 CVNs (cont.)

INTERSECTION		2018		2019		2020	
		AM	PM	AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	61.6 (F)	19.9 (C)	61.9 (F)	20.0 (C)	62.5 (F)	20.0 (C)
2	Fourth St (SR-75) & Pomona Ave	26.8 (D)	ECL (F)	27.1 (D)	ECL (F)	27.1 (D)	ECL (F)
3	Orange Ave (SR-75) & Third St (SR-75)	46.9 (D)	42.7 (D)	47.4 (D)	43.2 (D)	48.1 (D)	44.1 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	38.2 (D)	105.8 (F)	38.2 (D)	105.7 (F)	38.3 (D)	105.7 (F)
5	Silver Strand Blvd (SR-75)/Orange Ave & Pomona Ave	13.4 (B)	14.9 (B)	13.7 (B)	15.1 (B)	13.9 (B)	15.3 (B)
6	Silver Strand Blvd (SR-75) & Avenida de las Arenas	12.2 (B)	17.9 (B)	12.2 (B)	18.1 (B)	12.4 (B)	18.5 (B)
7	Silver Strand Blvd (SR-75) & Rendova Rd	17.0 (B)	11.6 (B)	17.1 (B)	11.8 (B)	17.2 (B)	11.9 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	47.8 (D)	61.6 (E)	48.3 (D)	63.0 (E)	48.7 (D)	65.6 (E)
9	Strand Wy & Guadalcanal Rd	10.9 (B)	28.4 (D)	11.0 (B)	29.8 (D)	11.2 (B)	32.8 (D)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	3.1 (A)	63.8 (E)	3.1 (A)	66.3 (E)	3.4 (A)	68.8 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	25.8 (D)	20.8 (C)	26.2 (D)	21.6 (C)	26.6 (D)	22.5 (C)
12	Silver Strand Blvd (SR-75) & Leyte Rd	26.3 (C)	8.4 (A)	27.2 (C)	8.5 (A)	28.3 (C)	8.6 (A)
13	Silver Strand Blvd (SR-75) & Attu Ave	26.0 (D)	10.1 (B)	26.6 (D)	10.2 (B)	27 (D)	10.3 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	6.1 (A)	3.3 (A)	6.1 (A)	3.4 (A)	6.2 (A)	3.4 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	21.4 (C)	10.3 (B)	22.5 (C)	10.3 (B)	23.4 (C)	10.3 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	8.6 (A)	ECL (F)	9.2 (A)	ECL (F)	10.6 (B)	ECL (F)
	with signal improvement	8.2 (A)	9.5 (A)	7.4 (A)	14.9 (B)	15.5 (B)	30.2 (C)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	44.2 (D)	34.8 (C)	65.9 (E)	57.4 (E)	99.2 (F)	97.2 (F)

INTERSECTION		2018		2019		2020	
		AM	PM	AM	PM	AM	PM
19	7th St & Silver Strand Blvd (SR-75)	96.4 (F)	62.6 (E)	100.1 (F)	65.7 (E)	116.4 (F)	77.9 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	8.6 (A)	11.4 (B)	8.8 (A)	13.5 (B)	9.3 (A)	18.0 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	15.3 (C)	111.8 (F)	16.3 (C)	ECL (F)	17.9 (C)	ECL (F)
22	3rd St & Palm Ave	15.2 (C)	64.4 (F)	19 (C)	95.6 (F)	30.7 (D)	145.8 (F)
23	Palm Ave & Rainbow Dr	55.1 (F)	48.9 (E)	76.1 (F)	69.8 (F)	105.4 (F)	117.6 (F)
24	7th St & Palm Ave	8.6 (A)	5.7 (A)	8.7 (A)	5.7 (A)	8.8 (A)	5.7 (A)
25	Delaware St & Palm Ave	12.1 (B)	19.9 (C)	12.1 (B)	25.3 (D)	12.2 (B)	36.0 (E)
26	9th St & Palm Ave (SR-75)	51.9 (D)	53.2 (D)	73.7 (E)	65.7 (E)	110.6 (F)	94.1 (F)
27	Florida St & Palm Ave (SR-75)	7.9 (A)	7.9 (A)	8.2 (A)	8.2 (A)	8.6 (A)	9.5 (A)
28	13th St & Palm Ave (SR-75)	40.4 (D)	54.3 (D)	44.8 (D)	64.4 (E)	61.0 (E)	84.7 (F)
29	16th St & Palm Ave (SR-75)	15.8 (B)	24.0 (C)	18.6 (B)	36.1 (D)	31.1 (C)	61.7 (E)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	55.4 (E)	ECL (F)	69.7 (E)	ECL (F)	93.7 (F)	ECL (F)
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	44.0 (D)	39.7 (D)	61.7 (E)	41.9 (D)	96.1 (F)	44.5 (D)
32	I-5 NB Ramps & Palm Ave (SR-75)	11.9 (B)	9.1 (A)	12.2 (B)	9.3 (A)	12.8 (B)	9.3 (A)
33	Silver Strand Blvd & YMCA Dwy	8.7 (A)	10.0 (B)	8.8 (A)	10.6 (B)	8.9 (A)	11.6 (B)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction.
The signal improvement at intersection 17 include an exclusive southbound right-turn lane and extension of the existing northbound right-turn lane.

Table D-6
“Construction North, Operations South” Construction Scenario –
Alternative 1 Intersection Traffic Analysis Summary with 2 CVNs (cont.)

INTERSECTION		2021		2022		2023	
		AM	PM	AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	63.2 (F)	20.0 (C)	64.2 (F)	20.1 (C)	64.6 (F)	20.2 (C)
2	Fourth St (SR-75) & Pomona Ave	27.2 (D)	ECL (F)	27.2 (D)	ECL (F)	27.3 (D)	ECL (F)
3	Orange Ave (SR-75) & Third St (SR-75)	49 (D)	45.5 (D)	50.5 (D)	47.6 (D)	51.5 (D)	48.7 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	38.5 (D)	105.6 (F)	38.7 (D)	105.5 (F)	38.8 (D)	105.6 (F)
5	Silver Strand Blvd (SR-75)/Orange Ave & Pomona Ave	14.3 (B)	15.5 (B)	16.2 (B)	15.9 (B)	16.8 (B)	16.1 (B)
6	Silver Strand Blvd (SR-75) & Avenida de las Arenas	12.6 (B)	18.9 (B)	12.7 (B)	19.4 (B)	12.9 (B)	19.7 (B)
7	Silver Strand Blvd (SR-75) & Rendova Rd	17.3 (B)	12.1 (B)	17.3 (B)	12.2 (B)	17.5 (B)	12.5 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	49.5 (D)	67.7 (E)	50.1 (D)	70.2 (E)	50.8 (D)	72.5 (E)
9	Strand Wy & Guadalcanal Rd	11.6 (B)	35.3 (E)	12 (B)	40.1 (E)	12.2 (B)	44.0 (E)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	3.6 (A)	71.7 (E)	3.7 (A)	74.6 (E)	3.8 (A)	77.2 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	27 (D)	23.8 (C)	27.4 (D)	25.6 (D)	27.8 (D)	25.5 (D)
12	Silver Strand Blvd (SR-75) & Leyte Rd	29.7 (C)	8.7 (A)	31.1 (C)	8.9 (A)	32.8 (C)	9 (A)
13	Silver Strand Blvd (SR-75) & Attu Ave	27.4 (D)	10.5 (B)	27.9 (D)	10.7 (B)	28.6 (D)	10.8 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	6.3 (A)	3.5 (A)	6.3 (A)	3.5 (A)	6.5 (A)	3.5 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	24.5 (C)	10.2 (B)	25.9 (C)	10.1 (B)	27.3 (C)	10.1 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	10 (B)	ECL (F)	8.6 (A)	ECL (F)	0.0 (A)	0.0 (A)
	with signal improvement	7.9 (A)	18.3 (B)	5.3 (A)	5.2 (A)	7.4 (A)	14.9 (B)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	80.9 (F)	81.7 (F)	37.4 (D)	38.4 (D)	65.9 (E)	57.4 (E)

INTERSECTION		2021		2022		2023	
		AM	PM	AM	PM	AM	PM
19	7th St & Silver Strand Blvd (SR-75)	106.1 (F)	70.8 (E)	98.9 (F)	64.2 (E)	100.1 (F)	65.7 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	10.2 (B)	15.2 (B)	12.2 (B)	11.3 (B)	8.8 (A)	13.5 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	20.8 (C)	ECL (F)	26.8 (D)	ECL (F)	16.3 (C)	ECL (F)
22	3rd St & Palm Ave	64.8 (F)	ECL (F)	136.1 (F)	ECL (F)	19.0 (C)	95.6 (F)
23	Palm Ave & Rainbow Dr	165.5 (F)	ECL (F)	ECL (F)	ECL (F)	76.1 (F)	69.8 (F)
24	7th St & Palm Ave	9 (A)	5.7 (A)	9.4 (A)	6.8 (A)	8.7 (A)	5.7 (A)
25	Delaware St & Palm Ave	12.3 (B)	34.4 (D)	12.5 (B)	25.3 (D)	12.1 (B)	25.3 (D)
26	9th St & Palm Ave (SR-75)	107.3 (F)	91.4 (F)	77.6 (E)	82.6 (F)	73.7 (E)	65.7 (E)
27	Florida St & Palm Ave (SR-75)	8.6 (A)	9.3 (A)	8.3 (A)	8.1 (A)	8.2 (A)	8.2 (A)
28	13th St & Palm Ave (SR-75)	58.9 (E)	85.8 (F)	45.8 (D)	76.9 (E)	44.8 (D)	64.4 (E)
29	16th St & Palm Ave (SR-75)	29.1 (C)	59.0 (E)	19.2 (B)	38.6 (D)	18.6 (B)	36.1 (D)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	92.6 (F)	ECL (F)	76.6 (E)	ECL (F)	69.7 (E)	ECL (F)
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	93.3 (F)	47.9 (D)	66.4 (E)	52.4 (D)	61.7 (E)	41.9 (D)
32	I-5 NB Ramps & Palm Ave (SR-75)	12.8 (B)	9.4 (A)	12.5 (B)	9.5 (A)	12.2 (B)	9.3 (A)
33	Silver Strand Blvd & YMCA Dwy	9.1 (A)	13.3 (B)	9.3 (A)	16.4 (C)	8.8 (A)	10.6 (B)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction.
The signal improvement at intersection 17 include an exclusive southbound right-turn lane and extension of the existing northbound right-turn lane.

Table D-7
Year 2024 (1 CVN) with Alternative 1 Conditions –
Peak-Hour Intersection LOS Summary

Intersection		Traffic Control	2024 (1 CVN) with Alternative 1	
			AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	One-Way Stop	43.1 (E)	18.6 (C)
2	Fourth St (SR-75) & Pomona Ave	One-Way Stop	24.5 (C)	260.0 (F)
3	Orange Ave (SR-75) & Third St (SR-75)	Signalized	30.7 (C)	40.9 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	Signalized	37.1 (D)	59.6 (E)
5	Silver Strand Blvd/Orange Ave (SR-75) & Pomona Ave	Signalized	15.2 (B)	15.7 (B)
6	Silver Strand Blvd (SR-75) & Avenida De Las Arenas	Signalized	12.6 (B)	19.3 (B)
7	Silver Strand Blvd (SR-75) & Rendova Rd	Signalized	17.6 (B)	12.2 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	Signalized	42.1 (D)	42.8 (D)
9	Strand Way and Guadalcanal Road	Two-Way Stop	9.9 (A)	13.2 (B)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	Signalized	3.6 (A)	78.1 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Driveway	One-Way Stop	26.3 (D)	28.3 (D)
12	Silver Strand Blvd (SR-75) & Leyte Rd	Signalized	25.4 (C)	9.1 (A)
13	Silver Strand Blvd (SR-75) & Attu Ave	One-Way Stop	26.8 (D)	11.0 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	Signalized	5.9 (A)	3.6 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	All-Way Stop	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	Signalized	22.8 (C)	10.1 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	Signalized	15.5 (B)	42.6 (D)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	Signalized	141.6 (F)	47.2 (D)
19	7th St & Silver Strand Blvd (SR-75)	Signalized	112.4 (F)	69.1 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	Signalized	7.5 (A)	12.2 (B)
21	Driveway/Silver Strand Blvd & Palm Ave	Two-Way Stop	13.3 (B)	20.7 (C)
22	3rd St & Palm Ave	All-Way Stop	11.2 (B)	20.8 (C)

Intersection		Traffic Control	2024 (1 CVN) with Alternative 1	
			AM	PM
23	Palm Ave & Rainbow Dr	One-Way Stop	36.3 (E)	26.7 (D)
24	7th St & Palm Ave	Signalized	8.5 (A)	5.8 (A)
25	Delaware St & Palm Ave	One-Way Stop	12.0 (B)	12.7 (B)
26	9th St & Palm Ave (SR-75)	Signalized	49.8 (D)	58.8 (E)
27	Florida St & Palm Ave (SR-75)	Signalized	8.3 (A)	8.2 (A)
28	13th St & Palm Ave (SR-75)	Signalized	40.2 (D)	59.4 (E)
29	16th St & Palm Ave (SR-75)	Signalized	16.0 (B)	23.8 (C)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	Signalized	61.1 (E)	215.7 (F)
31	Palm Ave (SR-75) & I-5 SB Exit Ramp	Signalized	42.7 (D)	53.5 (D)
32	I-5 NB Ramps & Palm Ave (SR-75)	Signalized	11.9 (B)	9.5 (A)
33	Silver Strand Blvd & YMCA Driveway	One-Way Stop	8.5 (A)	8.6 (A)

Note: Table reflects intersection delay (LOS). Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a one-way or two-way stop-controlled intersection, delay refers to the worst movement. LOS calculations are based on the methodology outlined in the 2000 Highway Capacity Manual and performed using Synchro 8.0. **Bold** values indicate intersections operating at LOS E or F. SB=southbound; NB=northbound

Table D-8
Year 2024 (2 CVNs) with Alternative 1 Conditions –
Peak-Hour Intersection LOS Summary

Intersection		Traffic Control	2024 (2 CVNs) with Alternative 1	
			AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	One-Way Stop	60.6 (F)	19.9 (C)
2	Fourth St (SR-75) & Pomona Ave	One-Way Stop	27.4 (D)	465.9 (F)
3	Orange Ave (SR-75) & Third St (SR-75)	Signalized	45.7 (D)	44.9 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	Signalized	38.1 (D)	106.2 (F)
5	Silver Strand Blvd/Orange Ave (SR-75) & Pomona Ave	Signalized	16.2 (B)	15.7 (B)
6	Silver Strand Blvd (SR-75) & Avenida De Las Arenas	Signalized	12.8 (B)	19.5 (B)
7	Silver Strand Blvd (SR-75) & Rendova Rd	Signalized	18.2 (B)	12.3 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	Signalized	42.7 (D)	43.6 (D)
9	Strand Way and Guadalcanal Road	Two-Way Stop	9.9 (A)	13.2 (B)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	Signalized	3.6 (A)	84.6 (F)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Driveway	One-Way Stop	27.1 (D)	29.3 (D)
12	Silver Strand Blvd (SR-75) & Leyte Rd	Signalized	27.9 (C)	9.1 (A)
13	Silver Strand Blvd (SR-75) & Attu Ave	One-Way Stop	27.7 (D)	11.1 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	Signalized	6.1 (A)	3.6 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	All-Way Stop	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	Signalized	24.6 (C)	10.1 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	Signalized	20.0 (C)	45.4 (D)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	Signalized	148.7 (F)	52.2 (D)
19	7th St & Silver Strand Blvd (SR-75)	Signalized	113.3 (F)	69.8 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	Signalized	7.5 (A)	12.8 (B)
21	Driveway/Silver Strand Blvd & Palm Ave	Two-Way Stop	13.3 (B)	20.7 (C)
22	3rd St & Palm Ave	All-Way Stop	11.2 (B)	20.8 (C)

Intersection		Traffic Control	2024 (2 CVNs) with Alternative 1	
			AM	PM
23	Palm Ave & Rainbow Dr	One-Way Stop	36.3 (E)	26.7 (D)
24	7th St & Palm Ave	Signalized	8.5 (A)	5.8 (A)
25	Delaware St & Palm Ave	One-Way Stop	12.0 (B)	12.7 (B)
26	9th St & Palm Ave (SR-75)	Signalized	52.8 (D)	61.4 (E)
27	Florida St & Palm Ave (SR-75)	Signalized	8.3 (A)	8.2 (A)
28	13th St & Palm Ave (SR-75)	Signalized	40.7 (D)	61.7 (E)
29	16th St & Palm Ave (SR-75)	Signalized	16.3 (B)	25.1 (C)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	Signalized	63.6 (E)	220.4 (F)
31	Palm Ave (SR-75) & I-5 SB Exit Ramp	Signalized	47.3 (D)	54.7 (D)
32	I-5 NB Ramps & Palm Ave (SR-75)	Signalized	12.2 (B)	9.6 (A)
33	Silver Strand Blvd & YMCA Driveway	One-Way Stop	8.5 (A)	8.6 (A)

Note: Table reflects intersection delay (LOS). Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a one-way or two-way stop-controlled intersection, delay refers to the worst movement. LOS calculations are based on the methodology outlined in the 2000 Highway Capacity Manual and performed using Synchro 8.0. **Bold** values indicate intersections operating at LOS E or F. SB=southbound; NB=northbound

Table D-9
Year 2040 (1 CVN) with Alternative 1 Conditions –
Peak-Hour Intersection LOS Summary

Intersection		Traffic Control	2040 (1 CVN) with Alternative 1	
			AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	One-Way Stop	43.7 (E)	18.7 (C)
2	Fourth St (SR-75) & Pomona Ave	One-Way Stop	24.6 (C)	265.1 (F)
3	Orange Ave (SR-75) & Third St (SR-75)	Signalized	30.8 (C)	40.8 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	Signalized	37.2 (D)	60.3 (E)
5	Silver Strand Blvd/Orange Ave (SR-75) & Pomona Ave	Signalized	32.2 (C)	18.8 (B)
6	Silver Strand Blvd (SR-75) & Avenida De Las Arenas	Signalized	14.4 (B)	23.3 (C)
7	Silver Strand Blvd (SR-75) & Rendova Rd	Signalized	24.0 (C)	13.5 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	Signalized	46.4 (D)	63.5 (E)
9	Strand Way and Guadalcanal Road	Two-Way Stop	10.3 (B)	19.3 (C)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	Signalized	3.8 (A)	114.4 (F)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Driveway	One-Way Stop	33.6 (D)	34.1 (D)
12	Silver Strand Blvd (SR-75) & Leyte Rd	Signalized	54.3 (D)	11.0 (B)
13	Silver Strand Blvd (SR-75) & Attu Ave	One-Way Stop	35.5 (E)	11.3 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	Signalized	9.3 (A)	4.4 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	All-Way Stop	7.9 (A)	7.9 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	Signalized	51.6 (D)	10.3 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	Signalized	17.8 (B)	50.9 (D)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	Signalized	196.7 (F)	80.4 (F)
19	7th St & Silver Strand Blvd (SR-75)	Signalized	154.8 (F)	85.8 (F)
20	Silver Strand Blvd (SR-75) & Delaware St	Signalized	7.9 (A)	14.9 (B)
21	Driveway/Silver Strand Blvd & Palm Ave	Two-Way Stop	13.4 (B)	21.3 (C)
22	3rd St & Palm Ave	All-Way Stop	11.4 (B)	21.8 (C)

Intersection		Traffic Control	2040 (1 CVN) with Alternative 1	
			AM	PM
23	Palm Ave & Rainbow Dr	One-Way Stop	38.7 (E)	28.3 (D)
24	7th St & Palm Ave	Signalized	8.5 (A)	5.8 (A)
25	Delaware St & Palm Ave	One-Way Stop	12.1 (B)	12.8 (B)
26	9th St & Palm Ave (SR-75)	Signalized	86.5 (F)	73.3 (E)
27	Florida St & Palm Ave (SR-75)	Signalized	9.0 (A)	8.7 (A)
28	13th St & Palm Ave (SR-75)	Signalized	43.9 (D)	76.3 (E)
29	16th St & Palm Ave (SR-75)	Signalized	19.6 (B)	35.7 (D)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	Signalized	99.8 (F)	254.5 (F)
31	Palm Ave (SR-75) & I-5 SB Exit Ramp	Signalized	68.1 (E)	85.7 (F)
32	I-5 NB Ramps & Palm Ave (SR-75)	Signalized	13.4 (B)	10.4 (B)
33	Silver Strand Blvd & YMCA Driveway	One-Way Stop	8.5 (A)	8.6 (A)

Note: Table reflects intersection delay (LOS). Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a one-way or two-way stop-controlled intersection, delay refers to the worst movement. LOS calculations are based on the methodology outlined in the 2000 Highway Capacity Manual and performed using Synchro 8.0. **Bold** values indicate intersections operating at LOS E or F. SB=southbound; NB=northbound

Table D-10
Year 2040 (2 CVNs) with Alternative 1 Conditions –
Peak-Hour Intersection LOS Summary

Intersection		Traffic Control	2040 (2 CVNs) with Alternative 1	
			AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	One-Way Stop	61.5 (F)	20.0 (C)
2	Fourth St (SR-75) & Pomona Ave	One-Way Stop	27.6 (D)	473.2 (F)
3	Orange Ave (SR-75) & Third St (SR-75)	Signalized	46.2 (D)	45.0 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	Signalized	38.1 (D)	107.4 (F)
5	Silver Strand Blvd/Orange Ave (SR-75) & Pomona Ave	Signalized	36.0 (D)	18.9 (B)
6	Silver Strand Blvd (SR-75) & Avenida De Las Arenas	Signalized	14.8 (B)	23.8 (C)
7	Silver Strand Blvd (SR-75) & Rendova Rd	Signalized	26.8 (C)	13.8 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	Signalized	47.8 (D)	66.7 (E)
9	Strand Way and Guadalcanal Road	Two-Way Stop	10.3 (B)	19.3 (C)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	Signalized	3.9 (A)	121.2 (F)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Driveway	One-Way Stop	34.7 (D)	35.5 (E)
12	Silver Strand Blvd (SR-75) & Leyte Rd	Signalized	59.4 (E)	11.1 (B)
13	Silver Strand Blvd (SR-75) & Attu Ave	One-Way Stop	36.9 (E)	11.4 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	Signalized	9.9 (A)	4.4 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	All-Way Stop	7.9 (A)	7.9 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	Signalized	57.3 (E)	10.4 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	Signalized	15.5 (B)	52.8 (D)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	Signalized	204.3 (F)	86.7 (E)
19	7th St & Silver Strand Blvd (SR-75)	Signalized	158.0 (F)	87.6 (F)
20	Silver Strand Blvd (SR-75) & Delaware St	Signalized	7.9 (A)	15.6 (B)
21	Driveway/Silver Strand Blvd & Palm Ave	Two-Way Stop	13.4 (B)	21.3 (C)
22	3rd St & Palm Ave	All-Way Stop	11.4 (B)	21.8 (C)

Intersection		Traffic Control	2040 (2 CVNs) with Alternative 1	
			AM	PM
23	Palm Ave & Rainbow Dr	One-Way Stop	38.7 (E)	28.3 (D)
24	7th St & Palm Ave	Signalized	8.5 (A)	5.8 (A)
25	Delaware St & Palm Ave	One-Way Stop	12.1 (B)	12.8 (B)
26	9th St & Palm Ave (SR-75)	Signalized	92.2 (F)	77.0 (E)
27	Florida St & Palm Ave (SR-75)	Signalized	9.0 (A)	8.7 (A)
28	13th St & Palm Ave (SR-75)	Signalized	44.9 (D)	79.6 (E)
29	16th St & Palm Ave (SR-75)	Signalized	20.8 (C)	38.6 (D)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	Signalized	103.6 (F)	259.3 (F)
31	Palm Ave (SR-75) & I-5 SB Exit Ramp	Signalized	73.7 (E)	87.0 (F)
32	I-5 NB Ramps & Palm Ave (SR-75)	Signalized	13.8 (B)	10.6 (B)
33	Silver Strand Blvd & YMCA Driveway	One-Way Stop	8.5 (A)	8.6 (A)

Note: Table reflects intersection delay (LOS). Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a one-way or two-way stop-controlled intersection, delay refers to the worst movement. LOS calculations are based on the methodology outlined in the 2000 Highway Capacity Manual and performed using Synchro 8.0. **Bold** values indicate intersections operating at LOS E or F. SB=southbound; NB=northbound

Table D-11
“North Only” Construction Scenario – Alternative 2
Intersection Traffic Analysis Summary with 2 CVNs

INTERSECTION		2016		2017	
		AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	60.6 (F)	19.8 (C)	61.7 (F)	19.9 (C)
2	Fourth St (SR-75) & Pomona Ave	26.7 (D)	ECL (F)	26.8 (D)	ECL (F)
3	Orange Ave (SR-75) & Third St (SR-75)	45.3 (D)	41.1 (D)	46.8 (D)	42.4 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	38 (D)	105.8 (F)	38.2 (D)	105.7 (F)
5	Silver Strand Blvd (SR-75)/Orange Ave & Pomona Ave	12.9 (B)	14.4 (B)	13.2 (B)	14.7 (B)
6	Silver Strand Blvd (SR-75) & Avenida de las Arenas	11.9 (B)	17.5 (B)	12.1 (B)	17.8 (B)
7	Silver Strand Blvd (SR-75) & Rendova Rd	17 (B)	11.3 (B)	16.9 (B)	11.5 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	46.9 (D)	58.6 (E)	47.5 (D)	60.4 (E)
9	Strand Wy & Guadalcanal Rd	10.5 (B)	18.4 (C)	10.8 (B)	19.6 (C)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	2.8 (A)	59.0 (E)	3.0 (A)	62.0 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	24.9 (C)	19.2 (C)	25.5 (D)	20.7 (C)
12	Silver Strand Blvd (SR-75) & Leyte Rd	24.8 (C)	8.2 (A)	25.2 (C)	8.4 (A)
13	Silver Strand Blvd (SR-75) & Attu Ave	25.3 (D)	9.9 (A)	25.7 (D)	10.1 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	5.9 (A)	3.3 (A)	6 (A)	3.3 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.7 (A)	7.7 (A)	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	20.1 (C)	10.5 (B)	20.7 (C)	10.3 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	8.3 (A)	ECL (F)	52.6 (F)	ECL (F)
	with signal improvement	6.3 (A)	10.6 (B)	6.5 (A)	15.8 (B)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	38.9 (D)	25.9 (C)	53.3 (D)	33 (C)

INTERSECTION		2016		2017	
		AM	PM	AM	PM
19	7th St & Silver Strand Blvd (SR-75)	94.6 (F)	62.1 (E)	96.0 (F)	63.7 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	7.4 (A)	10.8 (B)	7.3 (A)	12 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	13.1 (B)	19.7 (C)	13.1 (B)	19.9 (C)
22	3rd St & Palm Ave	10.9 (B)	19.1 (C)	10.9 (B)	19.3 (C)
23	Palm Ave & Rainbow Dr	32.5 (D)	25.3 (D)	32.8 (D)	25.4 (D)
24	7th St & Palm Ave	8.4 (A)	5.8 (A)	8.4 (A)	5.8 (A)
25	Delaware St & Palm Ave	11.9 (B)	16.5 (C)	11.9 (B)	16.9 (C)
26	9th St & Palm Ave (SR-75)	42.7 (D)	48.2 (D)	47.4 (D)	50.9 (D)
27	Florida St & Palm Ave (SR-75)	7.7 (A)	8.2 (A)	7.8 (A)	8 (A)
28	13th St & Palm Ave (SR-75)	38.3 (D)	49.1 (D)	39.5 (D)	51.8 (D)
29	16th St & Palm Ave (SR-75)	14.4 (B)	20 (C)	15.1 (B)	22.1 (C)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	48.3 (D)	ECL (F)	52.8 (D)	ECL (F)
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	35.3 (D)	35 (D)	40.4 (D)	37.5 (D)
32	I-5 NB Ramps & Palm Ave (SR-75)	11.4 (B)	8.8 (A)	11.7 (B)	9 (A)
33	Silver Strand Blvd & YMCA Dwy	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction.
The signal improvement at intersection 17 include an exclusive southbound right-turn lane and extension of the existing northbound right-turn lane.

Table D-12
“Construction North, Operations South” Construction Scenario –
Alternative 2 Intersection Traffic Analysis Summary with 2 CVNs

INTERSECTION		2016		2017	
		AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	60.6 (F)	19.8 (C)	61.3 (F)	19.9 (C)
2	Fourth St (SR-75) & Pomona Ave	26.7 (D)	ECL (F)	26.8 (D)	ECL (F)
3	Orange Ave (SR-75) & Third St (SR-75)	45.3 (D)	41.1 (D)	46.2 (D)	42.1 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	38 (D)	105.8 (F)	38.1 (D)	105.8 (F)
5	Silver Strand Blvd (SR-75)/Orange Ave & Pomona Ave	12.9 (B)	14.4 (B)	13.2 (B)	14.6 (B)
6	Silver Strand Blvd (SR-75) & Avenida de las Arenas	11.9 (B)	17.5 (B)	12.1 (B)	17.7 (B)
7	Silver Strand Blvd (SR-75) & Rendova Rd	17 (B)	11.3 (B)	16.9 (B)	11.4 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	46.9 (D)	58.6 (E)	47.4 (D)	60.2 (E)
9	Strand Wy & Guadalcanal Rd	10.5 (B)	18.4 (C)	10.8 (B)	19.6 (C)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	2.8 (A)	59.0 (E)	3 (A)	61.8 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	24.9 (C)	19.2 (C)	25.5 (D)	20.3 (C)
12	Silver Strand Blvd (SR-75) & Leyte Rd	24.8 (C)	8.2 (A)	25.3 (C)	8.4 (A)
13	Silver Strand Blvd (SR-75) & Attu Ave	25.3 (D)	9.9 (A)	25.7 (D)	10 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	5.9 (A)	3.3 (A)	6 (A)	3.3 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.7 (A)	7.7 (A)	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	20.1 (C)	10.5 (B)	20.7 (C)	10.4 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	8.3 (A)	ECL (F)	8.5 (A)	ECL (F)
	with signal improvement	6.3 (A)	8.1 (A)	7 (A)	8.7 (A)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	38.6 (D)	25.8 (C)	42.5 (D)	31.4 (C)

INTERSECTION		2016		2017	
		AM	PM	AM	PM
19	7th St & Silver Strand Blvd (SR-75)	94.7 (F)	62.1 (E)	95.2 (F)	62.4 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	7.4 (A)	10.8 (B)	8.2 (A)	11.2 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	13.1 (B)	20.1 (C)	14.6 (B)	59.0 (F)
22	3rd St & Palm Ave	10.9 (B)	19.5 (C)	13.4 (B)	45.1 (E)
23	Palm Ave & Rainbow Dr	32.7 (D)	25.6 (D)	45.3 (E)	38.9 (E)
24	7th St & Palm Ave	8.4 (A)	5.8 (A)	8.5 (A)	5.7 (A)
25	Delaware St & Palm Ave	11.9 (B)	16.6 (C)	12 (B)	18.9 (C)
26	9th St & Palm Ave (SR-75)	42.7 (D)	48.3 (D)	48.2 (D)	51.2 (D)
27	Florida St & Palm Ave (SR-75)	7.7 (A)	8.2 (A)	7.9 (A)	8.0 (A)
28	13th St & Palm Ave (SR-75)	38.3 (D)	49.1 (D)	39.7 (D)	52.2 (D)
29	16th St & Palm Ave (SR-75)	14.4 (B)	20 (C)	15.2 (B)	22.4 (C)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	48.3 (D)	ECL (F)	53.5 (D)	ECL (F)
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	35.3 (D)	35 (D)	40.8 (D)	37.8 (D)
32	I-5 NB Ramps & Palm Ave (SR-75)	11.4 (B)	8.8 (A)	11.7 (B)	9 (A)
33	Silver Strand Blvd & YMCA Dwy	8.5 (A)	8.6 (A)	8.7 (A)	9.6 (A)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction.
The signal improvement at intersection 17 include an exclusive southbound right-turn lane and extension of the existing northbound right-turn lane.

Table D-13
“North Only” Construction Scenario – Alternative 3
Intersection Traffic Analysis Summary with 2 CVNs

INTERSECTION		2021		2022		2023	
		AM	PM	AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	67.9 (F)	20.2 (C)	69.8 (F)	20.3 (C)	70.5 (F)	20.5 (C)
2	Fourth St (SR-75) & Pomona Ave	27.3 (D)	ECL (F)	27.5 (D)	ECL (F)	27.8 (D)	ECL (F)
3	Orange Ave (SR-75) & Third St (SR-75)	56.1 (E)	47.6 (D)	58.7 (E)	50.1 (D)	59.8 (E)	53.5 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	39.5 (D)	105.6 (F)	40 (D)	105.9 (F)	40.2 (D)	106.1 (F)
5	Silver Strand Blvd (SR-75)/Orange Ave & Pomona Ave	15.7 (B)	16.4 (B)	16 (B)	17.1 (B)	16.8 (B)	17.5 (B)
6	Silver Strand Blvd (SR-75) & Avenida de las Arenas	12.9 (B)	20.1 (C)	13.2 (B)	21 (C)	13.4 (B)	21.7 (C)
7	Silver Strand Blvd (SR-75) & Rendova Rd	16.8 (B)	12.6 (B)	16.8 (B)	13 (B)	17.2 (B)	13.5 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	60.0 (E)	83.4 (F)	60.8 (E)	86.5 (F)	58.3 (E)	84.2 (F)
9	Strand Wy & Guadalcanal Rd	12.9 (B)	67.6 (F)	13.5 (B)	76.7 (F)	13.5 (B)	109.3 (F)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	3.6 (A)	72.5 (E)	3.7 (A)	76.0 (E)	3.9 (A)	79.6 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	27.7 (D)	26 (D)	28.2 (D)	28.8 (D)	28.5 (D)	30.6 (D)
12	Silver Strand Blvd (SR-75) & Leyte Rd	32.6 (C)	8.9 (A)	33.7 (C)	9.2 (A)	34.4 (C)	10.4 (B)
13	Silver Strand Blvd (SR-75) & Attu Ave	28.3 (D)	10.7 (B)	28.8 (D)	11 (B)	29.4 (D)	11.4 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	6.4 (A)	3.5 (A)	6.4 (A)	3.7 (A)	6.5 (A)	3.8 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	26.8 (C)	10.1 (B)	28.7 (C)	10.1 (B)	30 (C)	10.1 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	ECL (F)	ECL (F)	ECL (F)	ECL (F)	ECL (F)	ECL (F)
	with signal improvement	12.1 (B)	105.2 (F)	10.7 (B)	58.0 (E)	11.4 (B)	28.8 (C)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	166.6 (F)	138.5 (F)	126.6 (F)	94.5 (F)	98.2 (F)	66.7 (E)

INTERSECTION		2021		2022		2023	
		AM	PM	AM	PM	AM	PM
19	7th St & Silver Strand Blvd (SR-75)	170.3 (F)	130 (F)	134.1 (F)	92.2 (F)	115.3 (F)	74.1 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	7.6 (A)	61.4 (E)	7.3 (A)	24.7 (C)	7.3 (A)	15.8 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	13.2 (B)	20.2 (C)	13.2 (B)	20.3 (C)	13.3 (B)	20.4 (C)
22	3rd St & Palm Ave	11 (B)	19.8 (C)	11.1 (B)	19.9 (C)	11.1 (B)	20.1 (C)
23	Palm Ave & Rainbow Dr	34 (D)	25.9 (D)	34.6 (D)	26.4 (D)	35.4 (E)	26.7 (D)
24	7th St & Palm Ave	8.5 (A)	5.8 (A)	8.5 (A)	5.8 (A)	8.5 (A)	5.8 (A)
25	Delaware St & Palm Ave	12 (B)	25.5 (D)	12 (B)	16.8 (C)	12 (B)	12.7 (B)
26	9th St & Palm Ave (SR-75)	123.7 (F)	105.2 (F)	90.5 (F)	93.7 (F)	68.2 (E)	75.2 (E)
27	Florida St & Palm Ave (SR-75)	8.8 (A)	10.1 (B)	8.5 (A)	8.6 (A)	8.3 (A)	7.9 (A)
28	13th St & Palm Ave (SR-75)	69.2 (E)	94.8 (F)	50.5 (D)	83 (F)	43.4 (D)	73.9 (E)
29	16th St & Palm Ave (SR-75)	38.7 (D)	71.3 (E)	22.4 (C)	47.3 (D)	17.7 (B)	32.7 (C)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	102.7 (F)	ECL (F)	83.9 (F)	ECL (F)	71.8 (E)	ECL (F)
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	108.3 (F)	47 (D)	78.0 (E)	51.0 (D)	61.2 (E)	55.7 (E)
32	I-5 NB Ramps & Palm Ave (SR-75)	13.3 (B)	9.4 (A)	13 (B)	9.5 (A)	12.8 (B)	9.6 (A)
33	Silver Strand Blvd & YMCA Dwy	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction.
The signal improvement at intersection 17 include an exclusive southbound right-turn lane and extension of the existing northbound right-turn lane.

Table D-14
“Construction North, Operations South” Construction Scenario –
Alternative 3 Intersection Traffic Analysis Summary with 2 CVNs

INTERSECTION		2021		2022		2023	
		AM	PM	AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	66.1 (F)	20 (C)	67.1 (F)	20.1 (C)	64.6 (F)	20.2 (C)
2	Fourth St (SR-75) & Pomona Ave	27.2 (D)	ECL (F)	27.2 (D)	ECL (F)	27.3 (D)	ECL (F)
3	Orange Ave (SR-75) & Third St (SR-75)	53.6 (D)	45.5 (D)	54.9 (D)	47.6 (D)	51.5 (D)	49.8 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	39 (D)	105.6 (F)	39.3 (D)	105.5 (F)	38.8 (D)	105.6 (F)
5	Silver Strand Blvd (SR-75)/Orange Ave & Pomona Ave	15.7 (B)	15.5 (B)	16 (B)	15.9 (B)	16.8 (B)	16.3 (B)
6	Silver Strand Blvd (SR-75) & Avenida de las Arenas	12.8 (B)	18.9 (B)	13 (B)	19.4 (B)	12.9 (B)	19.9 (B)
7	Silver Strand Blvd (SR-75) & Rendova Rd	16.9 (B)	12.1 (B)	17 (B)	12.2 (B)	17.5 (B)	12.6 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	59.8 (E)	67.7 (E)	60.4 (E)	70.2 (E)	50.8 (D)	72.8 (E)
9	Strand Wy & Guadalcanal Rd	12.9 (B)	35.3 (E)	13.5 (B)	40.1 (E)	12.2 (B)	45.3 (E)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	3.6 (A)	71.7 (E)	3.7 (A)	74.6 (E)	3.8 (A)	77.5 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	27.6 (D)	23.8 (C)	28.1 (D)	25.6 (D)	27.8 (D)	26.4 (D)
12	Silver Strand Blvd (SR-75) & Leyte Rd	32.5 (C)	8.7 (A)	34 (C)	8.9 (A)	32.8 (C)	9.1 (A)
13	Silver Strand Blvd (SR-75) & Attu Ave	28.2 (D)	10.5 (B)	28.7 (D)	10.7 (B)	28.6 (D)	10.9 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	6.5 (A)	3.5 (A)	6.5 (A)	3.5 (A)	6.5 (A)	3.5 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	26.5 (C)	10.2 (B)	28.2 (C)	10.1 (B)	27.3 (C)	10.1 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	11 (B)	ECL (F)	9.1 (A)	ECL (F)	0.0 (A)	0.0 (A)
	with signal improvement	8.5 (A)	29.0 (C)	7.5 (A)	9.0 (A)	2.4 (A)	2.1 (A)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	108.7 (F)	133.1 (F)	56.0 (E)	76.6 (E)	29.3 (C)	39.5 (D)

INTERSECTION		2021		2022		2023	
		AM	PM	AM	PM	AM	PM
19	7th St & Silver Strand Blvd (SR-75)	123.6 (F)	97.3 (F)	99.7 (F)	68.4 (E)	103.8 (F)	63.6 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	10 (B)	29.7 (C)	11.7 (B)	13.9 (B)	13.4 (B)	11.5 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	20.8 (C)	ECL (F)	26.8 (D)	ECL (F)	31.9 (D)	ECL (F)
22	3rd St & Palm Ave	64.8 (F)	ECL (F)	136.1 (F)	ECL (F)	178.6 (F)	ECL (F)
23	Palm Ave & Rainbow Dr	166.9 (F)	ECL (F)	ECL (F)	ECL (F)	ECL (F)	ECL (F)
24	7th St & Palm Ave	9 (A)	5.7 (A)	9.4 (A)	6.8 (A)	9.7 (A)	7 (A)
25	Delaware St & Palm Ave	12.3 (B)	51.6 (F)	12.5 (B)	36.5 (E)	12.6 (B)	27.9 (D)
26	9th St & Palm Ave (SR-75)	130.6 (F)	124.4 (F)	99.7 (F)	115.3 (F)	68.6 (E)	92 (F)
27	Florida St & Palm Ave (SR-75)	8.9 (A)	11.2 (B)	8.5 (A)	9.6 (A)	8.3 (A)	8.4 (A)
28	13th St & Palm Ave (SR-75)	74.1 (E)	107.6 (F)	54.7 (D)	97.0 (F)	43.5 (D)	86.6 (F)
29	16th St & Palm Ave (SR-75)	42.5 (D)	88.4 (F)	25.5 (C)	64.5 (E)	17.8 (B)	45.4 (D)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	107.6 (F)	ECL (F)	90.0 (F)	ECL (F)	72.2 (E)	ECL (F)
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	115.5 (F)	47.9 (D)	86.0 (F)	52.4 (D)	59.7 (E)	59.5 (E)
32	I-5 NB Ramps & Palm Ave (SR-75)	13.3 (B)	9.4 (A)	13 (B)	9.5 (A)	12.6 (B)	9.6 (A)
33	Silver Strand Blvd & YMCA Dwy	9.1 (A)	13.3 (B)	9.3 (A)	16.4 (C)	9.4 (A)	20.8 (C)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction.
The signal improvement at intersection 17 include an exclusive southbound right-turn lane and extension of the existing northbound right-turn lane.

Table D-13
Year 2024 (1 CVN) with Alternative 3 Conditions –
Peak-Hour Intersection LOS Summary

Intersection		Traffic Control	2024 (1 CVN) with Alternative 3	
			AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	One-Way Stop	44.4 (E)	18.7 (C)
2	Fourth St (SR-75) & Pomona Ave	One-Way Stop	24.6 (C)	293.5 (F)
3	Orange Ave (SR-75) & Third St (SR-75)	Signalized	31.2 (C)	41.8 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	Signalized	37.3 (D)	60.4 (E)
5	Silver Strand Blvd/Orange Ave (SR-75) & Pomona Ave	Signalized	15.1 (B)	15.9 (B)
6	Silver Strand Blvd (SR-75) & Avenida De Las Arenas	Signalized	12.7 (B)	19.5 (B)
7	Silver Strand Blvd (SR-75) & Rendova Rd	Signalized	17.6 (B)	12.3 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	Signalized	42.6 (D)	49.4 (D)
9	Strand Way and Guadalcanal Road	Two-Way Stop	10.3 (B)	15.5 (C)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	Signalized	3.5 (A)	76.6 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Driveway	One-Way Stop	26.8 (D)	27.3 (D)
12	Silver Strand Blvd (SR-75) & Leyte Rd	Signalized	27.3 (C)	9.0 (A)
13	Silver Strand Blvd (SR-75) & Attu Ave	One-Way Stop	27.3 (D)	10.8 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	Signalized	6.1 (A)	3.6 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	All-Way Stop	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	Signalized	23.8 (C)	10.1 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	Signalized	13.3 (B)	33.8 (C)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	Signalized	132.5 (F)	41.8 (D)
19	7th St & Silver Strand Blvd (SR-75)	Signalized	111.7 (F)	68.7 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	Signalized	7.6 (A)	11.5 (B)
21	Driveway/Silver Strand Blvd & Palm Ave	Two-Way Stop	13.2 (B)	20.6 (C)
22	3rd St & Palm Ave	All-Way Stop	11.2 (B)	20.7 (C)

Intersection		Traffic Control	2024 (1 CVN) with Alternative 3	
			AM	PM
23	Palm Ave & Rainbow Dr	One-Way Stop	36.0 (E)	26.6 (D)
24	7th St & Palm Ave	Signalized	8.4 (A)	5.8 (A)
25	Delaware St & Palm Ave	One-Way Stop	12.0 (B)	12.7 (B)
26	9th St & Palm Ave (SR-75)	Signalized	47.0 (D)	56.3 (E)
27	Florida St & Palm Ave (SR-75)	Signalized	8.2 (A)	8.3 (A)
28	13th St & Palm Ave (SR-75)	Signalized	39.6 (D)	56.7 (E)
29	16th St & Palm Ave (SR-75)	Signalized	15.6 (B)	22.5 (C)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	Signalized	58.9 (E)	210.0 (F)
31	Palm Ave (SR-75) & I-5 SB Exit Ramp	Signalized	40.8 (D)	52.5 (D)
32	I-5 NB Ramps & Palm Ave (SR-75)	Signalized	11.9 (B)	9.5 (A)
33	Silver Strand Blvd & YMCA Driveway	One-Way Stop	8.5 (A)	8.6 (A)

Note: Table reflects intersection delay (LOS). Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a one-way or two-way stop-controlled intersection, delay refers to the worst movement. LOS calculations are based on the methodology outlined in the 2000 Highway Capacity Manual and performed using Synchro 8.0. **Bold** values indicate intersections operating at LOS E or F. SB=southbound; NB=northbound

Table D-14
Year 2024 (2 CVNs) with Alternative 3 Conditions –
Peak-Hour Intersection LOS Summary

Intersection		Traffic Control	2024 (2 CVNs) with Alternative 3	
			AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	One-Way Stop	62.5 (F)	20.0 (C)
2	Fourth St (SR-75) & Pomona Ave	One-Way Stop	27.5 (D)	513.2 (F)
3	Orange Ave (SR-75) & Third St (SR-75)	Signalized	48.1 (D)	45.9 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	Signalized	38.3 (D)	107.2 (F)
5	Silver Strand Blvd/Orange Ave (SR-75) & Pomona Ave	Signalized	16.1 (B)	15.9 (B)
6	Silver Strand Blvd (SR-75) & Avenida De Las Arenas	Signalized	12.8 (B)	19.8 (B)
7	Silver Strand Blvd (SR-75) & Rendova Rd	Signalized	18.2 (B)	12.5 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	Signalized	43.2 (D)	50.5 (D)
9	Strand Way and Guadalcanal Road	Two-Way Stop	10.3 (B)	15.5 (C)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	Signalized	3.6 (A)	83.0 (F)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Driveway	One-Way Stop	27.6 (D)	28.3 (D)
12	Silver Strand Blvd (SR-75) & Leyte Rd	Signalized	30.3 (C)	10.1 (B)
13	Silver Strand Blvd (SR-75) & Attu Ave	One-Way Stop	28.2 (D)	10.9 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	Signalized	6.4 (A)	3.6 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	All-Way Stop	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	Signalized	25.9 (C)	10.1 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	Signalized	13.4 (B)	35.2 (C)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	Signalized	139.4 (F)	46.1 (D)
19	7th St & Silver Strand Blvd (SR-75)	Signalized	112.2 (F)	68.9 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	Signalized	7.5 (A)	12.1 (B)
21	Driveway/Silver Strand Blvd & Palm Ave	Two-Way Stop	13.2 (B)	20.6 (C)
22	3rd St & Palm Ave	All-Way Stop	11.2 (B)	20.7 (C)

Intersection		Traffic Control	2024 (2 CVNs) with Alternative 3	
			AM	PM
23	Palm Ave & Rainbow Dr	One-Way Stop	36.0 (E)	26.6 (D)
24	7th St & Palm Ave	Signalized	8.4 (A)	5.8 (A)
25	Delaware St & Palm Ave	One-Way Stop	12.0 (B)	12.7 (B)
26	9th St & Palm Ave (SR-75)	Signalized	49.2 (D)	58.3 (E)
27	Florida St & Palm Ave (SR-75)	Signalized	8.3 (A)	8.2 (A)
28	13th St & Palm Ave (SR-75)	Signalized	40.0 (D)	58.8 (E)
29	16th St & Palm Ave (SR-75)	Signalized	15.9 (B)	23.5 (C)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	Signalized	60.9 (E)	214.4 (F)
31	Palm Ave (SR-75) & I-5 SB Exit Ramp	Signalized	45.5 (D)	53.6 (D)
32	I-5 NB Ramps & Palm Ave (SR-75)	Signalized	12.2 (B)	9.6 (A)
33	Silver Strand Blvd & YMCA Driveway	One-Way Stop	8.5 (A)	8.6 (A)

Note: Table reflects intersection delay (LOS). Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a one-way or two-way stop-controlled intersection, delay refers to the worst movement. LOS calculations are based on the methodology outlined in the 2000 Highway Capacity Manual and performed using Synchro 8.0. **Bold** values indicate intersections operating at LOS E or F. SB=southbound; NB=northbound

Table D-15
Year 2040 (1 CVN) with Alternative 3 Conditions –
Peak-Hour Intersection LOS Summary

Intersection		Traffic Control	2040 (1 CVN) with Alternative 3	
			AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	One-Way Stop	45.0 (E)	18.8 (C)
2	Fourth St (SR-75) & Pomona Ave	One-Way Stop	24.7 (C)	298.9 (F)
3	Orange Ave (SR-75) & Third St (SR-75)	Signalized	31.3 (D)	41.8 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	Signalized	37.4 (C)	61.1 (E)
5	Silver Strand Blvd/Orange Ave (SR-75) & Pomona Ave	Signalized	31.9 (C)	19.2 (B)
6	Silver Strand Blvd (SR-75) & Avenida De Las Arenas	Signalized	14.6 (B)	23.9 (C)
7	Silver Strand Blvd (SR-75) & Rendova Rd	Signalized	23.9 (C)	13.8 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	Signalized	49.4 (D)	79.0 (E)
9	Strand Way and Guadalcanal Road	Two-Way Stop	10.8 (B)	39.5 (E)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	Signalized	3.8 (A)	112.8 (F)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Driveway	One-Way Stop	34.2 (D)	32.8 (D)
12	Silver Strand Blvd (SR-75) & Leyte Rd	Signalized	58.3 (E)	10.9 (B)
13	Silver Strand Blvd (SR-75) & Attu Ave	One-Way Stop	36.4 (E)	11.2 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	Signalized	9.8 (A)	4.4 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	All-Way Stop	7.9 (A)	7.9 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	Signalized	55.0 (D)	10.3 (A)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	Signalized	14.4 (B)	42.4 (D)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	Signalized	187.0 (F)	72.8 (E)
19	7th St & Silver Strand Blvd (SR-75)	Signalized	151.4 (F)	84.1 (F)
20	Silver Strand Blvd (SR-75) & Delaware St	Signalized	7.8 (A)	14.1 (B)
21	Driveway/Silver Strand Blvd & Palm Ave	Two-Way Stop	13.4 (B)	21.3 (C)
22	3rd St & Palm Ave	All-Way Stop	11.4 (B)	21.6 (C)

Intersection		Traffic Control	2040 (1 CVN) with Alternative 3	
			AM	PM
23	Palm Ave & Rainbow Dr	One-Way Stop	38.4 (E)	28.2 (D)
24	7th St & Palm Ave	Signalized	8.5 (A)	5.8 (A)
25	Delaware St & Palm Ave	One-Way Stop	12.1 (B)	12.8 (B)
26	9th St & Palm Ave (SR-75)	Signalized	79.8 (E)	69.1 (E)
27	Florida St & Palm Ave (SR-75)	Signalized	9.0 (A)	8.6 (A)
28	13th St & Palm Ave (SR-75)	Signalized	42.8 (D)	71.9 (E)
29	16th St & Palm Ave (SR-75)	Signalized	18.7 (B)	32.4 (C)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	Signalized	95.8 (F)	248.6 (F)
31	Palm Ave (SR-75) & I-5 SB Exit Ramp	Signalized	64.5 (E)	84.4 (F)
32	I-5 NB Ramps & Palm Ave (SR-75)	Signalized	13.4 (B)	10.4 (B)
33	Silver Strand Blvd & YMCA Driveway	One-Way Stop	8.5 (A)	8.6 (A)

Note: Table reflects intersection delay (LOS). Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a one-way or two-way stop-controlled intersection, delay refers to the worst movement. LOS calculations are based on the methodology outlined in the 2000 Highway Capacity Manual and performed using Synchro 8.0. **Bold** values indicate intersections operating at LOS E or F. SB=southbound; NB=northbound

Table D-16
Year 2040 (2 CVNs) with Alternative 3 Conditions –
Peak-Hour Intersection LOS Summary

Intersection		Traffic Control	2040 (2 CVNs) with Alternative 3	
			AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	One-Way Stop	63.4 (F)	20.2 (C)
2	Fourth St (SR-75) & Pomona Ave	One-Way Stop	27.7 (D)	520.8 (F)
3	Orange Ave (SR-75) & Third St (SR-75)	Signalized	48.7 (D)	46.0 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	Signalized	38.3 (D)	108.4 (F)
5	Silver Strand Blvd/Orange Ave (SR-75) & Pomona Ave	Signalized	35.6 (D)	19.2 (B)
6	Silver Strand Blvd (SR-75) & Avenida De Las Arenas	Signalized	14.9 (B)	24.5 (C)
7	Silver Strand Blvd (SR-75) & Rendova Rd	Signalized	26.6 (C)	14.1 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	Signalized	51.1 (D)	83.0 (F)
9	Strand Way and Guadalcanal Road	Two-Way Stop	10.8 (B)	39.5 (E)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	Signalized	3.8 (A)	119.7 (F)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Driveway	One-Way Stop	35.4 (E)	34.2 (D)
12	Silver Strand Blvd (SR-75) & Leyte Rd	Signalized	63.4 (E)	11.0 (B)
13	Silver Strand Blvd (SR-75) & Attu Ave	One-Way Stop	37.8 (E)	11.2 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	Signalized	10.5 (B)	4.4 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	All-Way Stop	7.9 (A)	7.9 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	Signalized	61.0 (E)	10.3 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	Signalized	12.2 (B)	31.9 (C)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	Signalized	194.6 (F)	78.9 (E)
19	7th St & Silver Strand Blvd (SR-75)	Signalized	154.0 (F)	85.3 (F)
20	Silver Strand Blvd (SR-75) & Delaware St	Signalized	7.9 (A)	14.7 (B)
21	Driveway/Silver Strand Blvd & Palm Ave	Two-Way Stop	13.4 (B)	21.3 (C)
22	3rd St & Palm Ave	All-Way Stop	11.4 (B)	21.6 (C)

Intersection		Traffic Control	2040 (2 CVNs) with Alternative 3	
			AM	PM
23	Palm Ave & Rainbow Dr	One-Way Stop	38.4 (E)	28.2 (D)
24	7th St & Palm Ave	Signalized	8.5 (A)	5.8 (A)
25	Delaware St & Palm Ave	One-Way Stop	12.1 (B)	12.8 (B)
26	9th St & Palm Ave (SR-75)	Signalized	85.3 (F)	72.4 (E)
27	Florida St & Palm Ave (SR-75)	Signalized	9.0 (A)	8.7 (A)
28	13th St & Palm Ave (SR-75)	Signalized	43.6 (D)	75.3 (E)
29	16th St & Palm Ave (SR-75)	Signalized	19.4 (B)	35.0 (C)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	Signalized	99.3 (F)	253.2 (F)
31	Palm Ave (SR-75) & I-5 SB Exit Ramp	Signalized	70.3 (E)	85.7 (F)
32	I-5 NB Ramps & Palm Ave (SR-75)	Signalized	13.8 (B)	10.6 (B)
33	Silver Strand Blvd & YMCA Driveway	One-Way Stop	8.5 (A)	8.6 (A)

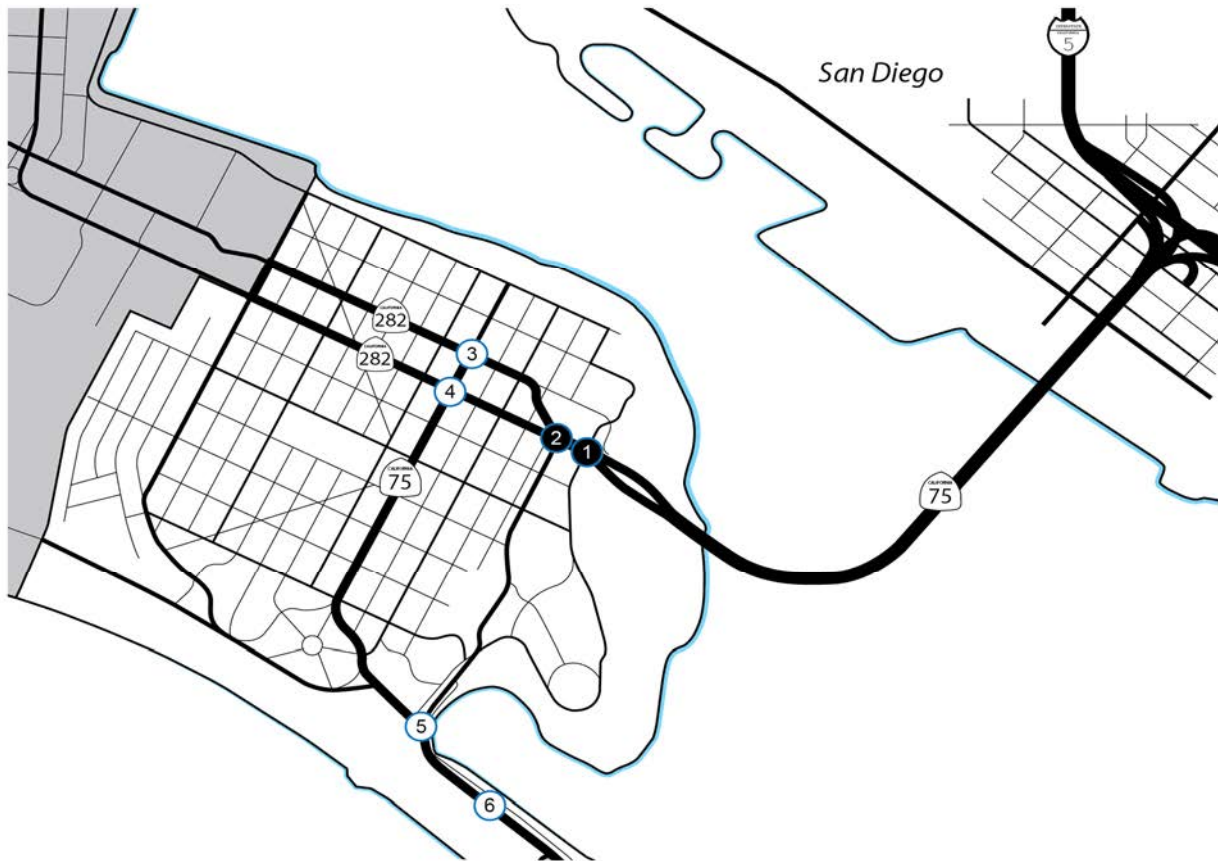
Note: Table reflects intersection delay (LOS). Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a one-way or two-way stop-controlled intersection, delay refers to the worst movement. LOS calculations are based on the methodology outlined in the 2000 Highway Capacity Manual and performed using Synchro 8.0. **Bold** values indicate intersections operating at LOS E or F. SB=southbound; NB=northbound

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1 <div> <div>10 / 56</div> <div>Glorietta Blvd</div> <div> <div>532 / 240</div> <div>3269 / 1675</div> <div>Fourth St (SR-75)</div> </div> </div> <div> <div>1313 / 3544</div> <div>35 / 18</div> <div>477 / 903</div> </div>	2 <div> <div>3168 / 1712</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1174 / 3310</div> <div>203 / 131</div> <div>Pomona Ave</div> <div>233 / 201</div> </div>	3 <div> <div>6 / 15</div> <div>259 / 767</div> <div>Orange Ave (SR-75)</div> <div> <div>250 / 87</div> <div>1536 / 537</div> <div>1562 / 987</div> <div>Third Street (SR-75)</div> </div> </div> <div> <div>41 / 71</div> <div>94 / 244</div> </div>	4 <div> <div>1444 / 1103</div> <div>435 / 672</div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> </div> <div> <div>501 / 1701</div> <div>52 / 45</div> <div>126 / 322</div> <div>217 / 440</div> </div>
5 <div> <div>1144 / 1227</div> <div>Orange Ave (SR-75)</div> <div> <div>7 / 13</div> <div>225 / 181</div> <div>Pomona Ave</div> </div> </div> <div> <div>1151 / 896</div> <div>626 / 715</div> </div>	6 <div> <div>38 / 158</div> <div>1291 / 1460</div> <div>41 / 70</div> <div>Silver Strand Blvd (SR-75)</div> <div> <div>6 / 26</div> <div>0 / 11</div> <div>8 / 27</div> <div>Avenidas De Las Arenas</div> </div> </div> <div> <div>49 / 150</div> <div>3 / 11</div> <div>11 / 30</div> <div>21 / 24</div> <div>1374 / 1526</div> <div>27 / 52</div> </div>		

CORONADO

Study intersections 1 - 6



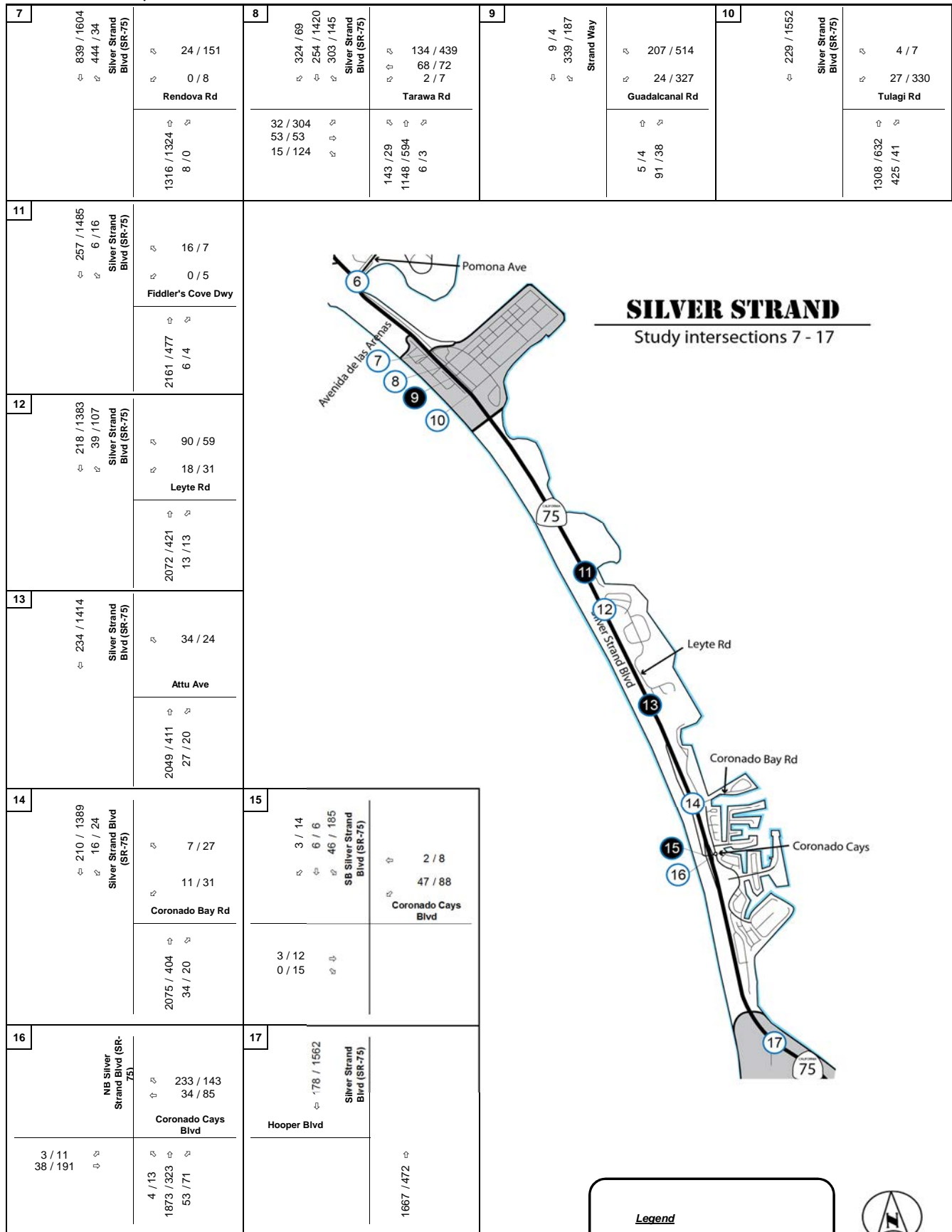
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X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



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18 <div>46 / 199 131 / 1105 4 / 19</div> <div>Silver Strand Blvd (SR-75)</div> <div>21 / 7 8 / 4 50 / 19</div> <div>Rainbow Dr</div> <div>406 / 90 2 / 7 40 / 70</div> <div>27 / 76 1543 / 323 11 / 58</div>	19 <div>54 / 22 43 / 27 21 / 25</div> <div>7th St</div> <div>18 / 36 1397 / 381</div> <div>Silver Strand Blvd (SR-75)</div> <div>8 / 59 215 / 1058 20 / 60</div> <div>39 / 19 24 / 41 2 / 5</div>	20 <div>14 / 4</div> <div>Delaware St</div> <div>9 / 39 1406 / 416 407 / 516</div> <div>Silver Strand Blvd (SR-75)</div> <div>232 / 1089</div>	21 <div>5 / 9 48 / 105</div> <div>Silver Strand Blvd</div> <div>105 / 41 129 / 308</div> <div>Palm Ave</div> <div>10 / 4 234 / 214</div> <div>Dwy</div>
22 <div>15 / 14 11 / 34 12 / 29</div> <div>3rd St</div> <div>25 / 25 210 / 322 27 / 86</div> <div>Palm Ave</div> <div>8 / 8 273 / 296 5 / 13</div> <div>12 / 15 15 / 39 127 / 69</div>	23 <div>70 / 142 18 / 53</div> <div>Rainbow Dr</div> <div>154 / 40 335 / 458</div> <div>Palm Ave</div> <div>226 / 74 428 / 425</div>	24 <div>28 / 31 28 / 43 2 / 13</div> <div>7th St</div> <div>0 / 4 336 / 460 27 / 32</div> <div>Palm Ave</div> <div>17 / 29 421 / 434 16 / 30</div> <div>66 / 55 37 / 26 82 / 23</div>	25 <div>506 / 482 5 / 9</div> <div>Delaware St</div> <div>3 / 7 6 / 3</div>
26 <div>26 / 27 47 / 82 93 / 179</div> <div>9th St</div> <div>45 / 135 1548 / 793 25 / 60</div> <div>Palm Ave (SR-75)</div> <div>22 / 43 663 / 1388 40 / 128</div> <div>168 / 101 38 / 93 53 / 65</div>	27 <div>16 / 15 11 / 14 57 / 66</div> <div>Florida St</div> <div>13 / 57 1727 / 1211 21 / 51</div> <div>Palm Ave (SR-75)</div> <div>3 / 21 901 / 1679 36 / 59</div> <div>19 / 22 5 / 11 32 / 36</div>	28 <div>16 / 21 37 / 46 174 / 159</div> <div>13th St</div> <div>54 / 84 1578 / 1288 100 / 162</div> <div>Palm Ave (SR-75)</div> <div>4 / 28 974 / 1561 66 / 204</div> <div>149 / 133 20 / 42 94 / 132</div>	29 <div>22 / 11 3 / 11 40 / 25</div> <div>16th St</div> <div>13 / 17 1712 / 1596 45 / 177</div> <div>Palm Ave (SR-75)</div> <div>15 / 10 1248 / 1692 27 / 52</div> <div>17 / 41 7 / 9 51 / 84</div>
30 <div>80 / 236 96 / 248 244 / 610</div> <div>19th St</div> <div>223 / 576 1651 / 1605 254 / 340</div> <div>Palm Ave (SR-75)</div> <div>95 / 196 1262 / 1632 31 / 26</div> <div>76 / 68 75 / 184 800 / 553</div>	31 <div>1047 / 1659 161 / 456</div> <div>I-5 SB Exit Ramp</div> <div>1082 / 869</div> <div>Palm Ave (SR-75)</div> <div>295 / 521</div>	32 <div>543 / 260 437 / 546</div> <div>Palm Ave (SR-75)</div> <div>456 / 970</div> <div>751 / 436 2 / 3 149 / 111</div>	33 <div>14 / 37</div> <div>Silver Strand Blvd</div> <div>YMCA Dwy</div> <div>4 / 11</div> <div>5 / 9 66 / 4</div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



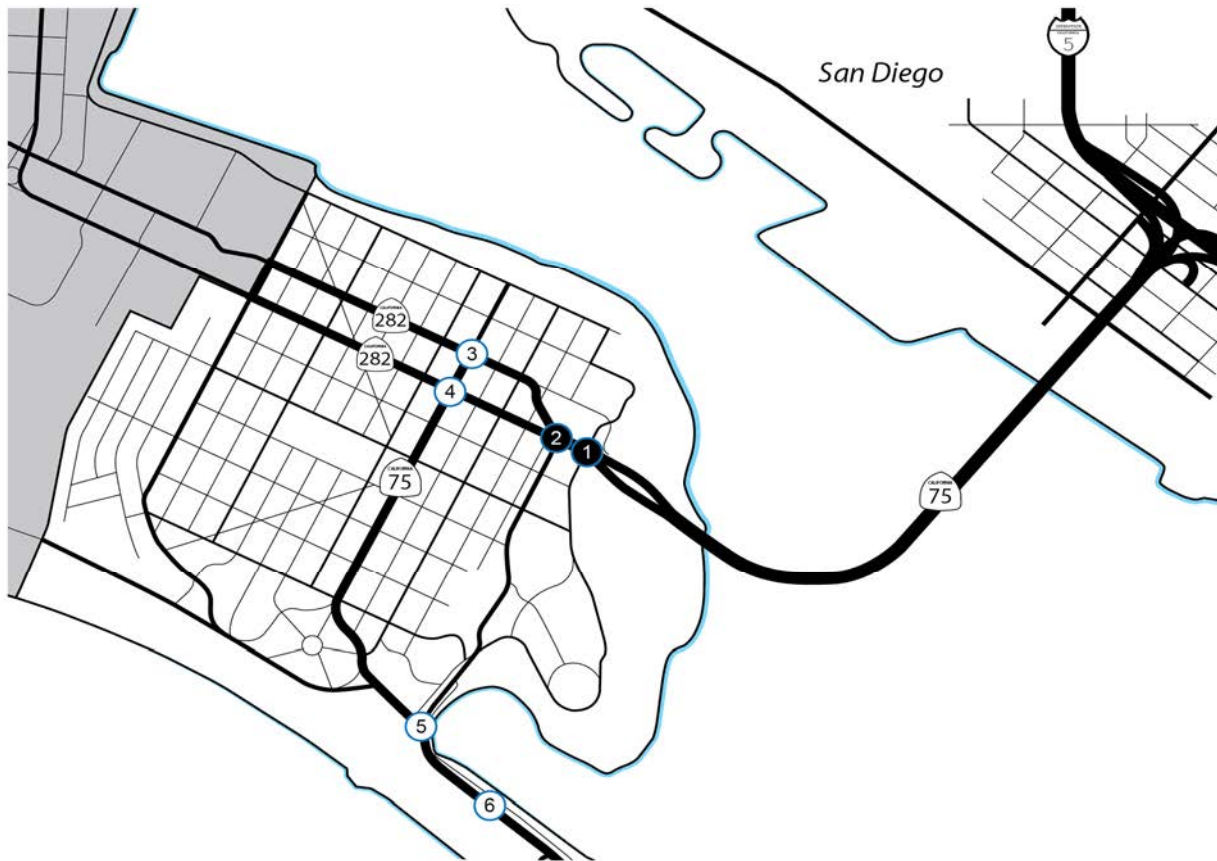
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1 10 / 56 ↻ 1313 / 3552 35 / 18 ↻ 535 / 241 3287 / 1684 ↻ 479 / 908 ↻ Fourth St (SR-75)	2 3186 / 1722 ↻ 1174 / 3315 204 / 132 ↻ 234 / 202 ↻ Fourth St (SR-75) Pomona Ave	3 6 / 15 ↻ 260 / 771 ↻ 251 / 87 1545 / 540 1562 / 987 ↻ 41 / 71 94 / 245 ↻ Orange Ave (SR-75) Third Street (SR-75)	4 1444 / 1103 ↻ 437 / 676 ↻ 503 / 1710 52 / 45 ↻ 127 / 324 217 / 440 ↻ Orange Ave (SR-75) Fourth St (SR-75)
5 1286 / 1379 ↻ 8 / 14 ↻ 253 / 203 ↻ 1294 / 1007 704 / 804 ↻ Orange Ave (SR-75) Silver Strand Blvd (SR-75)	6 43 / 178 ↻ 1451 / 1641 ↻ 46 / 79 ↻ 7 / 29 0 / 12 9 / 30 ↻ 55 / 168 3 / 12 12 / 34 ↻ 23 / 27 1544 / 1715 30 / 58 ↻ Silver Strand Blvd (SR-75) Avenidas De Las Arenas		

CORONADO

Study intersections 1 - 6



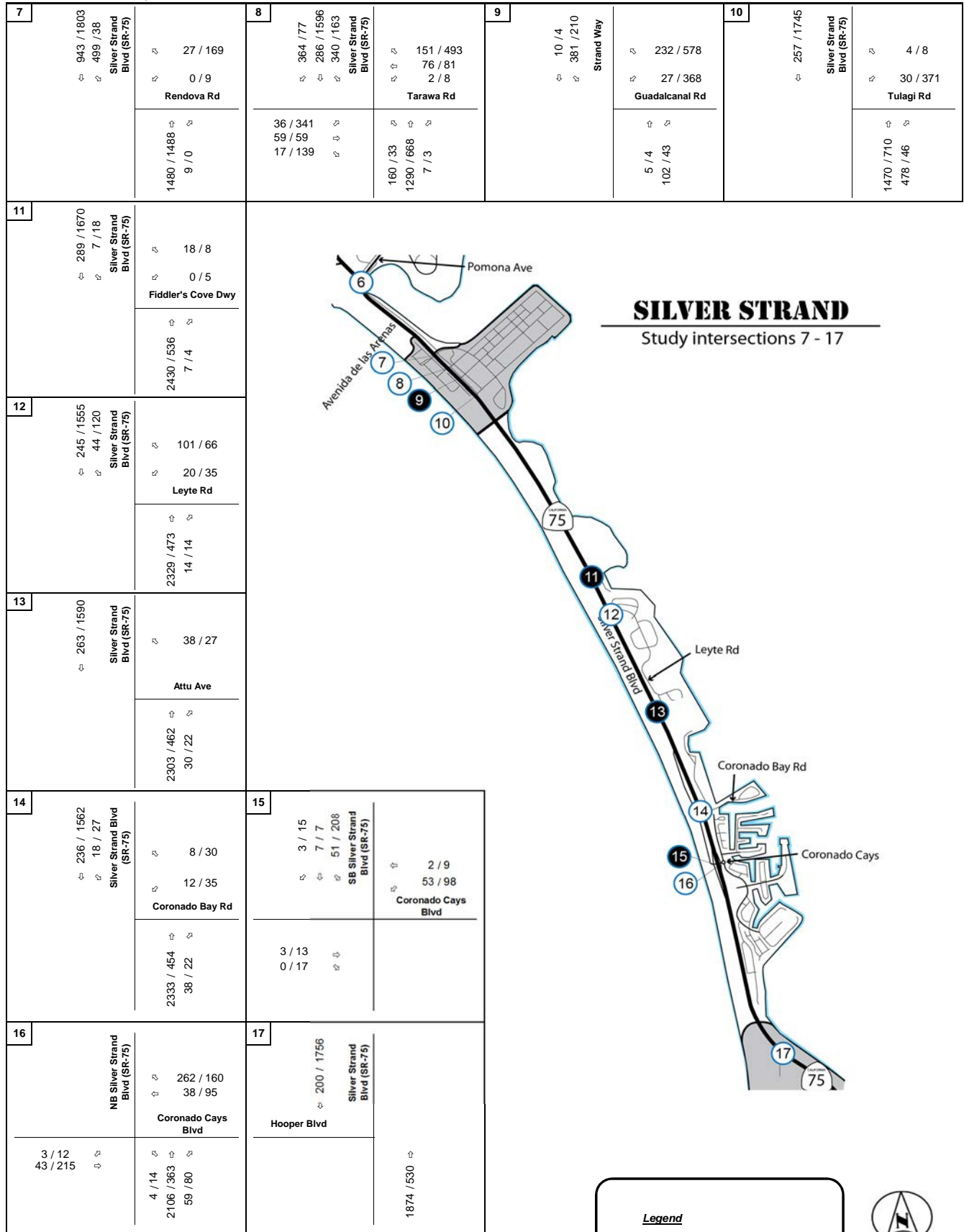
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X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

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<div>18</div> <div> <div>51 / 224</div> <div>147 / 1242</div> <div>4 / 19</div> <div>Silver Strand Blvd (SR-75)</div> <div>21 / 7</div> <div>8 / 4</div> <div>50 / 19</div> <div>Rainbow Dr</div> <div>456 / 101</div> <div>2 / 7</div> <div>45 / 79</div> <div>30 / 85</div> <div>1735 / 363</div> <div>11 / 58</div> </div>	<div>19</div> <div> <div>60 / 24</div> <div>48 / 30</div> <div>23 / 28</div> <div>7th St</div> <div>20 / 40</div> <div>1570 / 406</div> <div>Silver Strand Blvd (SR-75)</div> <div>9 / 66</div> <div>215 / 1190</div> <div>20 / 67</div> <div>44 / 19</div> <div>27 / 46</div> <div>2 / 5</div> </div>	<div>20</div> <div> <div>15 / 4</div> <div>Delaware St</div> <div>10 / 44</div> <div>1580 / 449</div> <div>457 / 580</div> <div>Silver Strand Blvd (SR-75)</div> <div>232 / 1224</div> </div>	<div>21</div> <div> <div>5 / 9</div> <div>49 / 107</div> <div>Silver Strand Blvd</div> <div>107 / 42</div> <div>131 / 313</div> <div>Palm Ave</div> <div>10 / 4</div> <div>238 / 218</div> <div>Dwy</div> </div>
<div>22</div> <div> <div>15 / 14</div> <div>11 / 34</div> <div>12 / 29</div> <div>3rd St</div> <div>25 / 25</div> <div>214 / 327</div> <div>27 / 87</div> <div>Palm Ave</div> <div>8 / 8</div> <div>278 / 301</div> <div>5 / 13</div> <div>12 / 15</div> <div>15 / 40</div> <div>129 / 70</div> </div>	<div>23</div> <div> <div>71 / 144</div> <div>18 / 54</div> <div>Rainbow Dr</div> <div>156 / 41</div> <div>340 / 466</div> <div>Palm Ave</div> <div>230 / 75</div> <div>435 / 432</div> </div>	<div>24</div> <div> <div>28 / 31</div> <div>28 / 43</div> <div>2 / 13</div> <div>7th St</div> <div>0 / 4</div> <div>341 / 468</div> <div>27 / 32</div> <div>Palm Ave</div> <div>17 / 29</div> <div>428 / 441</div> <div>16 / 30</div> <div>67 / 56</div> <div>37 / 26</div> <div>83 / 23</div> </div>	<div>25</div> <div> <div>514 / 490</div> <div>5 / 9</div> <div>Delaware St</div> <div>3 / 7</div> <div>6 / 3</div> <div>Palm Ave</div> </div>
<div>26</div> <div> <div>28 / 29</div> <div>52 / 90</div> <div>102 / 197</div> <div>50 / 149</div> <div>1710 / 876</div> <div>27 / 66</div> <div>Palm Ave (SR-75)</div> <div>24 / 47</div> <div>732 / 1534</div> <div>40 / 141</div> <div>185 / 111</div> <div>42 / 102</div> <div>58 / 71</div> <div>9th St</div> </div>	<div>27</div> <div> <div>17 / 16</div> <div>12 / 15</div> <div>63 / 72</div> <div>Florida St</div> <div>14 / 63</div> <div>1908 / 1338</div> <div>23 / 56</div> <div>Palm Ave (SR-75)</div> <div>3 / 23</div> <div>995 / 1856</div> <div>40 / 65</div> <div>21 / 24</div> <div>5 / 12</div> <div>35 / 40</div> </div>	<div>28</div> <div> <div>17 / 23</div> <div>41 / 51</div> <div>192 / 176</div> <div>13th St</div> <div>59 / 93</div> <div>1744 / 1424</div> <div>110 / 179</div> <div>Palm Ave (SR-75)</div> <div>4 / 30</div> <div>1076 / 1725</div> <div>72 / 225</div> <div>165 / 147</div> <div>22 / 46</div> <div>104 / 146</div> </div>	<div>29</div> <div> <div>24 / 12</div> <div>3 / 12</div> <div>44 / 27</div> <div>16th St</div> <div>14 / 18</div> <div>1892 / 1764</div> <div>50 / 195</div> <div>Palm Ave (SR-75)</div> <div>16 / 11</div> <div>1379 / 1870</div> <div>29 / 57</div> <div>18 / 45</div> <div>8 / 10</div> <div>56 / 93</div> </div>
<div>30</div> <div> <div>88 / 261</div> <div>106 / 274</div> <div>269 / 674</div> <div>19th St</div> <div>246 / 636</div> <div>1824 / 1774</div> <div>280 / 376</div> <div>Palm Ave (SR-75)</div> <div>105 / 216</div> <div>1395 / 1804</div> <div>34 / 28</div> <div>84 / 75</div> <div>83 / 203</div> <div>884 / 611</div> <div>Saturn Blvd</div> </div>	<div>31</div> <div> <div>1157 / 1833</div> <div>178 / 504</div> <div>I-5 SB Exit Ramp</div> <div>1196 / 960</div> <div>Palm Ave (SR-75)</div> <div>326 / 575</div> </div>	<div>32</div> <div> <div>I-5 NB Ramps</div> <div>600 / 287</div> <div>483 / 603</div> <div>Palm Ave (SR-75)</div> <div>504 / 1072</div> <div>830 / 482</div> <div>2 / 3</div> <div>165 / 123</div> </div>	<div>33</div> <div> <div>14 / 38</div> <div>Silver Strand Blvd</div> <div>YMCA Dwy</div> <div>4 / 11</div> <div>5 / 9</div> <div>67 / 4</div> </div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



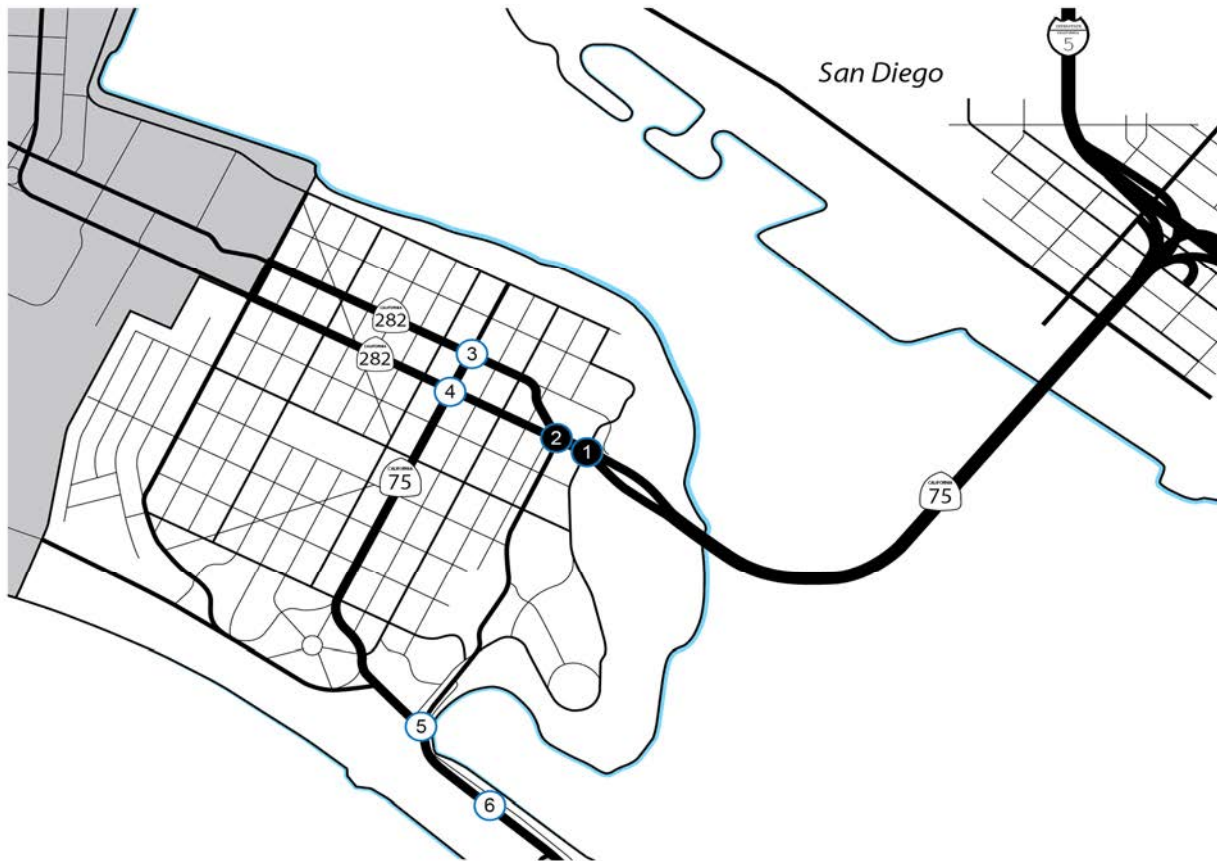
NOT TO SCALE

NBC Coastal Campus

<div>1</div> <div>Glorietta Blvd</div> <div>↕ -197 / -49</div> <div>Fourth St (SR-75)</div> <div>-20 / -179 ↕</div>	<div>2</div> <div>↕ -197 / -49</div> <div>Fourth St (SR-75)</div> <div>-20 / -179 ↕</div> <div>Pomona Ave</div> <div>↕ -2 / -17</div>	<div>3</div> <div>Orange Ave (SR-75)</div> <div>↕ -197 / -49</div> <div>Third Street (SR-75)</div> <div>↕ -2 / -17</div>	<div>4</div> <div>↕ -197 / -49</div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> <div>-17 / -5 ↕</div> <div>↕ -2 / -17</div> <div>↕ -20 / -179</div>
<div>5</div> <div>↕ -220 / -55</div> <div>Orange Ave (SR-75)</div> <div>Silver Strand Blvd (SR-75)</div> <div>Pomona Ave</div> <div>↕ -23 / -201</div> <div>↕ -2 / -17</div>	<div>6</div> <div>↕ -220 / -55</div> <div>Silver Strand Blvd (SR-75)</div> <div>Avenidas De Las Arenas</div> <div>↕ -25 / -218</div>		

CORONADO

Study intersections 1 - 6



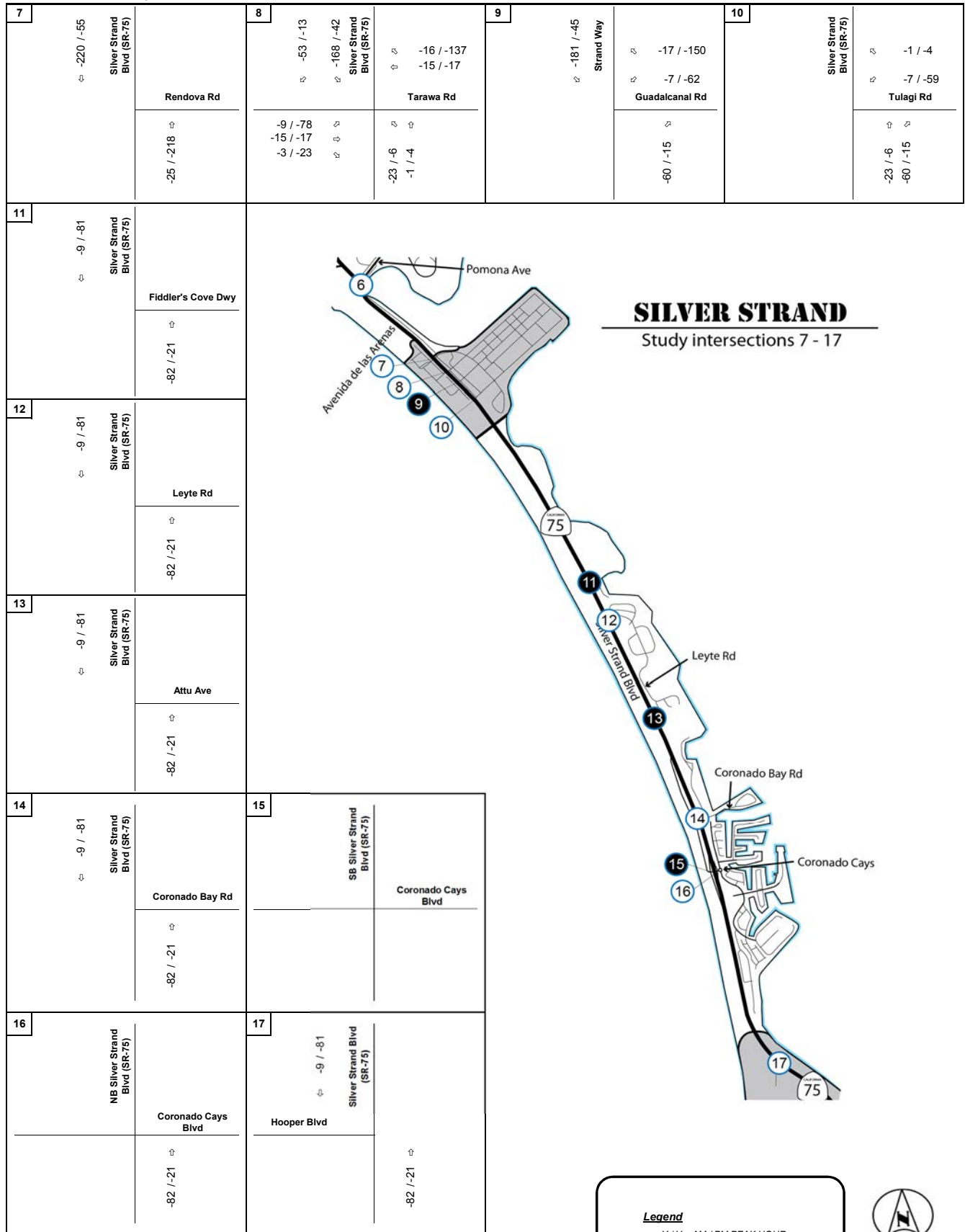
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus



NBC Coastal Campus

18	-1 / -4 -9 / -78 Silver Strand Blvd (SR-75)	Rainbow Dr	7th St	-76 / -19 Silver Strand Blvd (SR-75)	Delaware St	-76 / -19 Silver Strand Blvd (SR-75)	Silver Strand Blvd	Palm Ave
-4 / -1	-79 / -20	-9 / -75 -1 / -4	-4 / -1	-9 / -75			Dwy	
22	3rd St	Palm Ave	23	-1 / -4 Rainbow Dr	Palm Ave	24	-1 / -4 7th St	Palm Ave
		-4 / -1					Delaware St	
26	-73 / -18 Palm Ave (SR-75)	9th St	27	Florida St	-73 / -18 Palm Ave (SR-75)	28	13th St	-69 / -18 Palm Ave (SR-75)
-8 / -72 -1 / -4	-4 / -1	-8 / -72			-8 / -69 -1 / -4		16th St	-69 / -18 Palm Ave (SR-75)
30	19th St	-66 / -17 Palm Ave (SR-75)	31	-17 / -5 I-5 SB Exit Ramp	-50 / -13 Palm Ave (SR-75)	32	I-5 NB Ramps	-7 / -2 Palm Ave (SR-75)
-8 / -65 -1 / -4	-4 / -1	-1 / -7			-1 / -7		Silver Strand Blvd	YMCA Dwy



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



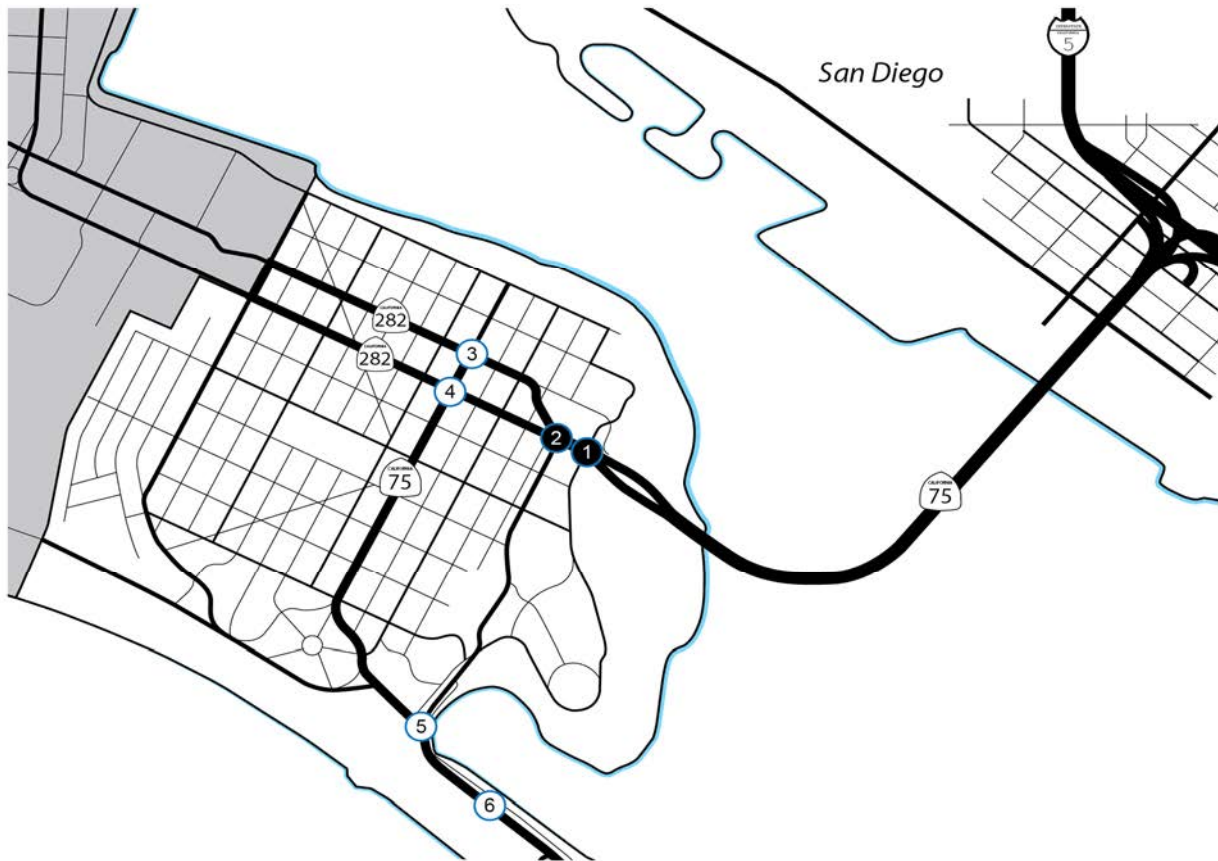
NOT TO SCALE

NBC Coastal Campus

<div>1</div> <div>Glorietta Blvd</div> <div>157 / 39</div> <div>Fourth St (SR-75)</div> <div>18 / 155</div>	<div>2</div> <div></div> <div>157 / 39</div> <div>Fourth St (SR-75)</div> <div>18 / 155</div> <div>Pomona Ave</div>	<div>3</div> <div>Orange Ave (SR-75)</div> <div>157 / 39</div> <div>Third Street (SR-75)</div> <div>4 / 32</div>	<div>4</div> <div></div> <div>157 / 39</div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> <div>33 / 8</div> <div>4 / 32</div> <div>18 / 155</div>
<div>5</div> <div>203 / 50</div> <div>Orange Ave (SR-75)</div> <div>Silver Strand Blvd (SR-75)</div> <div>Pomona Ave</div> <div>23 / 201</div>	<div>6</div> <div>203 / 50</div> <div>Silver Strand Blvd (SR-75)</div> <div>Avenidas De Las Arenas</div> <div>23 / 201</div>		

CORONADO

Study intersections 1 - 6



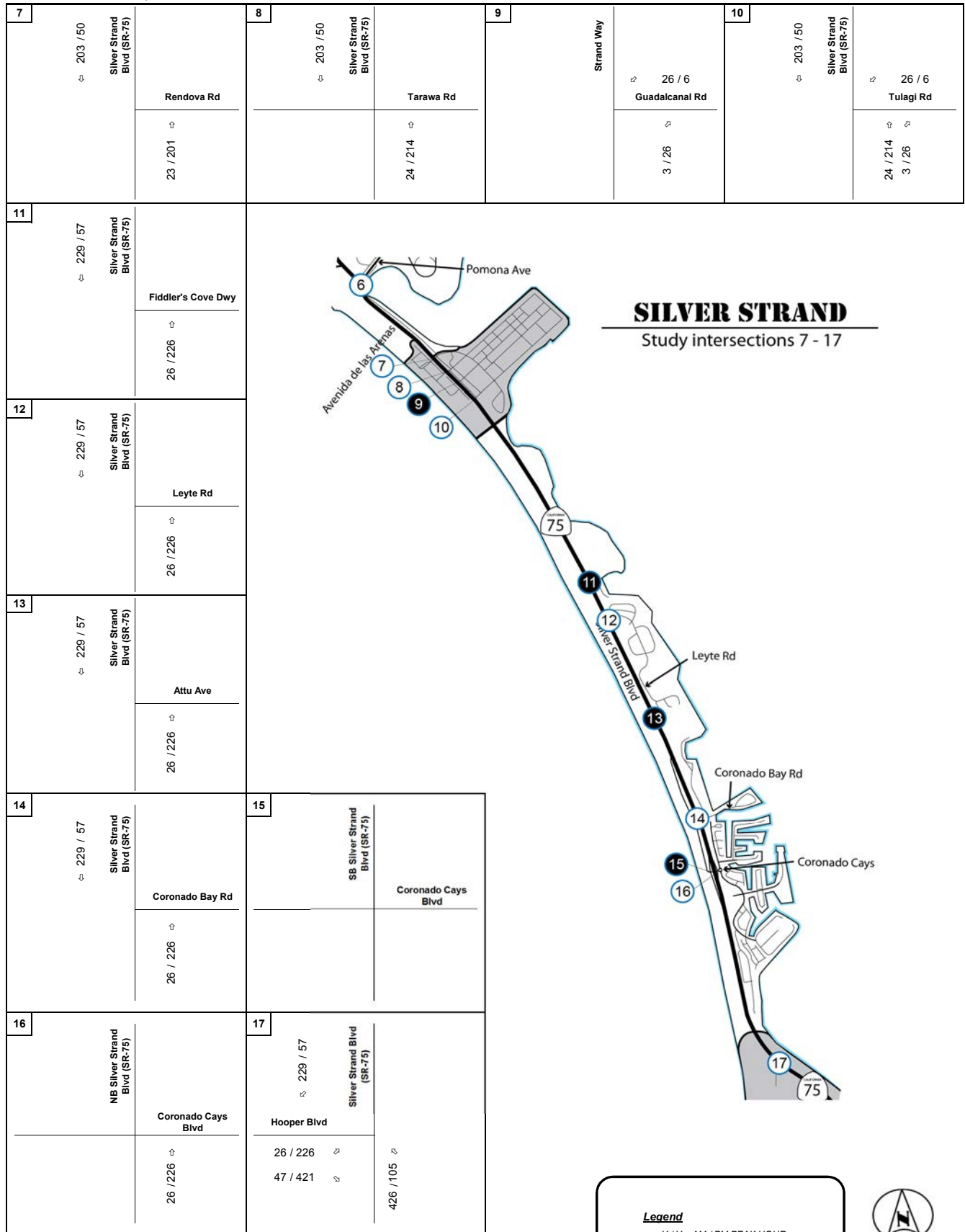
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus



NBC Coastal Campus

18	1 / 6 47 / 414 Silver Strand Blvd (SR-75) Rainbow Dr 7 / 2 419 / 104	19	7th St 413 / 102 Silver Strand Blvd (SR-75) 46 / 408 1 / 6 7 / 2	20	Delaware St 413 / 102 Silver Strand Blvd (SR-75) 46 / 408	21	Silver Strand Blvd 1 / 6 Palm Ave 7 / 2 Dwy
22	3rd St 1 / 6 Palm Ave 7 / 2	23	1 / 6 Rainbow Dr Palm Ave 7 / 2	24	1 / 6 7th St Palm Ave 7 / 2	25	Palm Ave Delaware St
26	406 / 100 Palm Ave (SR-75) 45 / 401 1 / 6 9th St 7 / 2	27	Florida St 406 / 100 Palm Ave (SR-75) 45 / 401	28	13th St 400 / 99 Palm Ave (SR-75) 45 / 395 1 / 6 7 / 2	29	16th St 400 / 99 Palm Ave (SR-75) 45 / 395
30	19th St 393 / 97 Palm Ave (SR-75) 44 / 388 1 / 6 Saturn Blvd 7 / 2	31	295 / 73 I-5 SB Exit Ramp 98 / 24 Palm Ave (SR-75) 1 / 13	32	I-5 NB Ramps 13 / 3 Palm Ave (SR-75) 1 / 13 85 / 21	33	Silver Strand Blvd YMCA Dwy



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



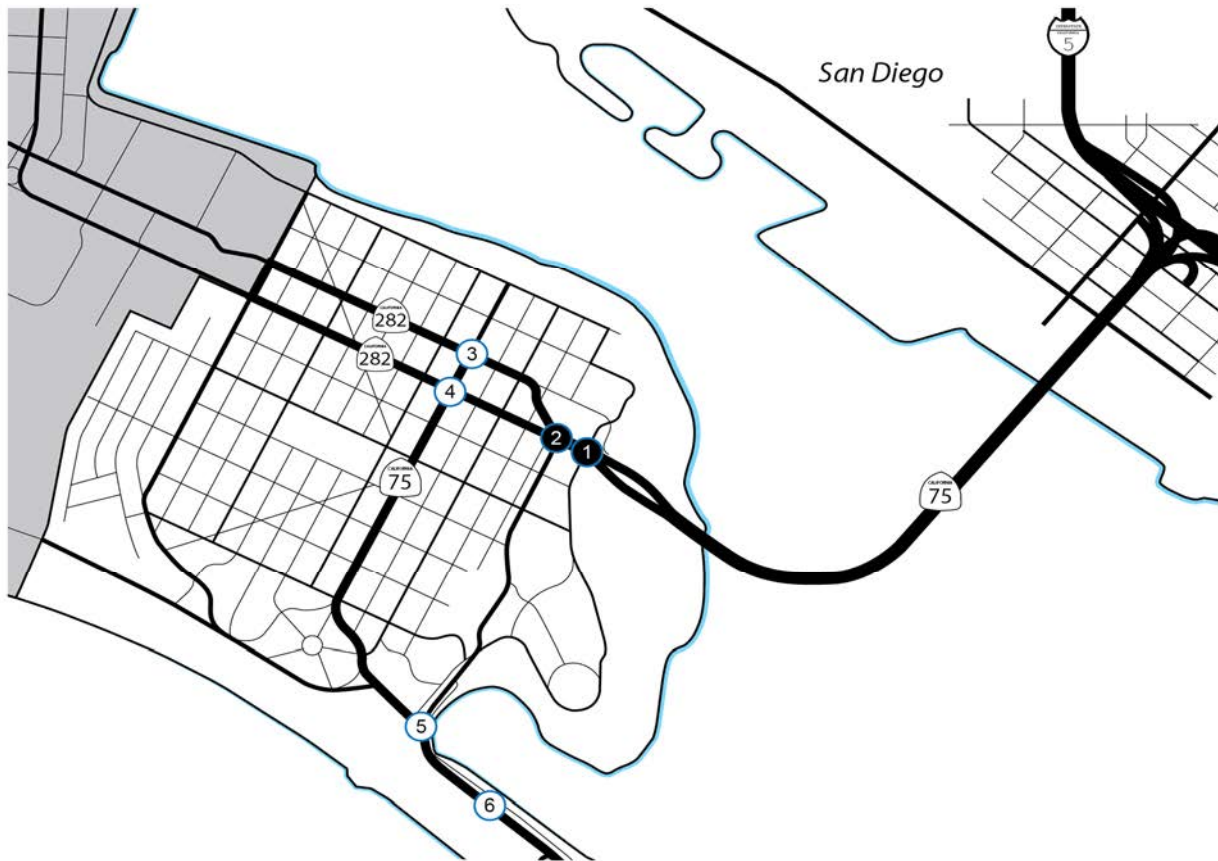
NOT TO SCALE

NBC Coastal Campus

<div>1</div> <div>Glorietta Blvd</div> <div> <div> <div>-40 / -10</div> <div>Fourth St (SR-75)</div> </div> <div> <div>-2 / -24</div> <div></div> </div> </div>	<div>2</div> <div></div> <div> <div> <div>-40 / -10</div> <div>Fourth St (SR-75)</div> </div> <div> <div>-2 / -24</div> <div>Pomona Ave</div> </div> <div> <div>-2 / -17</div> <div></div> </div> </div>	<div>3</div> <div>Orange Ave (SR-75)</div> <div> <div> <div>-40 / -10</div> <div>Third Street (SR-75)</div> </div> <div> <div>2 / 15</div> <div></div> </div> </div>	<div>4</div> <div>Orange Ave (SR-75)</div> <div> <div> <div>-40 / -10</div> <div>Fourth St (SR-75)</div> </div> <div> <div>16 / 3</div> <div></div> </div> <div> <div>2 / 15</div> <div>-2 / -24</div> </div> </div>
<div>5</div> <div>Orange Ave (SR-75)</div> <div> <div> <div>-17 / -5</div> <div>Pomona Ave</div> </div> <div> <div>-2 / -17</div> <div></div> </div> </div>	<div>6</div> <div>Silver Strand Blvd (SR-75)</div> <div> <div> <div>-17 / -5</div> <div>Avenidas De Las Arenas</div> </div> <div> <div>-2 / -17</div> <div></div> </div> </div>		

CORONADO

Study intersections 1 - 6



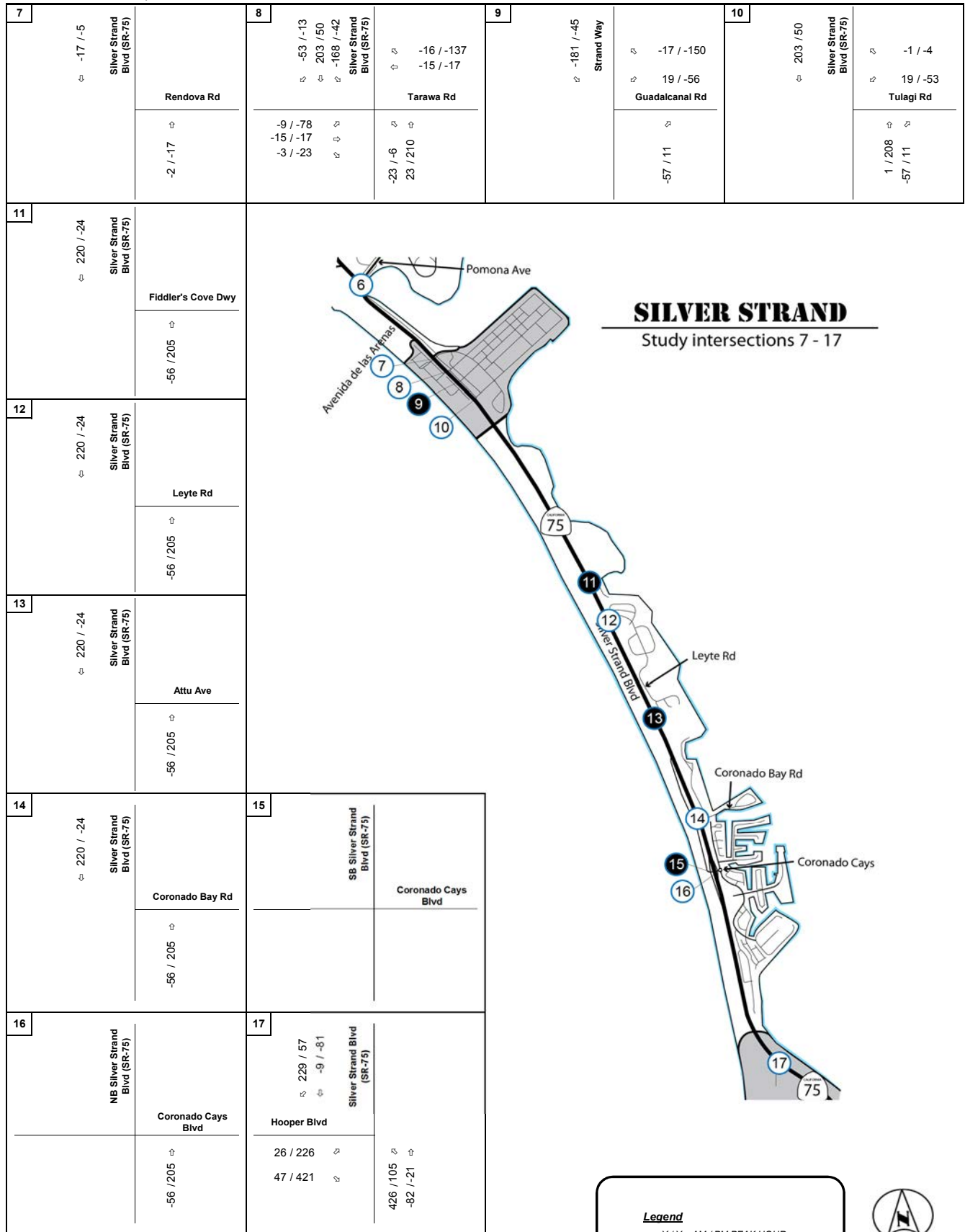
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus



NBC Coastal Campus

18	0 / 2 38 / 336 Silver Strand Blvd (SR-75) Rainbow Dr 3 / 1	19	7th St 337 / 83 Silver Strand Blvd (SR-75) 37 / 333 0 / 2 3 / 1	20	Delaware St 337 / 83 Silver Strand Blvd (SR-75) 37 / 333	21	Silver Strand Blvd 1 / 6 Palm Ave 7 / 2 Dwy
22	3rd St 1 / 6 Palm Ave 7 / 2	23	0 / 2 Rainbow Dr Palm Ave 3 / 1	24	0 / 2 7th St Palm Ave 3 / 1	25	Palm Ave Delaware St
26	333 / 82 Palm Ave (SR-75) 37 / 329 0 / 2 9th St 3 / 1	27	Florida St 333 / 82 Palm Ave (SR-75) 37 / 329	28	13th St 331 / 81 Palm Ave (SR-75) 37 / 326 0 / 2 3 / 1	29	16th St 331 / 81 Palm Ave (SR-75) 37 / 326
30	19th St 327 / 80 Palm Ave (SR-75) 36 / 323 0 / 2 Saturn Blvd 3 / 1	31	278 / 68 I-5 SB Exit Ramp 48 / 11 Palm Ave (SR-75) 0 / 6	32	I-5 NB Ramps 6 / 1 Palm Ave (SR-75) 0 / 6 42 / 10	33	Silver Strand Blvd YMCA Dwy



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



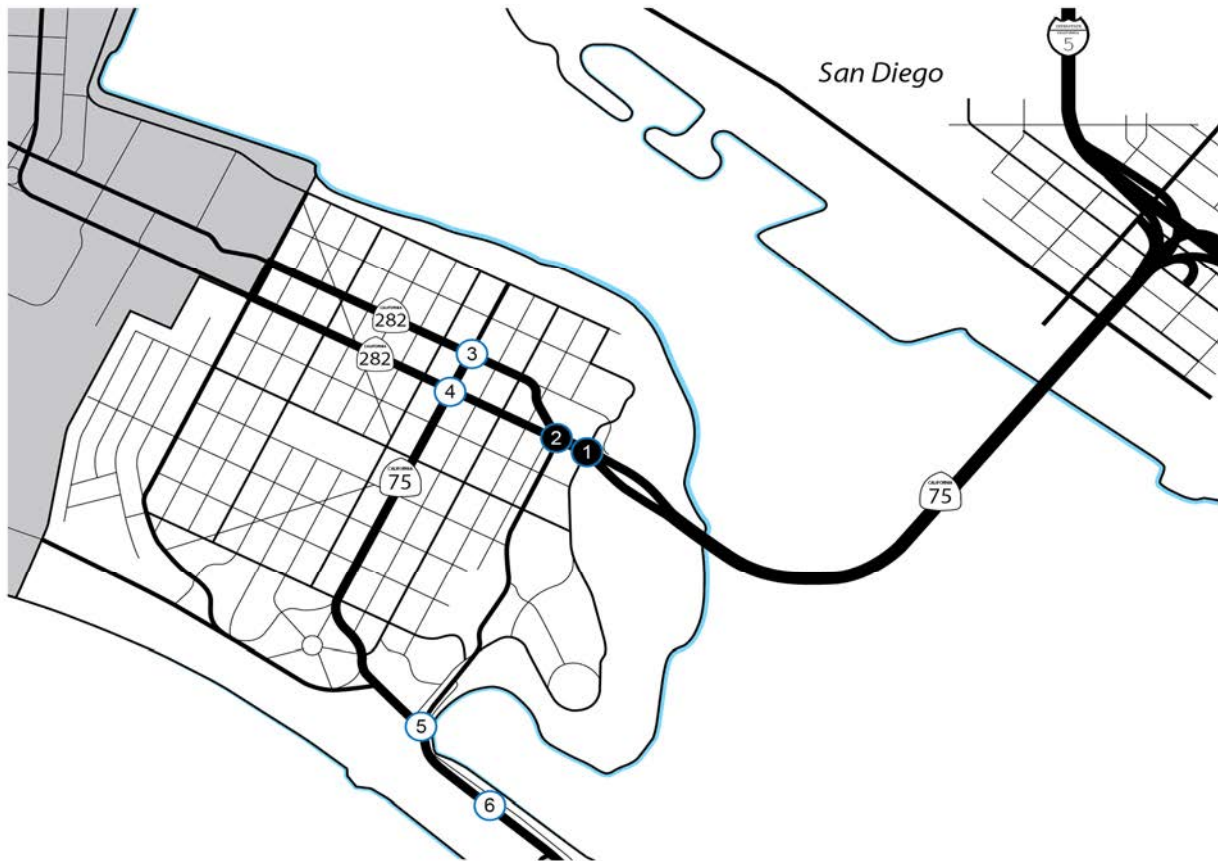
NOT TO SCALE

NBC Coastal Campus

<div>1</div> <div>Glorietta Blvd</div> <div>⇅ -132 / -33</div> <div>Fourth St (SR-75)</div> <div>-14 / -119 ⇅</div>	<div>2</div> <div></div> <div>⇅ -132 / -33</div> <div>Fourth St (SR-75)</div> <div>-14 / -119 ⇅</div> <div>Pomona Ave</div> <div>-2 / -11 ⇅</div>	<div>3</div> <div>Orange Ave (SR-75)</div> <div>⇅ -132 / -33</div> <div>Third Street (SR-75)</div> <div>-2 / -11 ⇅</div>	<div>4</div> <div>⇅ -132 / -33</div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> <div>-11 / -3 ⇅</div> <div>-2 / -11 ⇅</div> <div>-14 / -119 ⇅</div>
<div>5</div> <div>⇅ -147 / -37</div> <div>Orange Ave (SR-75)</div> <div>Silver Strand Blvd (SR-75)</div> <div>Pomona Ave</div> <div>⇅ -15 / -134</div> <div>⇅ -2 / -11</div>	<div>6</div> <div>⇅ -147 / -37</div> <div>Silver Strand Blvd (SR-75)</div> <div>Avenidas De Las Arenas</div> <div>-17 / -145 ⇅</div>		

CORONADO

Study intersections 1 - 6



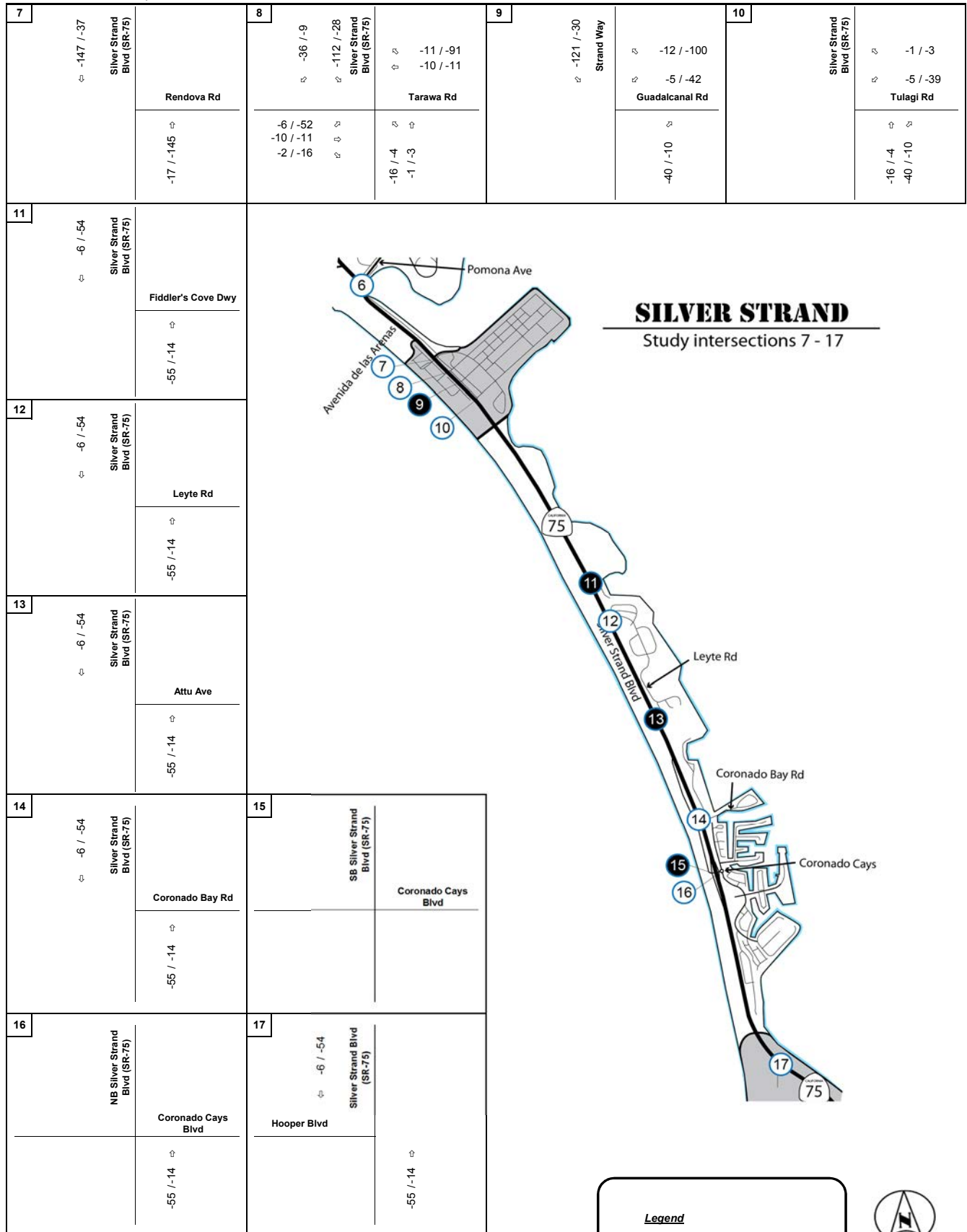
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus



NBC Coastal Campus

18	-1 / -3 -6 / -52 Silver Strand Blvd (SR-75)	Rainbow Dr	7th St	-51 / -13 Silver Strand Blvd (SR-75)	Delaware St	-51 / -13 Silver Strand Blvd (SR-75)	Silver Strand Blvd	Palm Ave
	-3 / -1	-53 / -13	-6 / -50 -1 / -3	-3 / -1	-6 / -50		Dwy	
22	3rd St	Palm Ave	-1 / -3 Rainbow Dr	Palm Ave	-1 / -3 7th St	Palm Ave	Delaware St	Palm Ave
			-3 / -1			-3 / -1		
26		-49 / -12 Palm Ave (SR-75)	Florida St	-49 / -12 Palm Ave (SR-75)	13th St	-46 / -12 Palm Ave (SR-75)	16th St	-46 / -12 Palm Ave (SR-75)
	-6 / -48 -1 / -3 9th St	-3 / -1	-6 / -48		-6 / -46 -1 / -3	-3 / -1	-6 / -46	
30	19th St	-44 / -11 Palm Ave (SR-75)	I-5 SB Exit Ramp	-33 / -9 Palm Ave (SR-75)	I-5 NB Ramps	-5 / -2 Palm Ave (SR-75)	Silver Strand Blvd	YMCA Dwy
	-5 / -44 -1 / -3 Saturn Blvd	-3 / -1	-1 / -5		-1 / -5	-29 / -8		



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



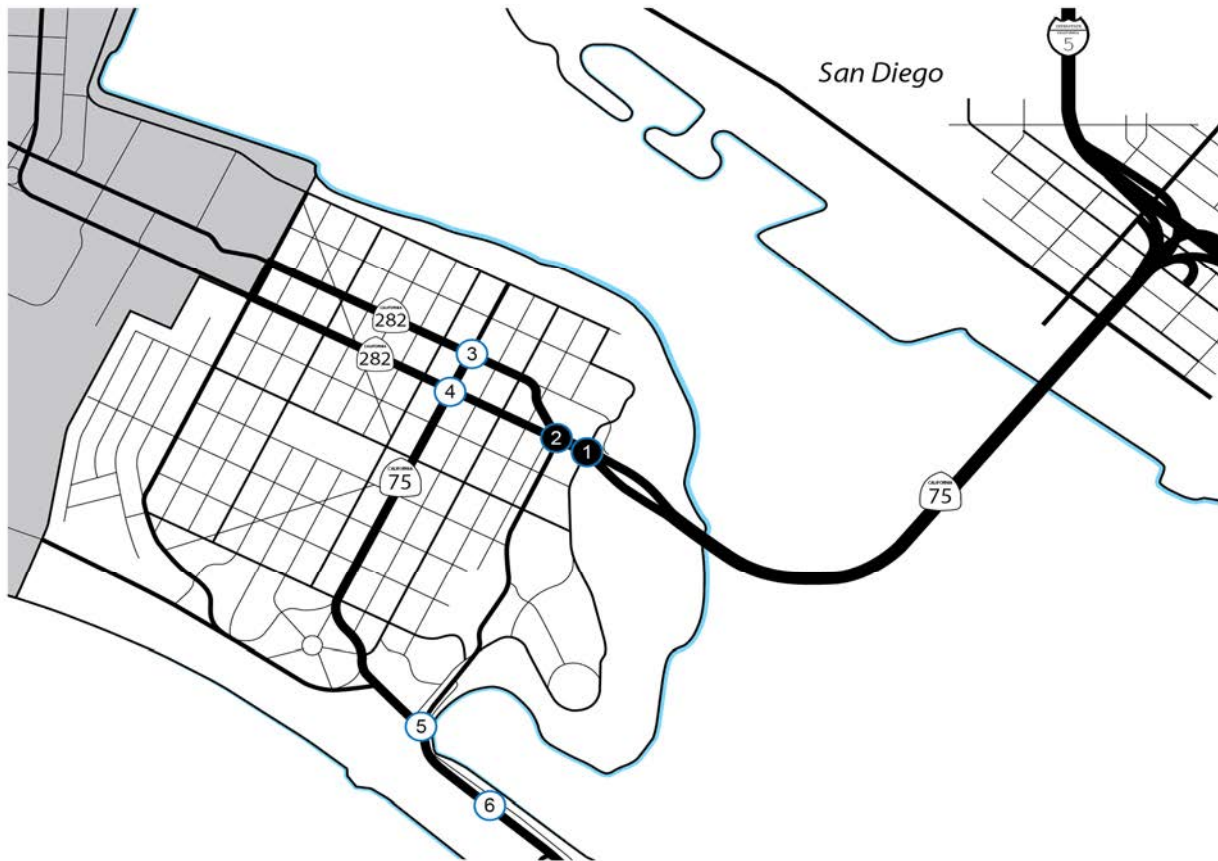
NOT TO SCALE

NBC Coastal Campus

<div>1</div> <div>Glorietta Blvd</div> <div>131 / 32</div> <div>Fourth St (SR-75)</div> <div>15 / 130</div>	<div>2</div> <div></div> <div>131 / 32</div> <div>Fourth St (SR-75)</div> <div>15 / 130</div> <div>Pomona Ave</div>	<div>3</div> <div>Orange Ave (SR-75)</div> <div>131 / 32</div> <div>Third Street (SR-75)</div> <div>3 / 27</div>	<div>4</div> <div></div> <div>131 / 32</div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> <div>27 / 7</div> <div>3 / 27</div> <div>15 / 130</div>
<div>5</div> <div>169 / 42</div> <div>Orange Ave (SR-75)</div> <div>Silver Strand Blvd (SR-75)</div> <div>Pomona Ave</div> <div>19 / 167</div>	<div>6</div> <div>169 / 42</div> <div>Silver Strand Blvd (SR-75)</div> <div>Avenidas De Las Arenas</div> <div>19 / 167</div>		

CORONADO

Study intersections 1 - 6



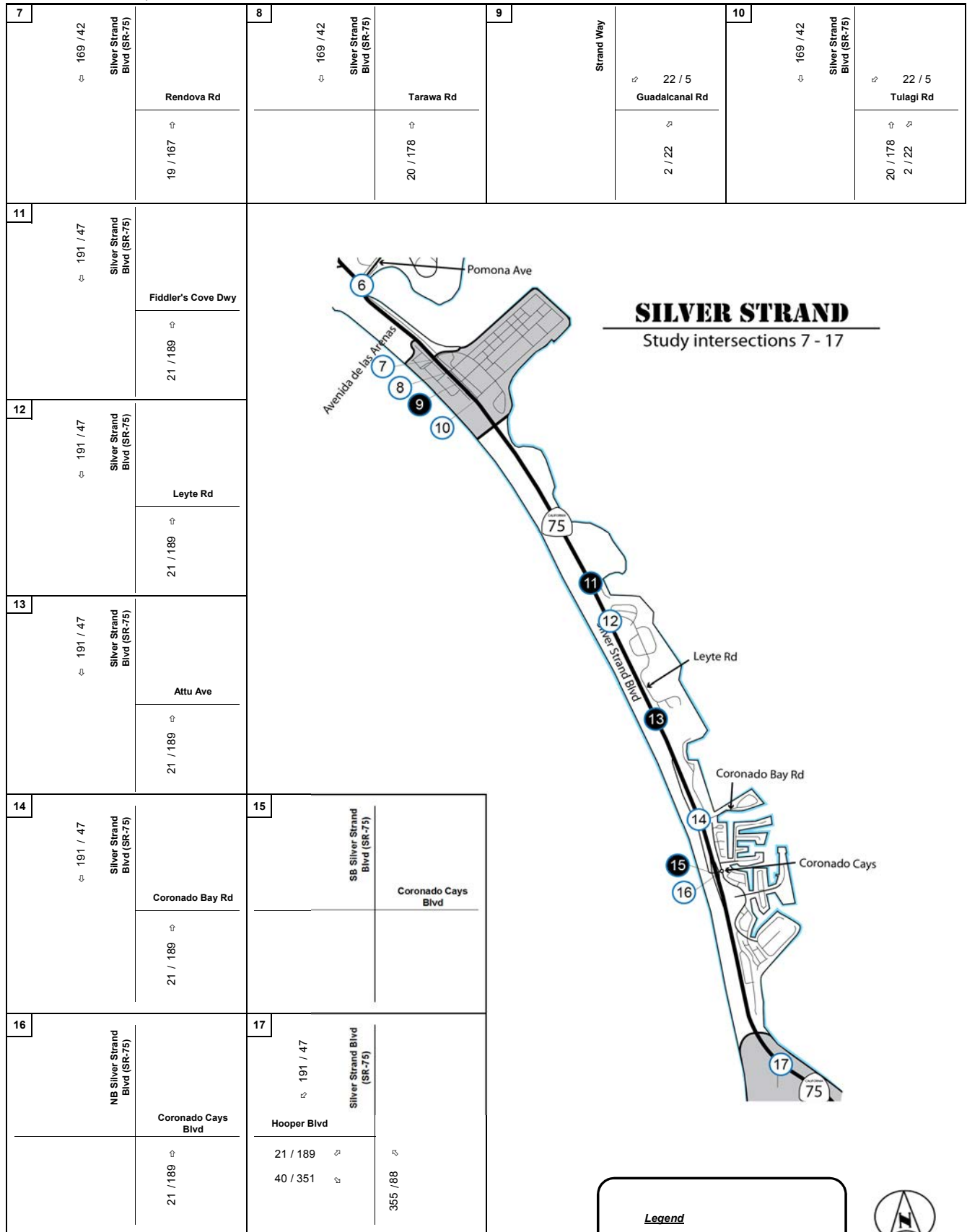
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus



NBC Coastal Campus

18	1 / 5 39 / 346 Silver Strand Blvd (SR-75) Rainbow Dr 5 / 1 349 / 86	19	7th St 344 / 85 Silver Strand Blvd (SR-75) 38 / 340 1 / 5 5 / 1	20	Delaware St 344 / 85 Silver Strand Blvd (SR-75) 38 / 340	21	Silver Strand Blvd 1 / 5 Palm Ave 5 / 1 Dwy
22	3rd St 1 / 5 Palm Ave 5 / 1	23	1 / 5 Rainbow Dr Palm Ave 5 / 1	24	1 / 5 7th St Palm Ave 5 / 1	25	Palm Ave Delaware St
26	339 / 84 Palm Ave (SR-75) 38 / 335 1 / 5 9th St 5 / 1	27	Florida St 339 / 84 Palm Ave (SR-75) 38 / 335	28	13th St 333 / 82 Palm Ave (SR-75) 37 / 329 1 / 5 5 / 1	29	16th St 333 / 82 Palm Ave (SR-75) 37 / 329
30	19th St 328 / 81 Palm Ave (SR-75) 37 / 324 1 / 5 Saturn Blvd 5 / 1	31	246 / 61 I-5 SB Exit Ramp 82 / 20 Palm Ave (SR-75) 1 / 11	32	I-5 NB Ramps 11 / 3 Palm Ave (SR-75) 1 / 11 71 / 18	33	Silver Strand Blvd YMCA Dwy



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



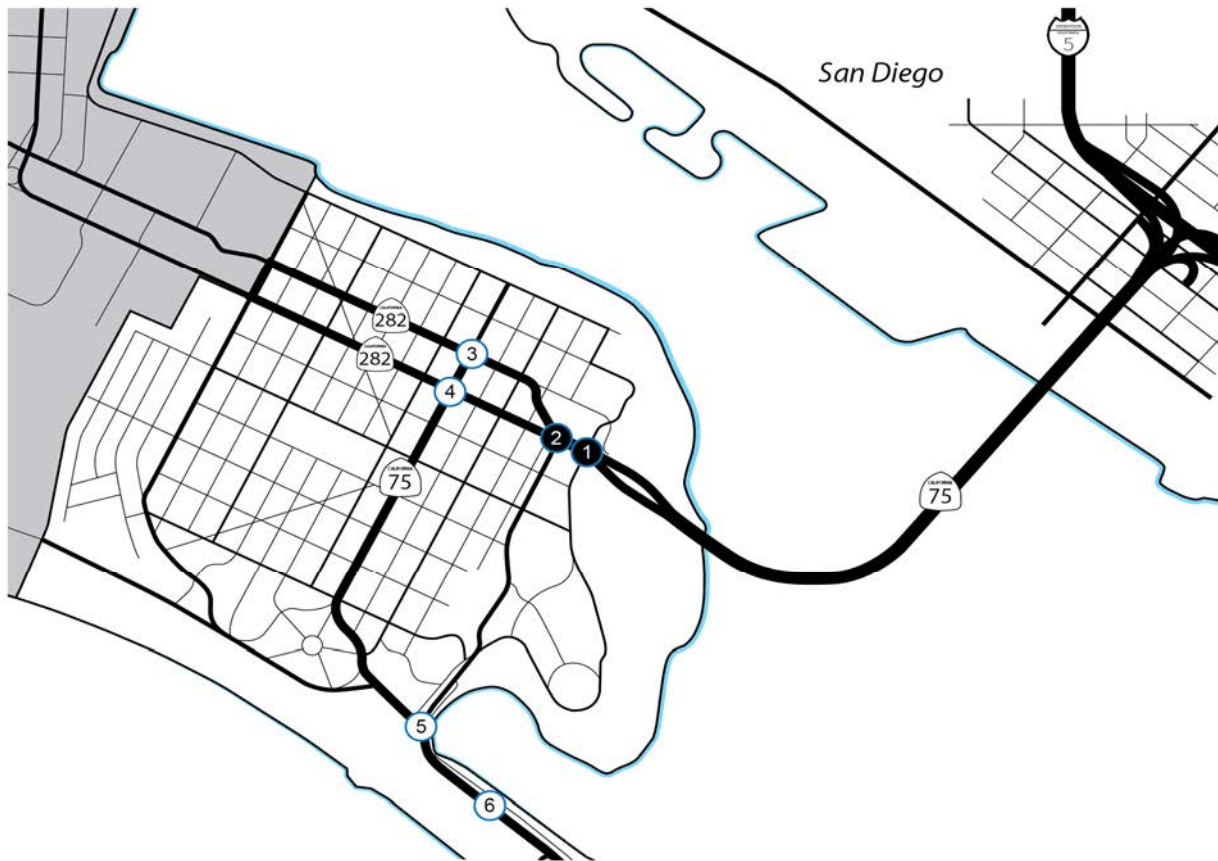
NOT TO SCALE

NBC Coastal Campus

<div>1</div> <div>Glorietta Blvd</div> <div>10 / 3</div> <div>Fourth St (SR-75)</div> <div>1 / 10</div>	<div>2</div> <div></div> <div>10 / 3</div> <div>Fourth St (SR-75)</div> <div>1 / 10</div> <div>Pomona Ave</div>	<div>3</div> <div>Orange Ave (SR-75)</div> <div>10 / 3</div> <div>Third Street (SR-75)</div>	<div>4</div> <div>Orange Ave (SR-75)</div> <div></div> <div>Fourth St (SR-75)</div> <div>1 / 10</div>
<div>5</div> <div>Orange Ave (SR-75)</div> <div>Silver Strand Blvd (SR-75)</div> <div>Pomona Ave</div>	<div>6</div> <div>Silver Strand Blvd (SR-75)</div> <div>Avenidas De Las Arenas</div>		

CORONADO

Study intersections 1 - 6



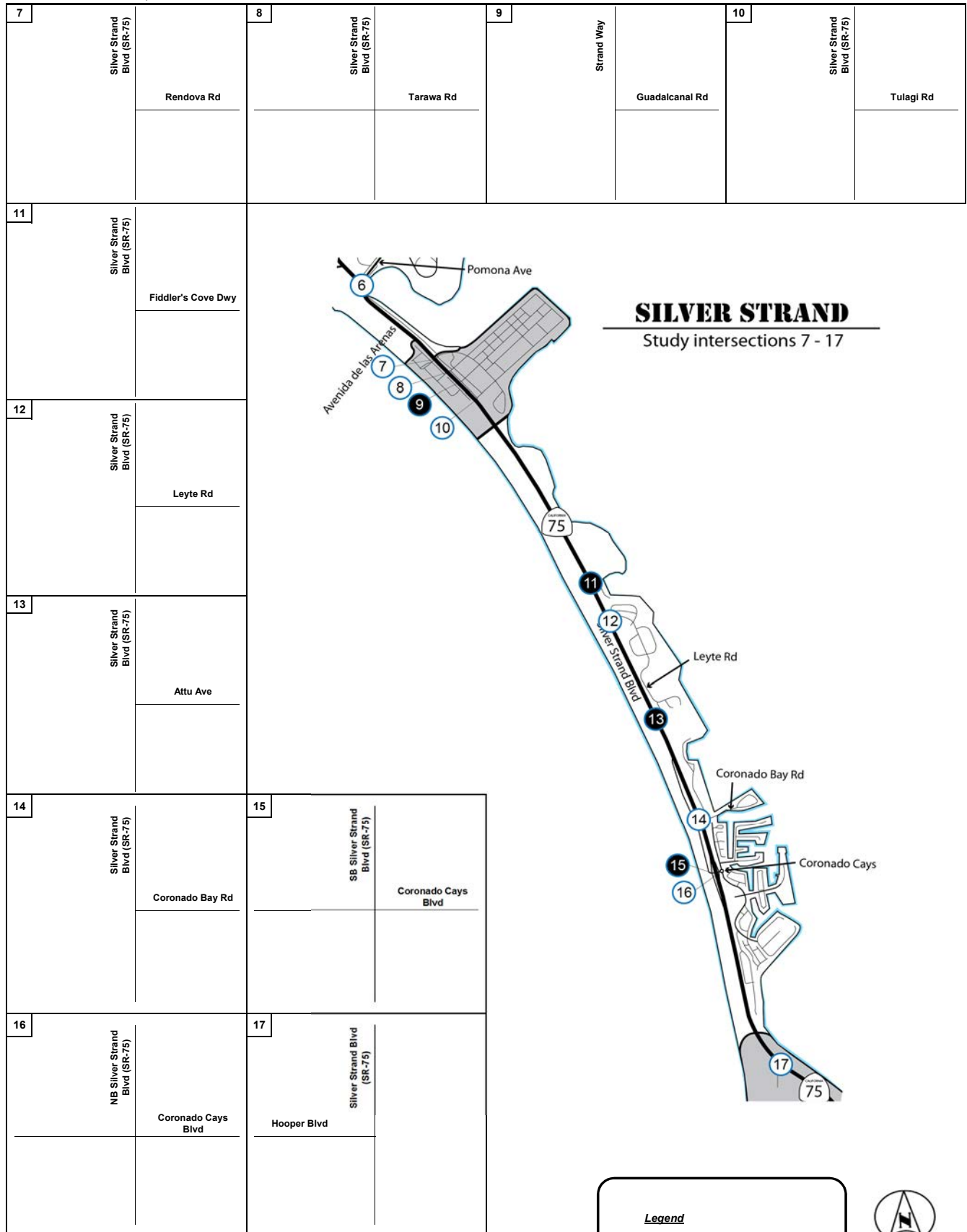
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus



NBC Coastal Campus

18	Silver Strand Blvd (SR-75)	Rainbow Dr	19	7th St	Silver Strand Blvd (SR-75)	20	Delaware St	Silver Strand Blvd (SR-75)	21	Silver Strand Blvd	Palm Ave
22	3rd St	Palm Ave	23	Rainbow Dr	Palm Ave	24	7th St	Palm Ave	25	Delaware St	Palm Ave
26	9th St	Palm Ave (SR-75)	27	Florida St	Palm Ave (SR-75)	28	13th St	Palm Ave (SR-75)	29	16th St	Palm Ave (SR-75)
30	19th St	Palm Ave (SR-75)	31	I-5 SB Exit Ramp	Palm Ave (SR-75)	32	I-5 NB Ramps	Palm Ave (SR-75)	33	Silver Strand Blvd	YMCA Dwy
	Saturn Blvd										



IMPERIAL BEACH

Study intersections 18 - 33

Legend

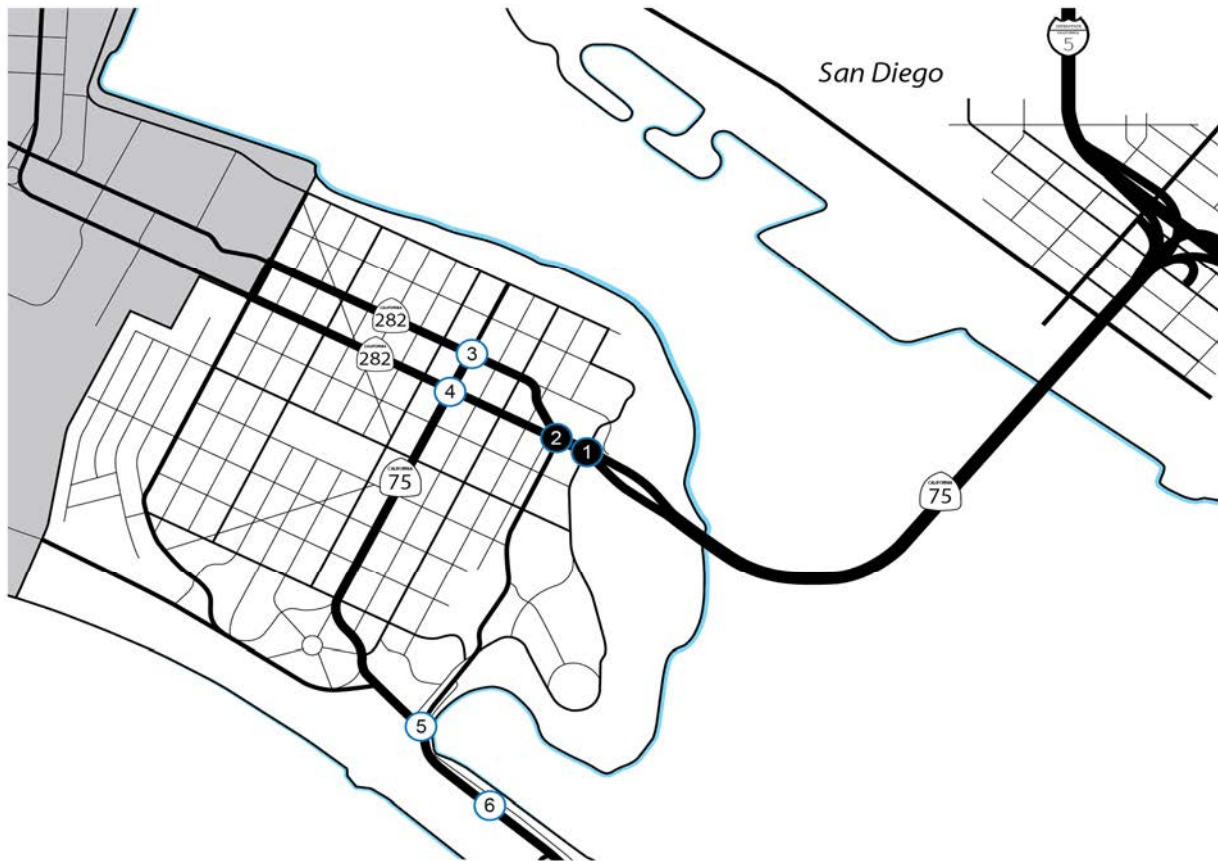
X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus

<div>1</div> <div>Glorietta Blvd</div> <div> <div> <div>9 / 2</div> <div>Fourth St (SR-75)</div> </div> <div> <div>2 / 21</div> <div></div> </div> </div>	<div>2</div> <div></div> <div> <div> <div>9 / 2</div> <div>Fourth St (SR-75)</div> </div> <div> <div>2 / 21</div> <div>Pomona Ave</div> </div> <div> <div>-2 / -11</div> <div></div> </div> </div>	<div>3</div> <div>Orange Ave (SR-75)</div> <div> <div> <div>10 / 3</div> <div>-1 / -1</div> <div>Third Street (SR-75)</div> </div> <div> <div>1 / 16</div> <div></div> </div> </div>	<div>4</div> <div>Orange Ave (SR-75)</div> <div> <div> <div>-1 / -1</div> <div></div> </div> <div> <div>1 / 10</div> <div>16 / 4</div> </div> <div> <div>1 / 16</div> <div>1 / 11</div> </div> </div>
<div>5</div> <div> <div>22 / 5</div> <div>Orange Ave (SR-75)</div> </div> <div> <div> <div>4 / 33</div> <div>-2 / -11</div> </div> <div>Pomona Ave</div> </div>	<div>6</div> <div> <div>22 / 5</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>2 / 22</div> <div>Avenidas De Las Arenas</div> </div>	<div> <div>CORONADO</div> <div>Study intersections 1 - 6</div> </div>	



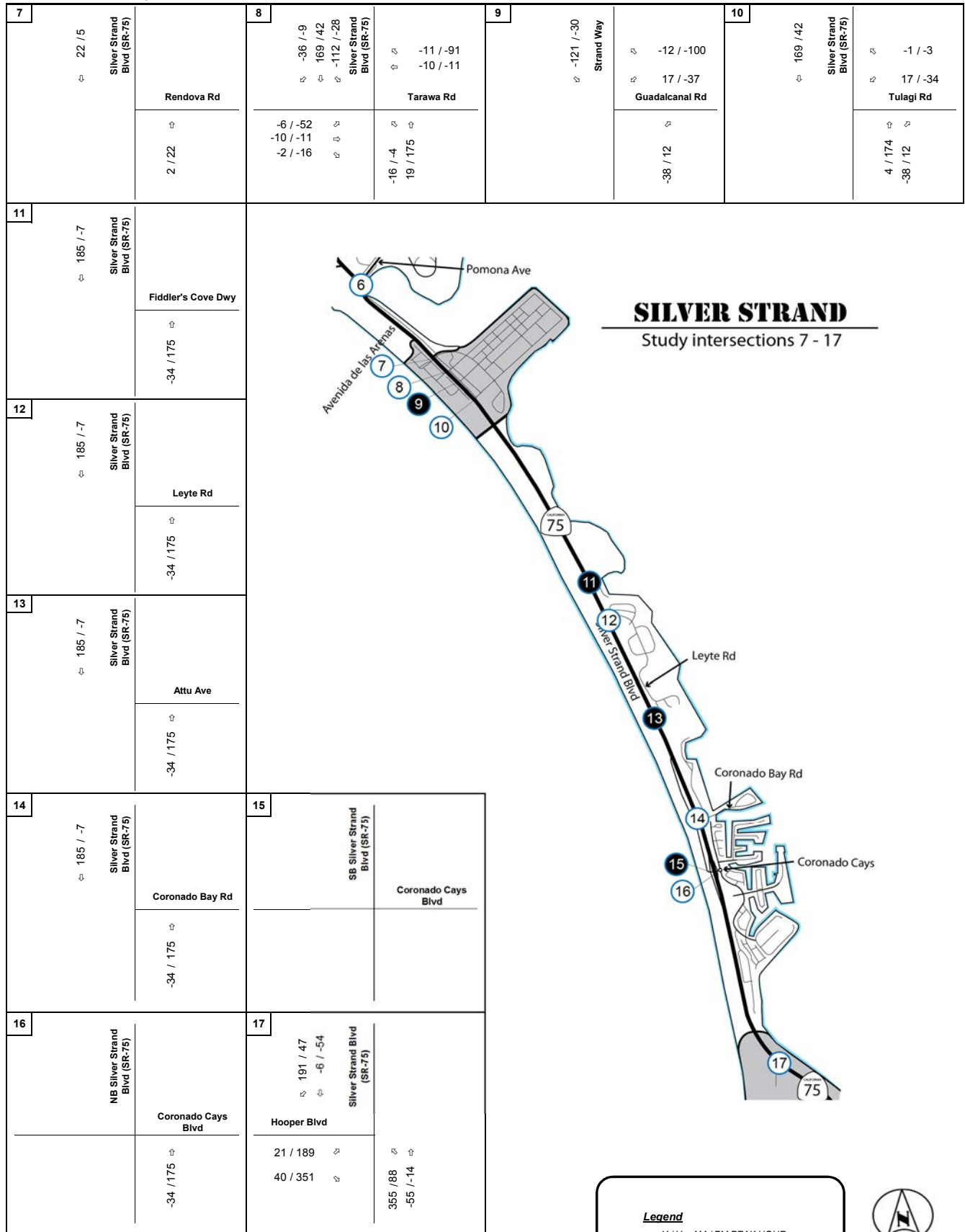
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X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



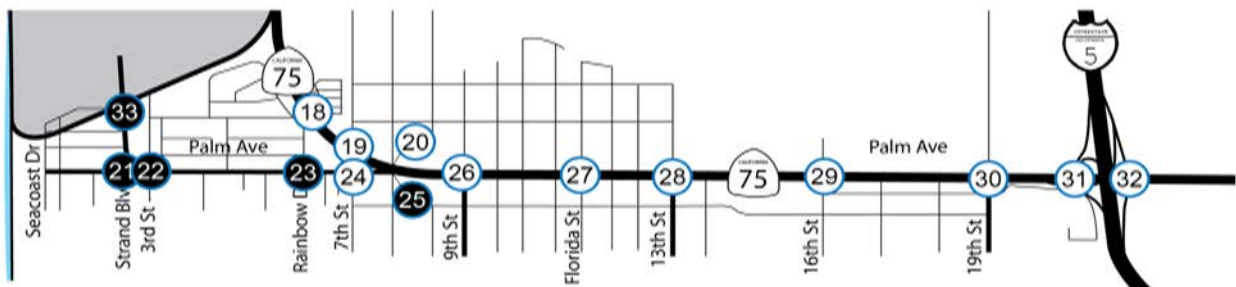
NOT TO SCALE

NBC Coastal Campus



NBC Coastal Campus

18	0 / 2 33 / 294 Silver Strand Blvd (SR-75) Rainbow Dr	19	7th St 293 / 72 Silver Strand Blvd (SR-75)	20	Delaware St 293 / 72 Silver Strand Blvd (SR-75)	21	Silver Strand Blvd 1 / 5 Palm Ave
22	3rd St 1 / 5 Palm Ave	23	0 / 2 Rainbow Dr Palm Ave	24	0 / 2 7th St Palm Ave	25	Palm Ave
26	290 / 72 Palm Ave (SR-75)	27	Florida St 290 / 72 Palm Ave (SR-75)	28	13th St 287 / 70 Palm Ave (SR-75)	29	16th St 287 / 70 Palm Ave (SR-75)
30	19th St 284 / 70 Palm Ave (SR-75)	31	235 / 58 I-5 SB Exit Ramp 49 / 11 Palm Ave (SR-75)	32	I-5 NB Ramps 6 / 1 Palm Ave (SR-75)	33	Silver Strand Blvd YMCA Dwy



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

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D-2

**DRAFT TRAFFIC
IMPACT STUDY**

***Final Traffic Impact Study for the
Environmental Impact Statement***

Naval Base Coronado Coastal Campus

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EXECUTIVE SUMMARY

Project Description

There are several Navy facilities that make up the Naval Base Coronado (NBC) in southwest California. NBC has a large presence within the City of Coronado, with three military facilities that include Naval Air Station North Island (NASNI) located on the northwestern end of Coronado Island, Naval Amphibious Base (NAB) located on the northern portion of the Silver Strand, and Silver Strand Training Complex (SSTC), or formerly known as the Naval Radio Receiving Facility (NRRF), located on the south portion of the Silver Strand.

The proposed project seeks to expand the naval campus at SSTC and redistribute personnel from the NASNI and NAB Coronado military facilities. This study evaluates the traffic conditions within the study area with one, two, and three homeported Carrier Vessel Nuclear (CVNs) in port at NASNI for three different build alternatives and compares them against a no-build alternative for Existing, Year 2024, and Year 2040 Conditions.

Analysis Scenarios

The following scenarios were analyzed as part of this study:

Existing Conditions

When data was being collected for the study intersections, either one or zero CVNs were in port. Traffic conditions at NBC change depending on the number of CVNs in port at NASNI. For the intersections that did not have a CVN in port at the time of data collection, the traffic counts collected were adjusted using trip generation formulas to forecast traffic volumes so that all of the existing data would reflect one CVN in port. The existing with one CVN in port data was further adjusted to develop baseline existing conditions with two and three CVNs in port.

Year 2024 Conditions

Year 2024 is the year at which all proposed project construction is assumed to be completed and the new facilities are fully operational. The Year 2024 roadway network is assumed to be the same as in the Existing Condition. The traffic was analyzed with the following number of CVNs in port:

- One CVN in port
- Two CVNs in port
- Three CVNs in port (with staggered work hours)

Year 2040 Conditions

Year 2040 is the future year that represents a horizon year conditions, approximately 30 years from existing conditions. The Year 2040 roadway network is assumed to be the same as in the Existing Condition and is consistent with adjacent City-adopted community plans. The traffic was analyzed with the following number of CVNs in port:

- One CVN in port
- Two CVNs in port
- Three CVNs in port (with staggered work hours)

For each of these study years a No-Action Alternative was analyzed. Under no-action conditions, it is assumed that the NBC Coastal Campus project would not take place and no construction or operational trips relating to the NBC Coastal Campus project would be in effect. Background growth and roadway network improvements independent of the Proposed Action would still occur.

For Year 2024 and Year 2040 study scenarios, three project alternatives (Alternative 1, 2, and 3) were analyzed. These project alternatives were compared to the No Action Alternative to determine the Proposed Action's impact on the study area.

Alternative 1 (SSTC-South Alternative) and Alternative 2 (SSTC-South Expanded Footprint Alternative) would have all of the proposed facilities within the expanded SSTC-South training site. The relocation of personnel from NASNI and NAB Coronado would be the same for these alternatives, but the layout of the facilities within SSTC-South would be different. Alternative 3 (Multi-Installation Alternative) would have the proposed facilities split between NASNI, NAB Coronado, and SSTC-South, resulting in a different personnel distribution than the other two alternatives.

In addition, an analysis was performed for each scenario without the implementation of the MILCON included in the Proposed Action that would install a new ECP along Silver Strand Boulevard (SR-75).

Forecast Traffic Volumes

To generate Year 2040 volumes from existing volumes, a comparison of San Diego Association of Governments (SANDAG) Series 12 Traffic Forecast Models was performed. The growth between 2008 and 2040 forecast model volumes along the roadway segments in the area was calculated. Average anticipated growth in different areas was calculated, and the respective growth factor was applied to the existing intersection volumes to estimate Year 2040 volumes.

To determine Year 2024 traffic volumes, linear interpolation was used between the existing one-CVN scenario and the Year 2040 one-CVN scenario. Specifically, the growth in volumes between the existing and Year 2040 scenarios was assumed to be equally distributed over each year. That annual growth rate was multiplied by 12 to reflect the 12 years between existing conditions and Year 2024, and was applied to existing-condition volumes to estimate Year 2024 baseline volumes.

Trip Generation

The trip generation step in transportation modeling relates the number of trips being produced from a zone or site by time period to the land use and demographic characteristics found at that location. The Proposed Action's trip generation was calculated based on the number of personnel relocating to use the new facilities upon completion. A trip rate of 2.5 daily trips per person was used, consistent with the Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region prepared by SANDAG in 2002. Peak-hour trip rates were obtained from the same source. These rates published by SANDAG take into account some carpooling and transit activities.

Trip Distribution and Assignment

The trip distribution step in modeling connects the trips originating in the study zone or site to where these trips are destined. For the Proposed Action, trip distribution assumptions were made based on traffic count data, SANDAG's Series 12 model, and previous studies in the area. Separate trip distributions were created for NAB Coronado, SSTC-South, and NASNI. Trip generation results were applied to the network using the trip distributions prepared for each installation separately and then were combined to provide the total trip assignment for the respective alternative.

Summary of Intersection Analyses

Table E-1 summarizes the locations at which impacts were found and during which scenarios those impacts were found to occur.

Table E-1. Peak-Hour Intersection Analysis Impact Summary

Intersection		Alternative 1/2		Alternative 3		Alternative 1/2 without P947		Alternative 3 without P947	
		1 CVN	2 CVNs	1 CVN	2 CVNs	1 CVN	2 CVNs	1 CVN	2 CVNs
YEAR 2024									
4	Orange Ave (SR-75) & Fourth St (SR-75)				•				•
10	Silver Strand Blvd (SR-75) & Tulagi Road	•	•	•	•	•	•	•	•
18	Silver Strand Blvd (SR-75) & Rainbow Dr	•	•	•	•				
19	7 th Street & Silver Strand Blvd (SR-75)		•			•	•	•	•
21	Silver Strand Blvd & Palm Ave					•	•	•	•
22	3 rd Street & Palm Ave					•	•	•	•
23	Palm Ave & Rainbow Dr					•	•	•	•
26	9 th Street & Palm Ave (SR-75)	•	•	•	•	•	•	•	•
28	13 th Street & Palm Ave (SR-75)	•	•	•	•	•	•	•	•
30	Saturn Blvd/19 th St & Palm Ave (SR-75)	•	•	•	•	•	•	•	•
31	I-5 SB Exit Ramp & Palm Ave (SR-75)					•	•		
YEAR 2040									
4	Orange Ave (SR-75) & Fourth St (SR-75)				•				•
10	Silver Strand Blvd (SR-75) & Tulagi Road	•	•	•	•	•	•	•	•
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy		•						
18	Silver Strand Blvd (SR-75) & Rainbow Dr	•	•	•	•				
19	7 th Street & Silver Strand Blvd (SR-75)	•	•	•	•	•	•	•	•
21	Silver Strand Blvd & Palm Ave					•	•	•	•
22	3 rd Street & Palm Ave					•	•	•	•
23	Palm Ave & Rainbow Dr					•	•	•	•
26	9 th Street & Palm Ave (SR-75)	•	•	•	•	•	•	•	•
28	13 th Street & Palm Ave (SR-75)	•	•	•	•	•	•	•	•
30	Saturn Blvd/19 th St & Palm Ave (SR-75)	•	•	•	•	•	•	•	•
31	Palm Ave (SR-75) & I-5 SB Exit Ramp	•	•	•	•	•	•	•	•

Potential Improvements

This study identified twelve improvements that could be made to the study area intersections to address inadequate operations with implementation of the NBC Coastal Campus. Eight of the improvements would apply to Alternatives 1, 2, or 3 as long as MILCON P947 is implemented. One of those eight improvements only occurs in Year 2040 with 2 CVNs and is not recommended for implementation as a result of this project. The four other improvements would only apply if P947 is not implemented.

The following seven improvements are recommended as mitigation measures for the NBC Coastal Campus. These improvements were developed with input from Caltrans. Prior to implementation, the proposed improvements should be confirmed with Caltrans and the respective City to ensure they are still necessary and are consistent with other planned improvements not known at the time of this study.

M1. Intersection #10, Silver Strand Boulevard (SR-75) & Tulagi Road

The significant impact at this intersection during the PM peak-hour can be mitigated by modifying the traffic signal timing by extending the green time on Silver Strand Boulevard (SR-75) by ten seconds to reflect a different traffic pattern that would be in place with the addition of the Proposed Action. The traffic signal is uncoordinated and the cycle length would be adjusted to include this additional ten seconds. No changes to the existing right-of-way and pavement width would be required.

M2. Intersection #18, Silver Strand Boulevard (SR-75) & Rainbow Drive

The significant impact at this intersection during the AM peak-hour can be mitigated by modifying the lane configuration on the eastbound Rainbow Drive approach. Changing the existing through-right lane into a left-through-right lane and extending the existing turn pocket to the intersection of Bonito Avenue increases capacity and queue area for this approach. The extension of the turn pocket would result in a loss of two 2-hour limit parking spaces. No changes to the existing right-of-way and pavement width would be required.

M3. Intersection #26, 9th Street & Palm Avenue (SR-75)

The significant impact at this intersection during the PM peak-hour can be mitigated by restriping the northbound and southbound approaches to have exclusive left-turn lanes and a shared through-right lane. The signal operations could then be changed from split phasing to protected left-turn phasing for these approaches. The intersection is currently split-phase for northbound and southbound movements and requires a significant amount of time for pedestrians to cross Palm Avenue twice: once with the southbound movements and once with the northbound movements. By changing the phasing, it allows the northbound and southbound through movements and pedestrian crossings to occur simultaneously, ultimately reducing the amount of time needed for 9th Street and providing more green time for Palm Avenue (SR-75).

M4. Intersection #28, 13th Street & Palm Avenue (SR-75)

The significant impact at this intersection during the PM peak-hour can be mitigated by removing the pedestrian crossing on the east leg of the intersection and shortening the corresponding northbound split time. The intersection is currently split-phase for northbound and southbound movements and requires a significant amount of time for pedestrians to cross Palm Avenue twice: once with the southbound movements and once with the northbound movements. By providing just a single crosswalk, it allows more green time to be assigned to the heavy movements on Palm Avenue (SR-75).

M5. Intersection #30, Saturn Boulevard/19th Street & Palm Avenue (SR-75)

The significant impact at this intersection during the PM peak-hour can be mitigated with the addition of a second westbound left-turn lane. There is currently a single westbound left-turn lane adjacent to an eight-foot wide raised median. To fit in a second left-turn lane within the existing curb width, the median would need to be reduced to four-feet wide and the eastbound through lane widths would need to be narrowed slightly. The bike lane would operate similar to its current layout.

M6. Intersection #19, 7th Street and Silver Strand Boulevard (SR-75)

The significant impact at this intersection could be mitigated by striping the southbound approach to include a left-turn pocket and through-right lane. This would require removing some parking along 7th Street to make room for the additional lane, estimated to be two parking spaces.

M11. Intersection #31, I-5 SB Exit Ramp and Palm Avenue (SR-75)

The significant impact for Year 2040 at this intersection can be partially mitigated by extending the southbound right-turn storage pockets on the exit ramp. This would require widening of the ramp.

The following improvement is not recommended as mitigation measures for the NBC Coastal Campus. The City of Coronado has requested that this intersection is evaluated under separate environmental review at a later date to determine when, if, and what type of traffic control safety measures are necessary at this location.

M12. Intersection #11, Fidler's Cove Driveway and Silver Strand Boulevard (SR-75)

The impact at the intersection of Silver Strand Boulevard (SR-75) and Fiddler's Cove Driveway was only identified for Alternatives 1 and 2 when two CVNs are in port and is a result of cumulative traffic along Silver Strand Boulevard (SR-75) preventing gaps in traffic from occurring for vehicles attempting to turn left out of Fiddler's Cove driveway. It can be mitigated by restricting outbound left turns from the driveway.

For several reasons identified in this study, it is recommended that P947 is implemented as early as possible in the Proposed Action development. P947 is necessary to prevent traffic in Imperial Beach from becoming excessive and providing appropriate capacity and security facilities to process the increasing number of vehicles accessing SSTC-South. It is assumed that P947 is included in the Proposed Action and no additional mitigation measures are required; however, if P947 is not implemented, additional mitigation measures identified in this study would apply:

M7. Intersection #21, Silver Strand Boulevard and Palm Avenue

The significant impact at this intersection would require widening of Silver Strand Boulevard from two lanes to four lanes and installation of a traffic signal at the intersection. Even with these improvements the intersection would still operate at LOS E during the PM peak hour.

M8. Intersection #22, 3rd Street and Palm Avenue

The significant impact at this intersection during the AM and PM peak-hours can be mitigated with the installation of a traffic signal.

M9. Intersection #23, Palm Avenue and Rainbow Drive

The significant impact at this intersection during the AM and PM peak-hours can be mitigated by restricting southbound left-turn movements. Vehicles that want to head eastbound on Palm Avenue from Rainbow Drive could utilize the intersection of Rainbow Drive and Silver Strand Boulevard (SR-75), approximately 700 feet north of this intersection to head eastbound.

M10. Intersection #31, I-5 SB Exit Ramp and Palm Avenue (SR-75)

The significant impact for Year 2024 at this intersection during the PM peak-hour can be mitigated by adjusting the signal timing at the intersection. The length of the eastbound, westbound, and southbound signal splits would need to be increased by 5 seconds (for a total cycle increase of 10 seconds).

The following impact location was identified to not have reasonable or feasible mitigations for the NBC Coastal Campus:

The intersection of Orange Avenue (SR-75) and Fourth Street (SR-75) is considered an impact because it worsens an existing LOS F condition by more than 1 second. The increase in delay for the Alternative 3 scenario when two CVNs are in port is 1.1 seconds. There was no reasonable mitigation found for this location. This impact was identified for Alternative 3 scenarios with 2 CVNs in. It would be considered a significant and unavoidable impact for Alternative 3.

Implementation of Potential Improvements

Several improvements involve signal retiming or modifications along SR-75. It is suggested that the DON discuss the funding of improvements with Caltrans and other stakeholders to develop a joint funding approach.

It is also suggested that the DON pursue funding opportunities for early implementation of MILCON project P947 to prevent traffic congestion in Imperial Beach and establish an ECP with adequate capacity and appropriate security requirements.

Construction Traffic

Two different construction scenarios were evaluated:

“North only” assumes that all construction traffic would access SSTC-South through the location of the new north gate, Intersection 17 –Silver Strand Boulevard (SR-75) and Hooper Boulevard, and would use Palm Avenue (SR-75) to traverse between I-5 and the SSTC-South access point. Similarly, all operational traffic would access SSTC-South through the location of the new north gate. The trip distribution methodology for operational traffic is consistent with the methodology used for full build-out of the project. This scenario assumes that a proper ECP and proposed intersection improvements outside the ECP are completed. “North only” construction scenario summary tables are provided as follows:

“Construction North, Operations South” assumes that all construction traffic would access SSTC-South through the location of the new north gate, Intersection 17 –Silver Strand Boulevard (SR-75) and Hooper Boulevard, and would use Palm Avenue (SR-75) to traverse between I-5 and the SSTC-South access point. It assumes that all operational traffic would access SSTC-South through the existing south gate in Imperial Beach. This scenario assumes the new ECP may not be in place during the construction years. Proper security checkpoint procedures would still occur at the existing access for non-construction activity. “Construction North, Operations South” construction scenario summary tables are provided as follows:

Construction traffic will have impacts to the roadway network immediately at six locations along SR-75. Impacts continue to add on as the development intensity increases and buildings are opened for use. Year 2017 is when the intersections through Imperial Beach have impacts and represents an oversaturation of the existing roadway network in Imperial Beach for the “Construction North, Operations South” scenario. Regardless of the selected Alternative, some impact avoidance and minimization measures to consider for construction include:

- Construct the new ECP on Silver Strand Boulevard (SR-75) early in the construction schedule or provide temporary access at the ultimate new ECP location to minimize construction traffic in the residential neighborhoods of Imperial Beach;
- Install a traffic signal and make turn lane improvements at the intersection of Hooper Boulevard and Silver Strand Boulevard (SR-75) to support construction activity;
- Include construction management in the design aspect of the NBC Coastal Campus
- Coordinate construction activity with NBC representatives to monitor daily activity levels at each installation and minimize interruptions to operations;
- Schedule heavy vehicle activity during non-peak hours;
- Encourage carpooling and staggered work hours for construction workers; and
- Notify public stakeholders of times where abnormal construction activity would occur (i.e. bunker removal).

Additional Impact Minimization Measures

In addition to the physical improvements noted in this study that mitigate potential traffic impacts, the Navy should also consider implementing the following impact minimization measures:

- Establish and implement measures to reduce construction traffic to the extent practicable.
- Work with Caltrans to establish appropriate traffic control management at the interim gate at the Hooper Boulevard entrance until the proposed Entry Control Point is fully constructed.
- Monitor traffic at the existing entrance to SSTC-South located in Imperial Beach and incorporate measures as necessary to maintain traffic volumes less than or equal to the existing volume.
- Commit to providing MTS bus stops at the new Entry Control Point intersection.
- Form an internal Traffic Advisory Committee to address traffic concerns.
- Prepare a Transportation Demand Management (TDM) Plan for Naval Base Coronado. This TDM Plan would consider the following topics:
 - Military Transportation Incentive Program (TIP)
 - SANDAG's iCommute program
 - Transit Network
 - Bicycle Network
 - Bikesharing programs
 - Pedestrian
 - Carpool/Vanpool
 - Intra-Base shuttle system
 - Carsharing programs
 - Parking supply limitations
 - Parking fees
 - Ferry service
 - Entry Control Point staffing
 - Signal timings
 - Work hours
- Continue to implement the goals of the 2014 Memorandum of Agreement between the Navy and SANDAG to reduce drive-alone work trips.
- Continue to coordinate with SANDAG to understand and apply region-wide transportation demand management tools, such as the following SANDAG documents noted provided during the EIS comment period¹:

¹ Comment number 9.52, Chapter 10, Final Naval Base Coronado Coastal Campus Environmental Impact Study.

- Designing for Smart Growth, Creating Great Places in the San Diego Region
- Planning and Designing for Pedestrians, Model Guidelines for the San Diego Region
- Trip Generation for Smart Growth
- Parking Strategies for Smart Growth
- Regional Multimodal Transportation Analysis: Alternative Approaches for Preparing Multimodal Transportation Analysis in EIRs
- Integrating Transportation Demand Management into the Planning and Development Process – A Reference for Cities
- Riding to 2050, the San Diego Regional Bike Plan
- Healthy Communities Atlas

Implementation of these measures would be beyond what is required of the Navy to mitigate their impacts but would further improve traffic conditions through Imperial Beach and Coronado and is encouraged.

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MILITARY ACRONYMS

CVN	Carrier Vessel Nuclear (nuclear powered aircraft carrier)
DON	Department of the Navy
ECP	Entry Control Point
MILCON	Military Construction Project
NAB	Naval Amphibious Base
NASNI	Naval Air Station North Island
NBC	Naval Base Coronado
NOLF-IB	Naval Outlying Field Imperial Beach
NRRF	Naval Radio Receiving Facility
NSWC	Naval Special Warfare Command
SSTC	Silver Strand Training Complex

TRAFFIC ENGINEERING ACRONYMS

AADT	Annual Average Daily Traffic
ADT	Average Daily Traffic
AWSC	All-Way Stop-Controlled
EIS	Environmental Impact Statement
FEIS	Final Environmental Impact Statement
HCM	Highway Capacity Manual
HOV	High Occupancy Vehicles
I	Interstate
ILV	Intersecting Lane Vehicle
ITE	Institute of Transportation Engineers
ITS	Intelligent Transportation Systems
LOS	Level of Service
MOE	Measurement of Effectiveness
MPH	Miles per Hour
MTS	Metropolitan Transit System
NCHRP	National Cooperative Highway Research Program
OWSC	One-Way Stop-Controlled
PHF	Peak-Hour Factor
PHV	Percent Heavy Vehicles
PM	Post Mile
ROW	Right-of-Way
RTP	Regional Transportation Plan
SANDAG	San Diego Association of Governments
SANTEC	San Diego Traffic Engineering Council
SEIS	Supplemental Environmental Impact Statement
SR	State Route
TAZ	Traffic Analysis Zones
TIP	Transportation Incentive Program
TWSC	Two-Way Stop-Controlled

KEY TRAFFIC TERMS

AM or PM Peak Hours are those hours of the day in which the bulk of commute trips occur and in which traffic impacts are likely to be the greatest. The a.m. peak hour on Coronado generally occurred between 6:15 a.m. and 7:15 a.m. The p.m. peak hour on Coronado generally occurred between 2:30 p.m. and 3:30 p.m.

Capacity of a transportation facility is the maximum number of persons or vehicles that can be expected to traverse a point or uniform section of road within a specified time frame under prevailing roadway, traffic and control conditions. Theoretically, this is the point in which the flow rate (vehicles/hour) on the facility is the highest.

Highway Capacity Manual (HCM) is a publication of the Transportation Research Board. It contains concepts, guidelines, and computational procedures for computing the capacity and quality of service of various highway facilities, including freeways, signalized and unsignalized intersections, rural highways, and the effects of transit, pedestrians, and bicycles on the performance of these systems.

Level of Service (LOS) corresponds to “excellent” through “failure” conditions in terms of traffic congestion, both for road segments and for intersections. It is used to provide an indication of the amount of delay a driver would experience along a road segment or the amount of wait time a driver would experience at an intersection. LOS is rated on a scale of “A” through “F”, with “A” representing excellent, free flow conditions, and “F” representing failures of road segments or intersections.

Peak Hour Factor (PHF) describes the relationship between hourly traffic volumes and the maximum rate of flow within the hour. Peak Hour Factor is defined as the hourly volume divided by four times the maximum 15-minute volume within the hour.

Transportation Analysis Zone (TAZ) is the unit of geography most commonly used in conventional transportation planning models. The size of a zone varies, but for typical metropolitan planning software, a zone of under 3000 people is common.

1.0 INTRODUCTION

Project Description

The Navy is proposing to develop an academic campus to support the current and future operational readiness of personnel with the Naval Special Warfare Command (NSWC) on Naval Base Coronado (NBC) in San Diego County, California. The proposed NBC Coastal Campus would include a mix of instructional and administrative facilities that would provide for indoor classroom and tactical training instruction, and equipment use, maintenance, and storage. The Proposed Action would include construction, operation, and maintenance of military construction projects (MILCONs). This would include 25 projects constructed over a 10-year period at a cost of approximately \$700 million, providing over approximately 1.5 million square feet of facilities.

The Proposed Action is needed due to lack of facilities and space to support NSWC's administrative, logistics, and classroom and tactical instruction functions. NSWC and its subordinate Commands are located at five separate installations of NBC. On those installations, many of the facilities are functionally obsolete and would not meet current or future requirements with expansion and renovation. Many of these facilities were built during the World War II era and are temporary or pre-engineered facilities built as a short-term solution to meet a specific but emerging requirement until a MILCON provides a permanent solution. At NAB Coronado, NSWC and subordinate Commands are spread throughout 60 facilities that are divided by State Route (SR) 75; are undersized and poorly configured facilities; and do not offer primacy (primary use), privacy, or proximity, thus, eliminating the potential to achieve effective Command and Control and organizational synergy. The Navy seeks to expand the naval campus at the Silver Strand Training Complex (SSTC) and redistribute personnel from Naval Air Station North Island (NASNI) and Naval Amphibious Base (NAB) Coronado.

Project Location

NBC is a group of eight Navy installations in the San Diego area, three of which could be included in the Coastal Campus development: NASNI, NAB Coronado, and SSTC-South.

NASNI is located just northwest of and adjacent to the City of Coronado. The installation is bounded by San Diego Bay on the north and east, the Pacific Ocean on the west, and the City of Coronado to the south. Primary on-installation access is via SR-282, by way of the Coronado Bay Bridge (SR-75).

NAB Coronado is located on the northern portion of the Silver Strand, bounded by San Diego Bay on the north, east, and south and the Pacific Ocean on the west. NAB Coronado is a primarily developed area with access provided via SR-75; which bisects the installation into two separate locations (Bay Side and Ocean Side).

SSTC is located adjacent to the southern border of the City of Coronado and adjacent to the northern border of the City of Imperial Beach, with San Diego Bay to the east and the Pacific Ocean to the west. SSTC is divided into two noncontiguous areas: SSTC-North and SSTC-South. SSTC-North includes land areas on the northern half of the Silver Strand peninsula and adjacent nearshore waters of the Pacific Ocean. SSTC-South includes land on the southern end of the Silver Strand peninsula and adjacent nearshore waters of the Pacific Ocean. SSTC-North and SSTC-South are separated by Silver Strand State Beach, which is owned by California Department of Parks and Recreation.

Analysis Scenarios

This document evaluates traffic facilities for three Proposed Action alternatives, with one to three homeported aircraft carriers. The three project alternatives were evaluated and compared to a no-build

alternative to determine the Proposed Action's impact on the study area. The following scenarios were analyzed as part of this study:

Existing Conditions

When data was being collected for the study intersections, either one or zero carrier vessels nuclear (CVNs) were in port, depending on the location of the count. For the intersections that did not have a carrier in port at the time of data collection, the collected traffic counts were adjusted to forecast traffic volumes so that all of the existing data would reflect one CVN in port. Trips were also applied to the Existing Condition with one CVN in port to estimate Existing Conditions with two and three (with staggered work hours) carriers in port based on methodology established in the *Final Traffic Study for the Supplemental Environmental Impact Statement for Developing Home Port Facilities for Three NIMITZ-Class Aircraft Carriers in Support of the U.S. Pacific Fleet*, dated May 2008, referred to as the "Home Port for Three Carriers Study" for the remainder of this report.

Year 2024 Conditions

Year 2024 is the year at which all proposed project construction is assumed to be completed and the new facilities are fully operational. The Year 2024 roadway network is assumed to be the same as in the Existing Condition. At any given time, the number of CVNs present at NASNI can fluctuate depending on the deployment schedule, but would never exceed three CVNs. As such, the traffic was analyzed with the following number of CVNs in port:

- One CVN in port
- Two CVNs in port
- Three CVNs in port (with staggered work hours)

Year 2040 Conditions

Year 2040 is the future year that represents a horizon year conditions, approximately 30 years from existing conditions. The Year 2040 roadway network is assumed to be the same as in the Existing Condition and is consistent with adjacent City-adopted community plans. Similar to the Year 2024 conditions, the traffic was analyzed with the following number of CVNs in port:

- One CVN in port
- Two CVNs in port
- Three CVNs in port (with staggered work hours)

For each of these study years a No-Action Alternative was analyzed. Under no-action conditions, it is assumed that the NBC Coastal Campus project would not take place and no construction or operational trips relating to the NBC Coastal Campus project would be in effect. Background growth and roadway network improvements independent of the Proposed Action would still occur.

For Year 2024 and Year 2040 study scenarios, three project alternatives (Alternative 1, 2, and 3) were analyzed. These project alternatives were compared to the No Action Alternative to determine the Proposed Action's impact on the study area.

Alternative 1 (SSTC-South Alternative) and Alternative 2 (SSTC-South Expanded Footprint Alternative) would have all of the proposed facilities within the expanded SSTC-South training site. The relocation of personnel from NASNI and NAB Coronado would be the same for these alternatives, but the layout of the facilities within SSTC-South would be different.

Alternative 3 (Multi-Installation Alternative) would have the proposed facilities split between NASNI, NAB Coronado, and SSTC-South, resulting in a different personnel distribution than the other two alternatives.

Trends and Historical Data

Traffic in the study area has historically been an issue and is influenced by tourism, development or redevelopment, and military operations. Data was collected from several transportation-related sources to help understand the historical trends in the area. The following summarizes key trends that were identified:

- Daily and peak-hour traffic volumes on the San Diego-Coronado Bridge have remained fairly constant since the toll removal in 2002.
- Summer months (June through September) have a noticeably higher volume on the San Diego-Coronado Bridge and Silver Strand Boulevard than the rest of the year.
- Daily and peak-hour traffic volumes on Silver Strand Boulevard have been declining since 2004.
- Peak-hour traffic volumes on Third and Fourth Streets in the City of Coronado have remained fairly constant since the NASNI gate improvements in 2006.
- Historical gate counts for traffic entering NASNI have remained fairly constant since 1995.
- Travel time between the toll both at the San Diego-Coronado Bridge and the entrance to NASNI was reduced by 18% (inbound) in the morning and 7% (outbound) in the afternoon with implementation of the new Main gate configuration at NASNI.
- Transit ridership has decreased in recent years and has significantly decreased since 2000.
- Ferry ridership averaged about 212 people, or 50% of capacity, in 2006 before it discontinued direct access to NASNI.
- The population in Coronado peaked in 1990 near 27,000 and has since returned to a population near 19,000 people. The projected population in Coronado by 2030 is approximately 31,000 people.
- It is difficult to firmly substantiate traffic patterns in the area, as traffic fluctuates seasonally and with military operations.

See Appendix A for more detailed trend analysis. Also note that population forecasts vary by source. Population projections by SANDAG show a population of only 27,937 by Year 2050.

2.0 METHODOLOGY

The following section describes the methodology used to estimate the traffic resulting from varying CVNs in port, forecast traffic volumes in the study area, complete the analysis process, and determine significant impacts.

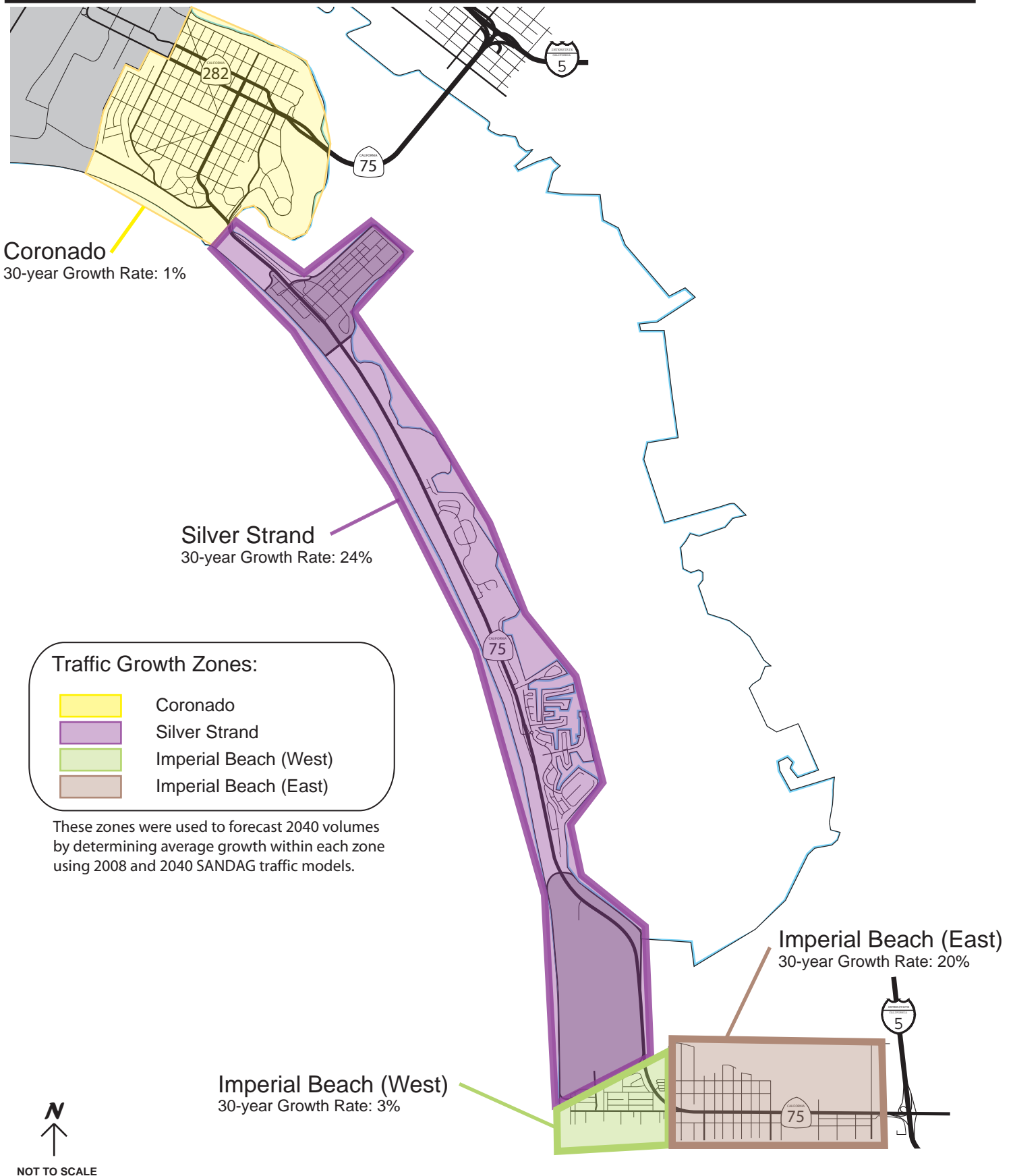
Forecast Traffic Volumes

To generate Year 2040 volumes from existing volumes, an initial comparison of 2008 and 2040 SANDAG Series 12 traffic forecast models was performed. The traffic model forecasts obtained from SANDAG are provided in **Appendix B**. After determining the traffic growth on individual roadways between the 2008 and 2040 traffic models, the study area was divided into four major zones and an average growth was determined for each zone. Zone boundaries were determined by the roadway characteristics and adjacent land uses. These zones are illustrated in **Figure 2-1** and the growth associated with each zone as determined from the model comparison is also shown on the figure. This approach to forecasting future volumes reflects the general growth of an area for a 30-year projection timeframe instead of individual roadway fluctuations. The area growth factors shown in the figure were applied to the existing intersection volumes to estimate Year 2040 turning movement volumes.

To determine Year 2024 traffic volumes, linear interpolation was used between the existing scenario and the Year 2040 scenario. Specifically, the growth in volumes between the existing and Year 2040 scenarios was assumed to be distributed equally for each year. The yearly increase was then multiplied by the number of years difference between Year 2024 and the existing year to estimate Year 2024 baseline volumes.

To ensure that reasonably foreseeable projects in the area are included in the Year 2024 traffic volumes, known projects were identified and added to existing volumes to be compared to the forecasted Year 2024 volumes. These cumulative projects are defined as projects within the study area that have been approved but are not yet generating trips. These projects are assumed to be open to the public by the time the Proposed Action is built out, Year 2024. The volumes for the cumulative projects are typically captured in traffic forecast models, but not in the years between the existing condition and the horizon year condition. For this project, two cumulative projects have been identified that was applied to the network, the Hotel Del Coronado expansion and the Bernardo Shores residential development. At locations where the existing-plus-cumulative project traffic volumes exceeded the model-based Year 2024 forecasted volumes, the existing-plus-cumulative project volumes were used. Otherwise, the previously described Year 2024 forecast volumes were used. While no other projects were identified at the time the study was prepared, new projects will arise before build out of this project is complete. Future projects in Coronado and Imperial Beach should use information from this study as a cumulative project for future projects to help forecast traffic operations in the near-term.

Traffic at NBC fluctuates depending on the number of CVNs in port and, therefore, this study evaluates conditions with varying number of CVNs in port. The CVN forecast volume methodology is consistent with the Home Port for Three Carriers Study and contained in **Appendix C**. Traffic counts were obtained when zero or one CVN was in port. Thus, the forecast methodology was used to develop traffic volumes for when two and three carriers are in port for existing, Year 2024, and Year 2040 study scenarios.



Analysis Process

To analyze the operations of both signalized and unsignalized intersections, Synchro 8 (Trafficware) was used for the analysis. Synchro 8 uses the methodologies outlined in the *Highway Capacity Manual (HCM)* published by Transportation Research Board. The modeling process has several variables that can be adjusted to reflect realistic conditions at the intersections being analyzed. Some assumptions made during the analysis process include:

- Signal timing parameters were obtained from Caltrans when applicable and otherwise optimized using Synchro software for Existing conditions.
- Signal timing parameters were kept consistent for all future and Plus Project Conditions.
- The peak hour factors (PHF) obtained from the traffic counts were used for all scenarios.
- The industry standard of 2% of traffic being considered heavy vehicles was used for all movements on all scenarios. More discussion on this assumption is provided in Section 7.0.

Intersections

The *HCM* establishes procedures to evaluate highway facilities and rate their ability to process traffic volumes. The terminology "level of service" is used to provide a qualitative evaluation based on certain quantitative calculations, which are related to empirical values.

The LOS for signalized intersections is defined in terms of delay, specifically, stated in terms of the average control delay per vehicle for the peak 15-minute period within the hour analyzed. The average control delay includes initial deceleration delay, queue move-up time, and final acceleration time in addition to the stop delay. The LOS for unsignalized intersections is determined by the computed or measured control delay and is defined for each minor movement. At an all-way stop control intersection, the delay reported is the average control delay of the intersection. At a one-way or two-way stop control intersection, the delay reported represents the worst movement. The criteria for the various levels of service designations are provided in **Table 2-1**.

Table 2-1. LOS Criteria for Intersections

LOS	Signalized	Unsignalized	Description
	Control Delay (sec/veh) (a)	Average Control Delay (sec/veh) (b)	
A	≤10.0	≤10.0	Operations with very low delay and most vehicles do not stop.
B	>10.0 and ≤20.0	>10.0 and ≤15.0	Operations with good progression but with some restricted movement.
C	>20.0 and ≤35.0	>15.0 and ≤25.0	Operations where a significant number of vehicles are stopping with some backup and light congestion.
D	>35.0 and ≤55.0	>25.0 and ≤35.0	Operations where congestion is noticeable, longer delays occur, and many vehicles stop. The proportion of vehicles not stopping declines
E	>55.0 and ≤80.0	>35.0 and ≤50.0	Operations where there is significant delay, extensive queuing, and poor progression.
F	>80.0	>50.0	Operations that are unacceptable to most drivers, when the arrival rates exceed the capacity of the intersection.

Notes:

- (a) 2010 Highway Capacity Manual, Chapter 18, Page 6, Exhibit 18-4
- (b) 2010 Highway Capacity Manual, Chapter 19, Page 2, Exhibit 19-1

Within the Cities of Coronado, Imperial Beach, and San Diego, all intersections are expected to operate at LOS D or better, as shown in the City of Coronado General Plan Circulation Element (18 July 2012), the City of Imperial Beach General Plan/LCP (October 2010), and the City of San Diego Significance Determination Thresholds, (January 2007).

SR-75 is a Caltrans-owned facility. Caltrans “endeavors to maintain a target LOS at the transition between LOS C and LOS D” on its facilities, but recognizes this may not always be feasible. Since each of the three local jurisdictions within the study area has LOS D as its minimum acceptable operations, intersections along SR-75 would also use LOS D as minimum acceptable operations.

Intersecting Lane Vehicle (ILV) Methodology

Per Caltrans District 11 requirements, intersection analysis must be performed at each local street interchange affected by a project using the intersecting lane vehicle (ILV) procedure. This evaluation process is discussed in further detail in the Caltrans Highway Design Manual Topic 406, page 400-30. The ILV analysis is used to estimate the capacity of a signalized intersection when the phasing is relatively simple. An intersection is thought to be at capacity when the ILV is 1,500 vehicles per hour.

Table 2-2 describes the traffic flow conditions of ramp intersections at various levels of operations.

Table 2-2. ILV Criteria at Ramp Intersections

ILV/hr (a)	Result	Description
< 1200	Below Capacity	Stable flow with slight, but acceptable delay. Occasional signal loading may develop. Free mid-block operations.
1200 – 1500	Approaching Capacity	Unstable flow with considerable delays possible. Some vehicles occasionally wait two or more cycles to pass through the intersection. Continuous backup occurs on some approaches.
> 1500	Above Capacity	Stop-and-go operation with severe delay and heavy congestion ^(b) . Traffic volume is limited by maximum discharge rates of each phase. Continuous backup in varying degrees occurs on all approaches. Where downstream capacity is restrictive, mainline congestion can impede orderly discharge through the intersection.

Notes:

Based on the Caltrans Highway Design Manual, Table 406 “Traffic Flow Conditions at Intersections at Various Levels of Operation”, page 400-33.

(a) = Intersecting Lane Vehicles/hour (ILV/hr)

(b) = The amount of congestion depends on how much the ILV/hr value exceeds 1500. Observed flow rates will normally not exceed 1500 ILV/hr, and the excess will be delayed in a queue.

Roadway Segments

The City of Coronado classifies its roadways into one of the following four categories based on the City of Coronado’s General Plan Circulation Element (July 2012):

- Major Arterial
- Minor Arterial
- Collector Street
- Local Street

Classification is determined based on the importance and purpose of the traffic movements and volumes on a particular street.

The City of Imperial Beach classifies its roadways into one of the following six categories based on its General Plan/LCP (2010):

- Six-Lane Prime Arterial
- Four-Lane Major Street
- Four-Lane Collector
- Three-Lane Collector
- Two-Lane Collector
- Residential Street

The City of San Diego classifies its roadways into one of the following four categories and provides LOS thresholds for each classification based on the City of San Diego General Plan (2008):

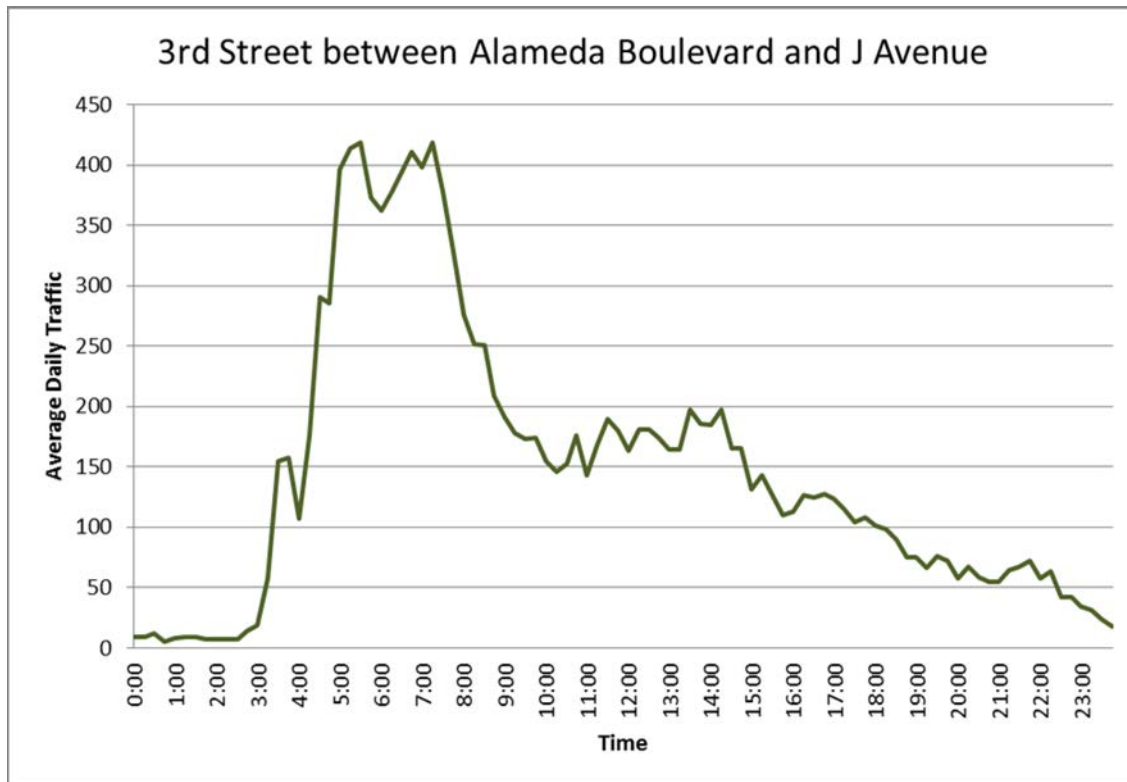
- Arterial
- Major Street
- Collector Street
- Local Street

Traffic patterns in Coronado are unique in that peak hours are spread over a longer time period because of the Navy's staggered work times and because of heavy tourism traffic that occurs outside of peak hours. **Figures 2-2 and 2-3** illustrate an average daily trip distribution along 3rd Street and 4th Street in the City of Coronado where the morning and afternoon peaks begin earlier than normal and last longer than normal. On 3rd Street the peak volumes start around 0500 and lasting a couple hours in the morning. On 4th Street the peak volumes start around 1400 and last until about 1630. During the rest of the day traffic on 3rd and 4th Streets are moderate in volume and fairly consistent.

Traffic in Imperial Beach is also influenced by military operations and has unique travel patterns that can be somewhat consistent throughout the day. Peak periods that are lengthened by military traffic arriving and departing before and after the typical commute times, and a mix of military, commercial, school, and residential traffic make for fairly consistent volumes throughout the day. **Figure 2-4** illustrates an average daily trip distribution along 13th Street in Imperial Beach where traffic volumes stay fairly consistent between 0600 and 1800.

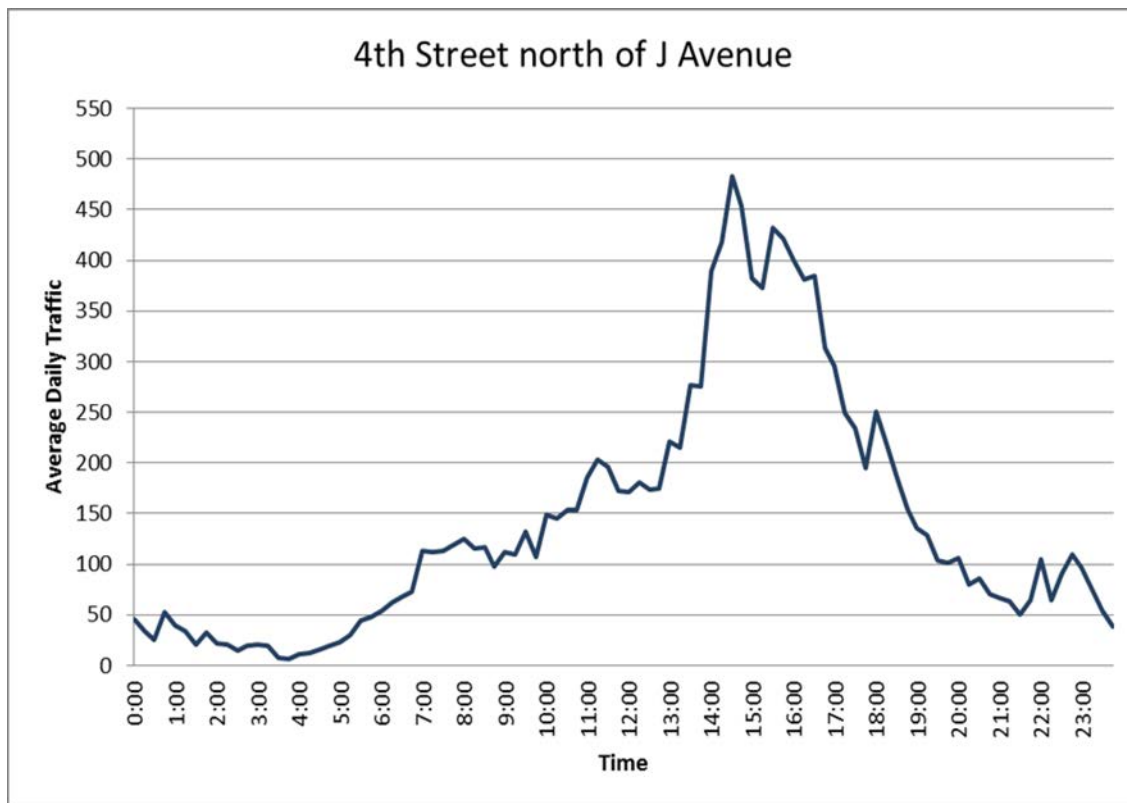
Traditional roadway segment analysis uses theoretical capacities for roadways depending on the classification and does not take into account grades of roadway, design features, number of traffic signals along the roadway, or other factors that influence operations. Furthermore, these capacities assume a traditional distribution of traffic over the day, including a typical 1-hour morning and afternoon peak hour. Thus, rather than looking at theoretical analysis of roadway segments using an average daily traffic (ADT) count and a defined classification, the respective segment's functionality can be determined by looking at the operations of the upstream and downstream intersections during the peak periods. If the intersections at both ends of a roadway segment operate effectively, it can be assumed that the segment of roadway has adequate capacity. Conversely, if the intersections at one or both ends of a roadway segment operate poorly, it can be assumed that the segment experiences volumes above its capacity. Therefore, roadway segment analysis was not conducted as part of this study as intersection operations govern the traffic flow along the roadways in this area. Roadway segment volumes are provided in **Appendix D** for reference purposes only.

Figure 2-2 Daily Traffic Distribution on 3rd Street



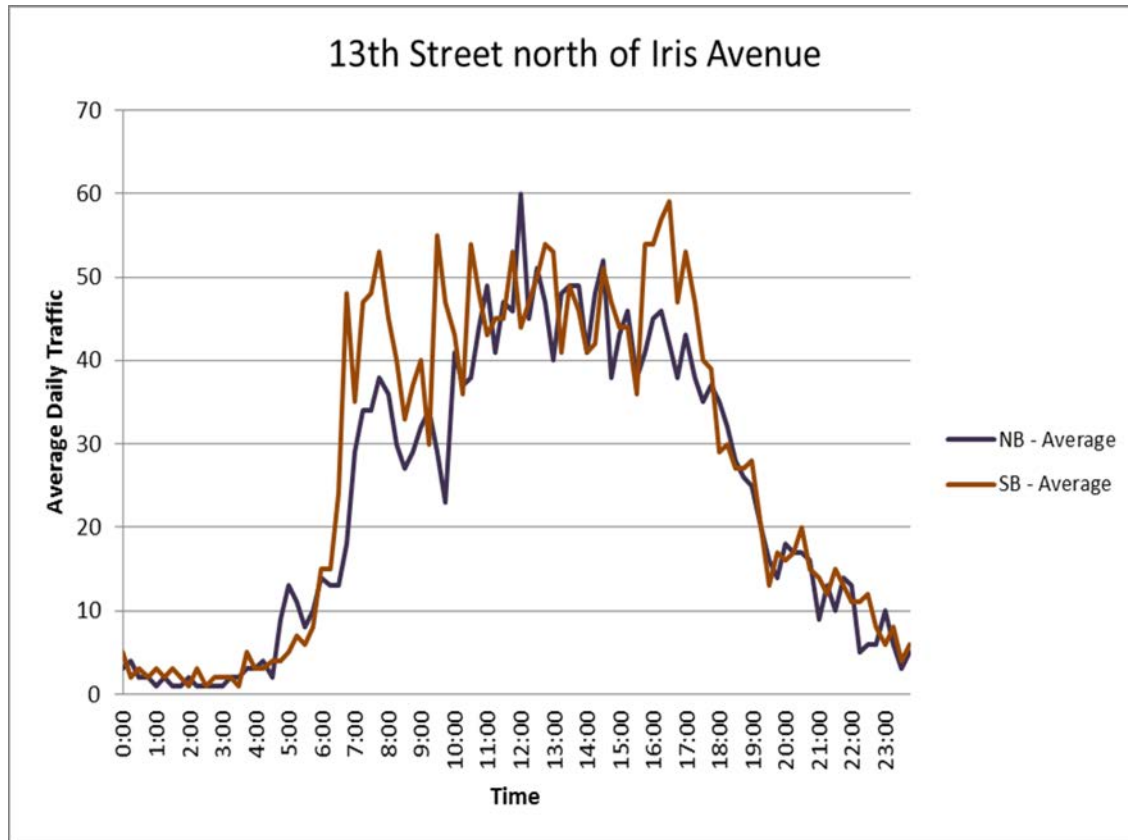
Count obtained in October 2012 by National Data and Surveying Services

Figure 2-3 Daily Traffic Distribution on 4th Street



Count obtained in October 2012 by National Data and Surveying Services

Figure 2-4 Daily Traffic Distribution on 13th Street



Count obtained in October 2012 by National Data and Surveying Services

Significance Determination

To determine the Proposed Action's impacts, San Diego Traffic Engineering Council/Institute of Transportation Engineers (SANTEC/ITE) guidelines were used at all locations. SANTEC/ITE guidelines were developed to promote "cooperation among the Cities, Caltrans, and the County of San Diego to create a region-wide standard for determining traffic impacts in environmental reports." These guidelines provide acceptable threshold standards to determine the significance of project impacts to intersections and arterial segments. At intersections, the measurement of effectiveness (MOE) is based on allowable increases in delay. At intersections that are expected to operate at LOS E or F, the allowable increase in delay is two seconds. If vehicle trips attributed to a project cause the delay at an intersection to increase by more than the allowable threshold, this would be considered a significant project traffic impact that requires mitigation.

Table 2-3 shows the criteria for determining levels of significance at intersections using SANTEC/ITE guidelines.

Table 2-3. Significance Criteria

Facility	Measurement of Effectiveness (MOE)	Significance Threshold ^(a)
Intersection	Seconds of Delay	>2.0 seconds at LOS E or F

(a) = Significance threshold applies only when the intersection operates at LOS E or F. Otherwise, an impact occurs if an intersection operating at LOS D or better without project traffic operates at LOS E or F with the addition of project traffic.

3.0 EXISTING CONDITIONS

The number of CVNs in port at NASNI has a direct relation to traffic volumes within the study area. Thus, existing baseline conditions were established with one, two, and three CVNs in port. However, scenarios with three CVNs in port were not analyzed since the associated requirement to stagger work hours would result in peak hour traffic volumes that are less than the two CVN scenarios. Staggering of work hours with three CVNs in port was a requirement previously established during the decision to homeport a third CVN at NASNI and remains in place at the time of this study. Since work hours are not required to be staggered when two CVNs are in port, the peak hour volume essentially doubles with the second CVN. When there are three CVNs in port, the shifts for each CVN are spread out approximately an hour apart so that commute traffic is spread over a three-hour period instead of tripling the demand over a single peak hour. As a result, the single peak hour volume would be less with three CVNs in port than it would be when two CVNs in port, although the period with commute traffic would last longer with three CVNs in port. The traffic analysis performed in this study looks at the single highest morning and afternoon peak hour. Traffic operations under scenarios with two CVNs in port would represent the highest volumes. Scenarios with one CVN in port are a close representation of operations when there are three CVNs in port. Thus, analysis of three CVNs was not performed. Traffic volumes for scenarios with three CVNs in port are provided in **Appendix E** to allow comparison in volumes with other scenarios.

Study Intersections

The 33 study intersections, shown in **Table 3-1**, were selected for analysis based on their locations along key travel ways and proximity to NBC installations. **Figure 3-1** displays the location of the study intersections. **Figure 3-2** shows the existing geometrics at each of the study intersections.

Road Network

The following provides a description of the existing street system within the vicinity of the study area.

San Diego-Coronado Bay Bridge (SR-75) is classified and functions as a five-lane freeway. The traffic lanes on the bridge are separated by a movable median, which allows for three westbound traffic lanes in the morning and three eastbound traffic lanes in the afternoon and evening. The approach on each side of the bridge contains three lanes. An out-of-service toll plaza sits on the west side of the bridge and serves as a traffic calming device for vehicles entering Coronado. The San Diego-Coronado Bay Bridge is also known as SR-75. The posted speed limit is 50 miles per hour (mph).

3rd Street is classified and functions as a westbound, one-way, three-lane principal arterial between Pomona Avenue and Alameda Boulevard. Third Street is also known as SR-75 between Pomona Avenue and Orange Avenue, and SR-282 between Orange Avenue and Alameda Boulevard. Sidewalks and curbs are located on both sides of the street for the entire length. No parking is allowed on Third Street east of Orange Avenue. An entrance-only NASNI gate is located at the west end of Third Street. This street serves as the main route from the San Diego-Coronado Bay Bridge to NASNI. The posted speed limit is 25 mph.

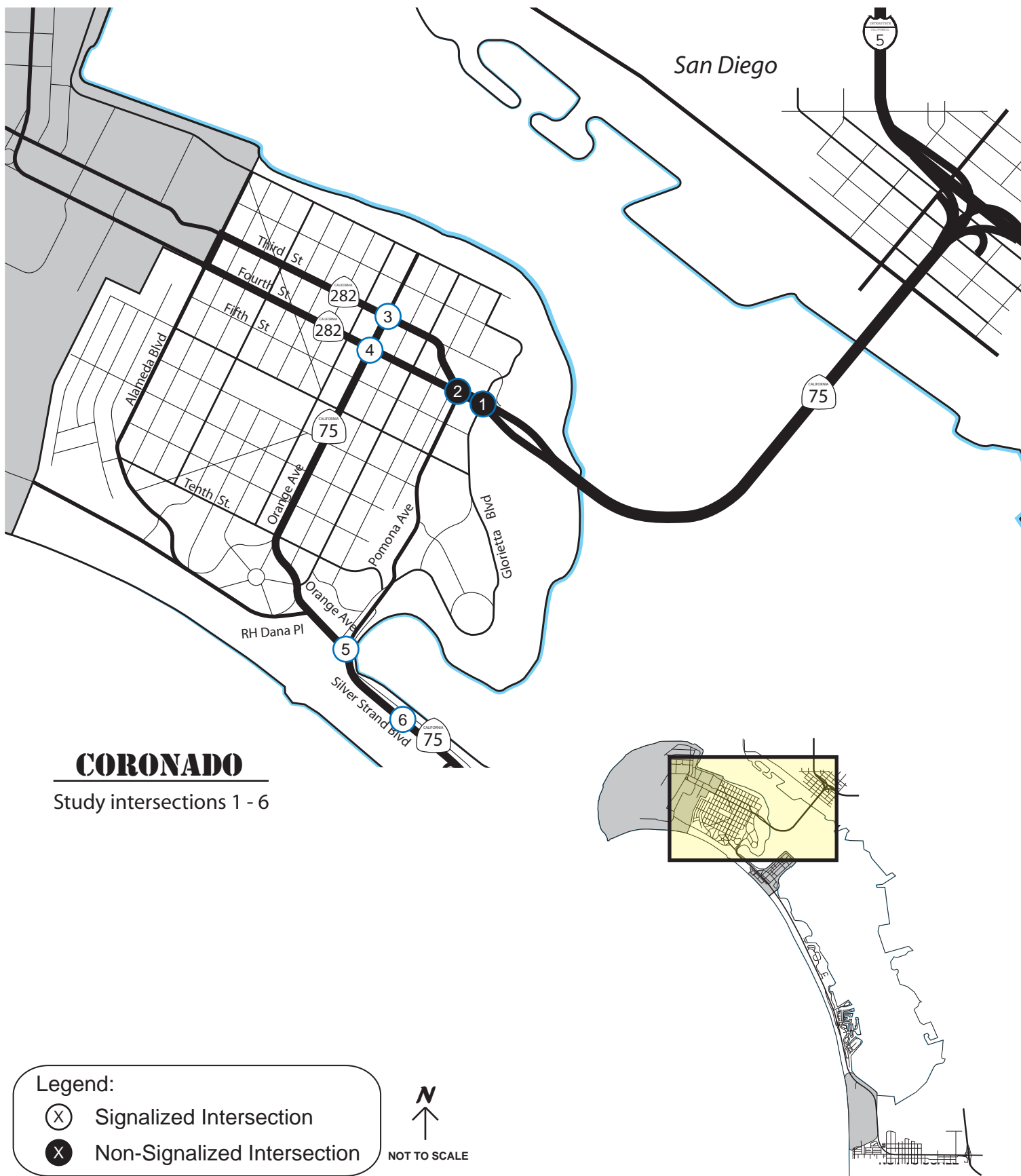
4th Street is classified and functions as an eastbound, one-way, three-lane principal arterial between Alameda Boulevard and Pomona Avenue. Sidewalks, curbs, and parallel-parking spaces are located on both sides of the street for the entire length. Fourth Street is also known as SR-282 between Alameda Boulevard and Orange Avenue, and as SR-75 between Orange Avenue and Pomona Avenue. An exit-only NASNI gate is located at the west end of the street. This street serves as the main route from NASNI to the San Diego-Coronado Bay Bridge. The posted speed limit is 25 mph.

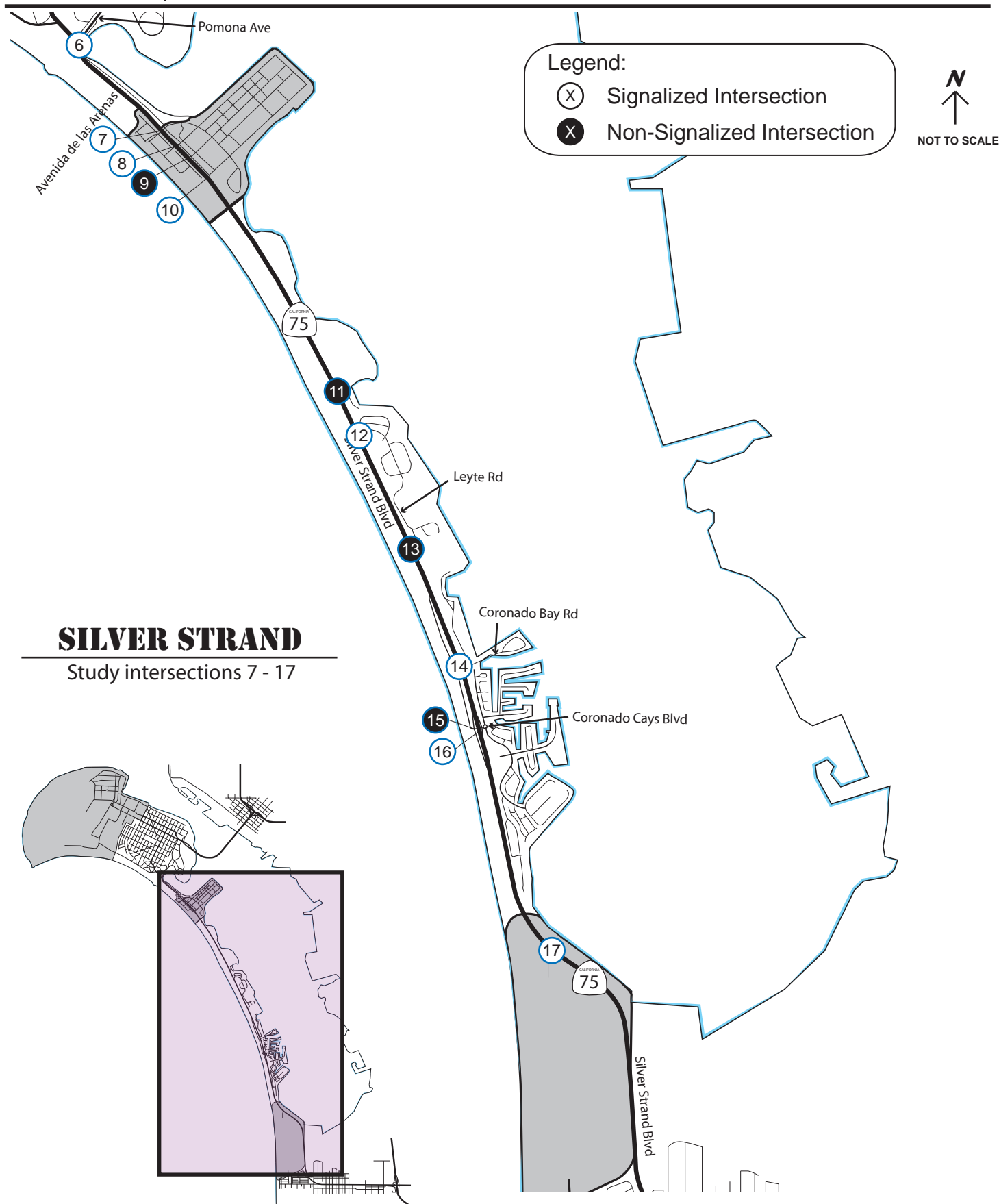
Table 3-1. Study Intersections

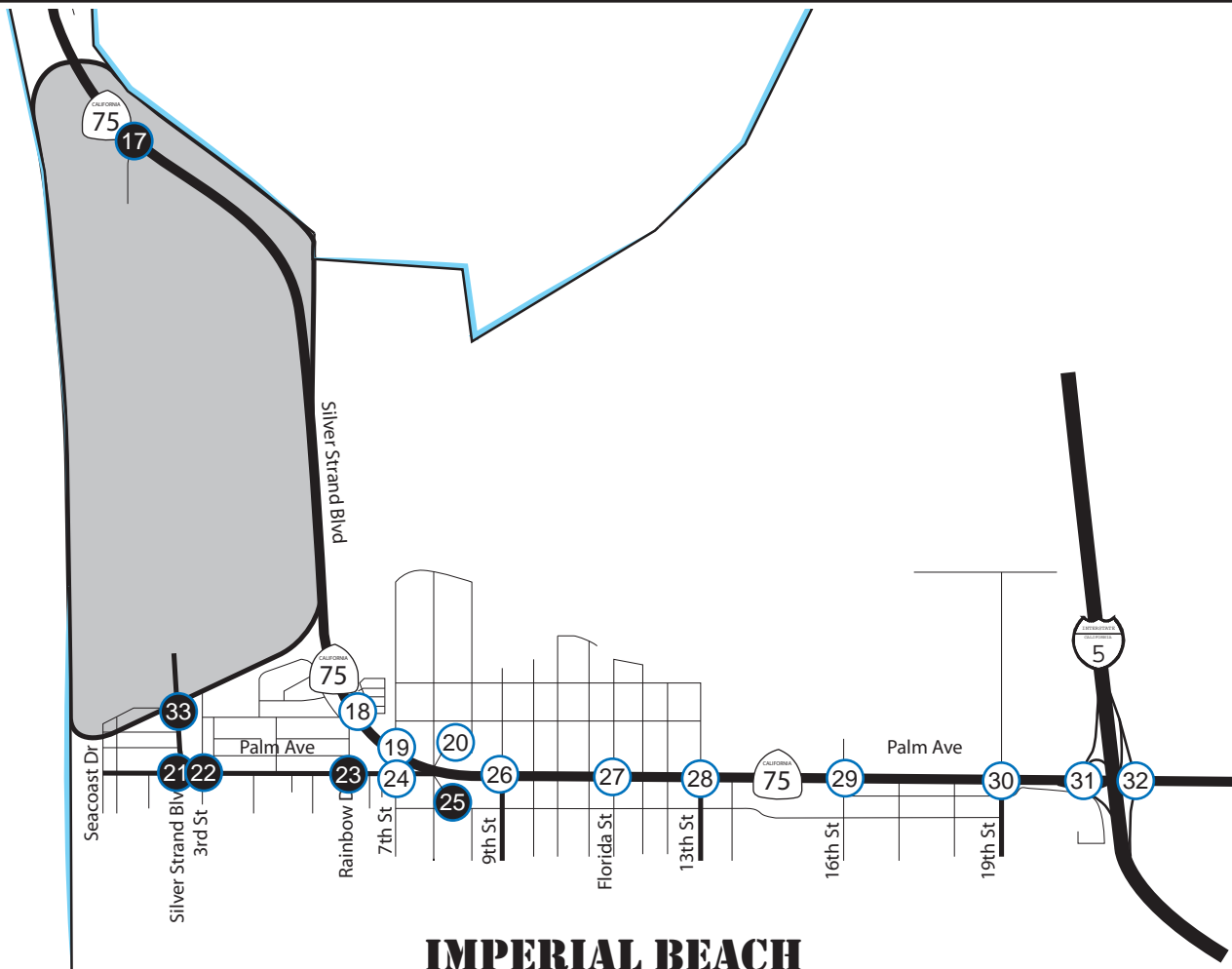
Intersection		Traffic Control (a)	Jurisdiction (b)
1	Glorietta Blvd and Fourth St (SR-75)	One-Way Stop	Caltrans/Coronado
2	Fourth St (SR-75) and Pomona Ave	One-Way Stop	Caltrans/Coronado
3	Orange Ave (SR-75) and Third St (SR-75)	Signal	Caltrans/Coronado
4	Orange Ave (SR-75) and Fourth St (SR-75)	Signal	Caltrans/Coronado
5	Silver Strand Blvd/Orange Ave (SR-75) and Pomona Ave	Signal	Caltrans/Coronado
6	Silver Strand Blvd (SR-75) and Avenida De Las Arenas	Signal	Caltrans/Coronado
7	Silver Strand Blvd (SR-75) and Rendova Rd	Signal	Caltrans/Coronado
8	Silver Strand Blvd (SR-75) and Tarawa Rd	Signal	Caltrans/Coronado
9	Strand Way and Guadalcanal Rd	Two-Way Stop	Navy/Coronado
10	Silver Strand Blvd (SR-75) and Tulagi Rd	Signal	Caltrans/Coronado
11	Silver Strand Blvd (SR-75) and Fiddler's Cove Driveway	One-Way Stop	Caltrans/Coronado
12	Silver Strand Blvd (SR-75) and Leyte Rd	Signal	Caltrans/Coronado
13	Silver Strand Blvd (SR-75) and Attu Ave	One-Way Stop	Caltrans/Coronado
14	Silver Strand Blvd (SR-75) and Coronado Bay Rd	Signal	Caltrans/Coronado
15	Southbound Silver Strand Blvd (SR-75) and Coronado Cays Blvd	All-Way Stop	Caltrans/Coronado
16	Northbound Silver Strand Blvd (SR-75) and Coronado Cays Blvd	Signal	Caltrans/Coronado
17	Silver Strand Blvd (SR-75) and Hooper Blvd	Signal	Caltrans/Navy
18	Silver Strand Blvd (SR-75) and Rainbow Dr	Signal	Caltrans/ Imperial Beach
19	7th St and Silver Strand Blvd (SR-75)	Signal	Caltrans/ Imperial Beach
20	Silver Strand Blvd (SR-75) and Delaware St	Signal	Caltrans/ Imperial Beach
21	Driveway/Silver Strand Blvd and Palm Ave	Two-Way Stop	Imperial Beach
22	3rd St and Palm Ave	All-Way Stop	Imperial Beach
23	Palm Ave and Rainbow Dr	One-Way Stop	Imperial Beach
24	7th St and Palm Ave	Signal	Imperial Beach
25	Delaware St and Palm Ave	One-Way Stop	Imperial Beach
26	9th St and Palm Ave (SR-75)	Signal	Caltrans/ Imperial Beach
27	Florida St and Palm Ave (SR-75)	Signal	Caltrans/ Imperial Beach
28	13th St and Palm Ave (SR-75)	Signal	Caltrans/ Imperial Beach
29	16th St and Palm Ave (SR-75)	Signal	Caltrans/San Diego
30	Saturn Blvd/19th St and Palm Ave (SR-75)	Signal	Caltrans/San Diego
31	Palm Ave (SR-75) and I-5 Southbound Exit Ramp	Signal	Caltrans
32	I-5 Northbound Ramps and Palm Ave (SR-75)	Signal	Caltrans
33	Silver Strand Blvd and YMCA Driveway	One-Way Stop	Imperial Beach

Notes:

- (a) Signal = Traffic signal;
One-Way Stop, Two-Way Stop, and All-Way Stop represent unsignalized intersections and the number of stop-controlled approaches.
- (b) Jurisdiction refers to the agency that is responsible for the operation and maintenance of the intersection. SR-75 is a California Department of Transportation (Caltrans) facility but side streets are within local jurisdictions so most intersections have shared responsibility.







IMPERIAL BEACH

Study intersections 18 - 33



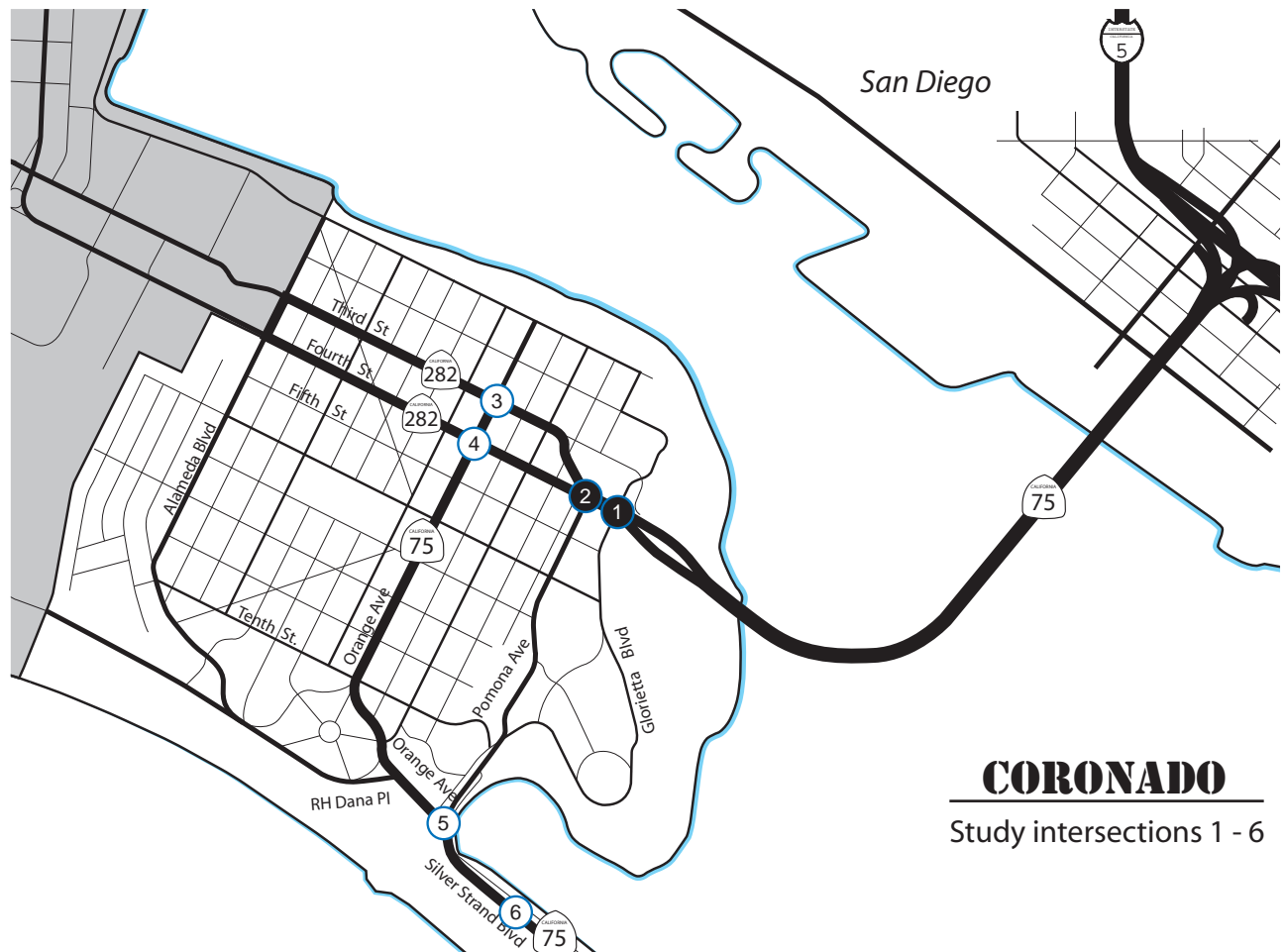
Legend:

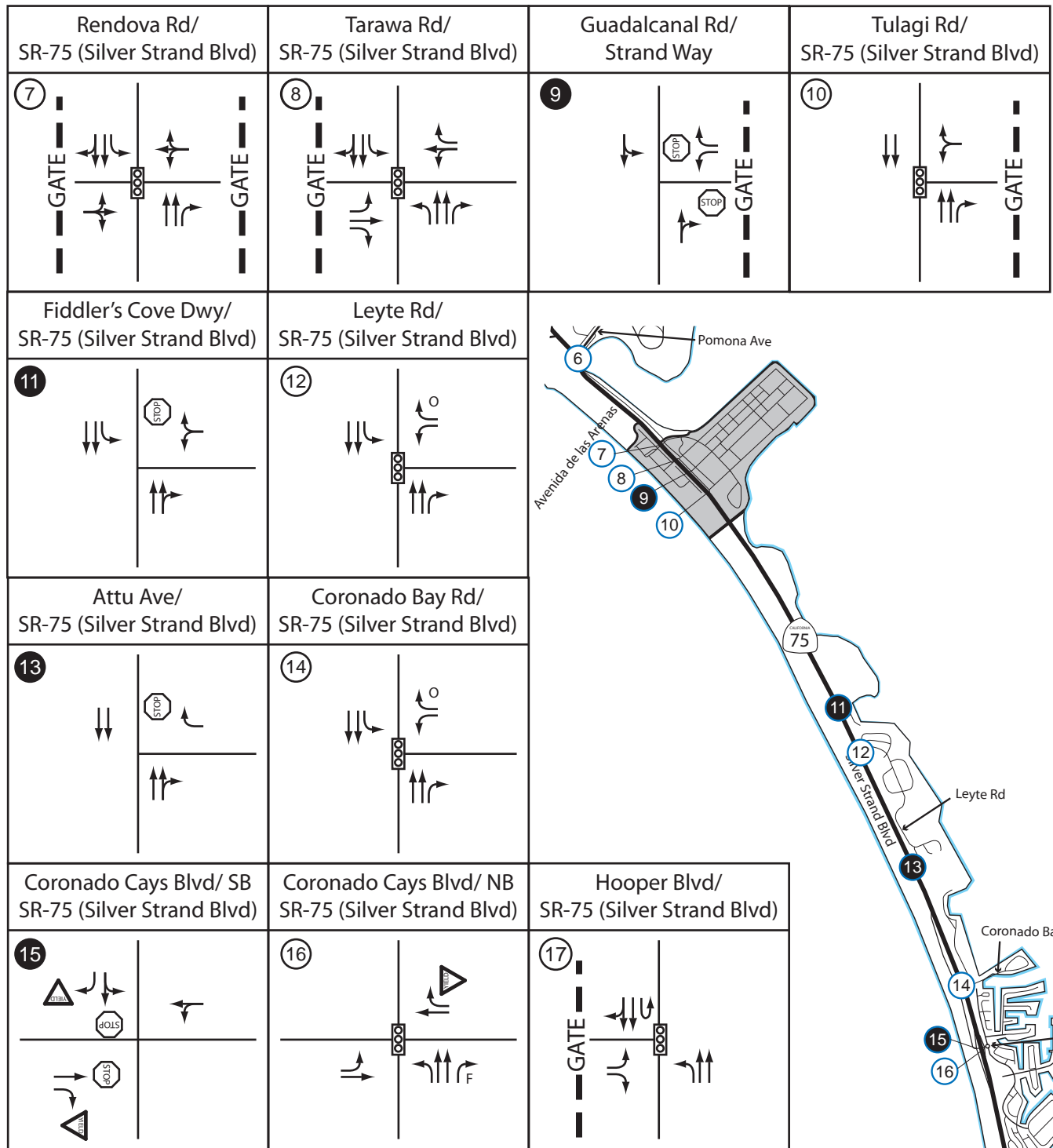
- (X) Signalized Intersection
- (X) Non-Signalized Intersection



NOT TO SCALE

SR-75 (Fourth St)/ Glorietta Blvd	SR-75 (Fourth St)/ Pomona Ave	SR-75 (Third St)/ SR-75 (Orange Ave)	SR-75 (Fourth St)/ SR-75 (Orange Ave)
<p>1</p>	<p>2</p>	<p>3</p>	<p>4</p>
Pomona Ave/ SR-75 (Silver Strand Blvd)	Avenida De Las Arenas/ SR-75 (Silver Strand Blvd)	<p>Legend:</p> <ul style="list-style-type: none"> (X) Signalized (X) Unsignalized o Right-turn overlap F Free right-turn 	
<p>5</p>	<p>6</p>		





Legend:

- | | |
|------------------|------------------------|
| (X) Signalized | (o) Right-turn overlap |
| (X) Unsignalized | (F) Free right-turn |



NOT TO SCALE

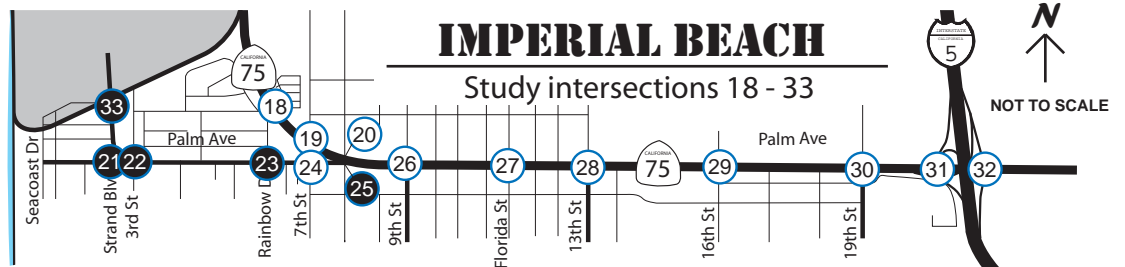
SILVER STRAND

Study intersections 7 - 17

Rainbow Dr/ SR-75 (Silver Strand Blvd)	SR-75 (Silver Strand Blvd)/ 7th St	SR-75 (Silver Strand Blvd)/ Delaware St	Palm Ave/ Silver Strand Blvd
(18)	(19)	(20)	(21)
Palm Ave/ 3rd St	Palm Ave/ Rainbow Dr	Palm Ave/ 7th St	Palm Ave/ Delaware St
(22)	(23)	(24)	(25)
SR-75 (Palm Ave)/ 9th St	SR-75 (Palm Ave)/ Florida St	SR-75 (Palm Ave)/ 13th St	SR-75 (Palm Ave)/ 16th St
(26)	(27)	(28)	(29)
SR-75 (Palm Ave)/ 19th St	SR-75 (Palm Ave)/ I-5 SB Exit Ramp	SR-75 (Palm Ave)/ I-5 NB Ramps	YMCA Dwy/ Silver Strand Blvd
(30)	(31)	(32)	(33)

Legend:

- (X) Signalized
- (X) Unsignalized
- O Right-turn overlap
- F Free right-turn



Orange Avenue (SR-75) is classified and functions as a north/south, four-lane minor arterial between First Street and Third Street, and a four-lane principal arterial between Third Street and Pomona Avenue. Orange Avenue is also known as SR-75. The road has a wide, raised landscaped median for the entire length. This street has sidewalks, curbs, and parallel-parking spaces on both sides of the street for the entire length. The posted speed limit is 30 mph between First Street and Ninth Street, and 25 mph between Ninth Street and Pomona Avenue.

Silver Strand Boulevard (SR-75) is classified and functions as a north/south, four-lane principal arterial from Coronado Street to the City of Imperial Beach. The roadway is divided by three-beam barriers and primarily has a posted speed limit of 65 mph, but some portions are as low as 35 mph. Silver Strand Boulevard is also known as SR-75 south of Pomona Avenue. Parking is not allowed along Silver Strand Boulevard; however, a paved shoulder lane is available on both sides. There is a separate two-lane bike path to the east of the road that travels the entire length.

Palm Avenue is a six-lane prime arterial that transitions into a two-lane collector (Class III) in the westward direction. Between I-5 and 7th Street, Palm Avenue is a divided six-lane prime arterial with a speed limit of 40 mph and is also known as SR-75. Between 7th Street (where SR-75 and Palm Avenue split) and Rainbow Drive, Palm Avenue is a four-lane collector separated by a two-way left-turn lane. The speed limit in this section is 35 mph. The section of Palm Avenue between Rainbow Drive and 3rd Street is a two-lane collector separated by a two-way-left-turn lane, the speed limit in this section remains at 35 mph. West of 3rd Street, Palm Avenue is a two-lane undivided collector with a posted speed limit of 30 mph.

Traffic Volumes

Existing peak-hour turning movement volumes at the study intersections were collected in 2012. Traffic counts in the a.m. peak period were obtained between 6:00 and 8:00 a.m. and traffic counts in the p.m. peak period were obtained between 2:30 and 4:30 p.m. The existing traffic volume data is contained in **Appendix F**.

Traffic counts were not all performed on the same day and the number of CVNs in port at NASNI varied with one or zero on the different days that counts were performed. To account for differences in the number of CVNs in port during the day of the counts, adjustments were made to the count data acquired when zero CVNs were in port using the CVN forecast methodology contained in Appendix C. CVN traffic was applied to each of the intersections to establish existing conditions except the following locations which captured traffic data when one CVN was in port:

- Glorietta Boulevard at Fourth Street (SR-75)
- Pomona Avenue at Fourth Street (SR-75)
- Orange Avenue (SR-75) at Third Street (SR-75)
- Orange Avenue (SR-75) at Fourth Street (SR-75)
- Silver Strand Boulevard (SR-75) at Avenidas de las Arenas
- Silver Strand Boulevard (SR-75) at Rendova Road
- Silver Strand Boulevard (SR-75) at Tarawa Road
- Strand Way at Guadalcanal Road
- Silver Strand Boulevard (SR-75) at Tulagi Road

Existing volumes representing one CVN in port were adjusted using forecast methodology contained in Appendix A to determine the existing volume when two and three CVNs are in port.

Figures 3-3 and 3-4 show the Existing Conditions volumes with one and two CVNs in port, respectively. As previously explained, analysis was not performed for scenarios with three CVNs in port as volumes

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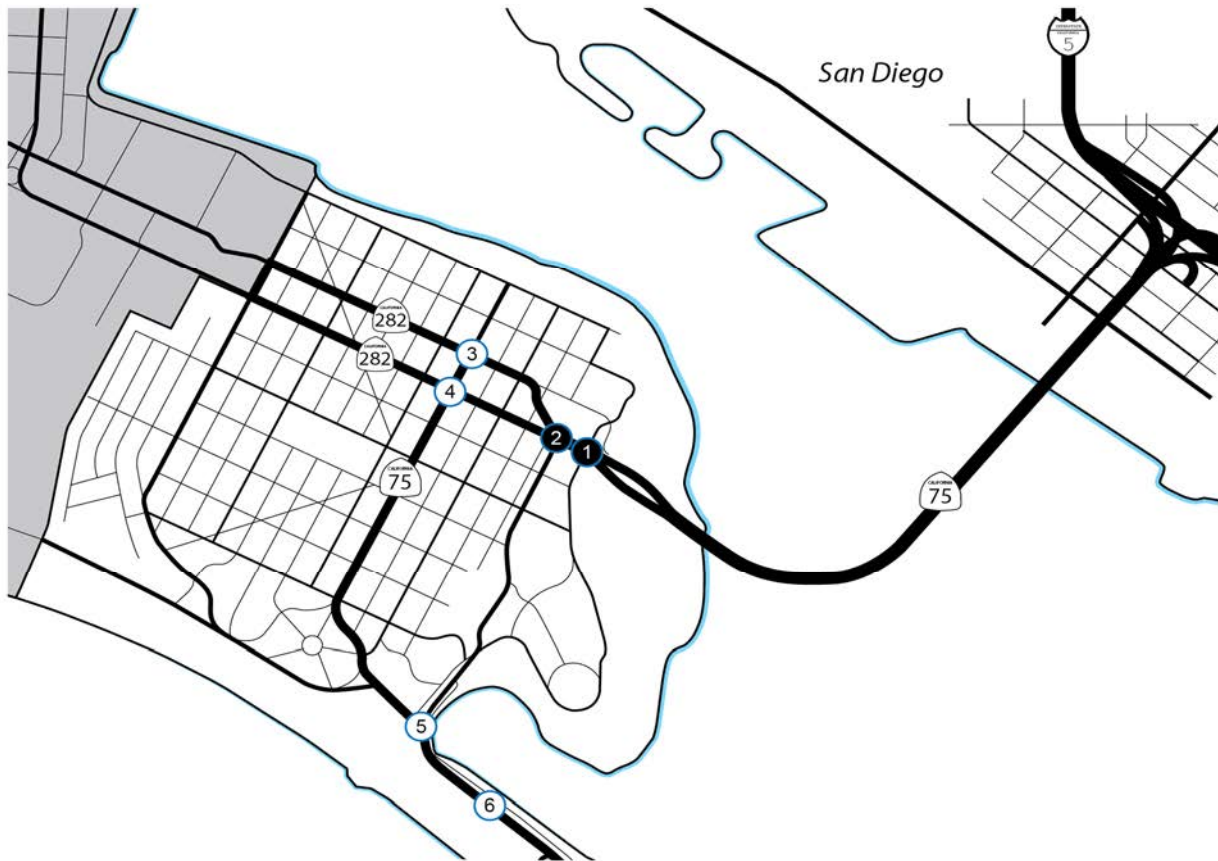
<div>1</div> <div><div>↔</div><div>9 / 55</div><div>Glorietta Blvd</div></div> <div><div>↔</div><div>529 / 238</div><div>↕</div><div>3254 / 1667</div><div>Fourth St (SR-75)</div></div> <div><div>1290 / 3516</div><div>34 / 17</div><div>↕</div></div> <div><div>↕</div><div>474 / 899</div></div>
<div>2</div> <div><div>↕</div><div>3154 / 1704</div><div>Fourth St (SR-75)</div></div> <div><div>1151 / 3282</div><div>201 / 130</div><div>↕</div><div>Pomona Ave</div></div> <div><div>↕</div><div>231 / 200</div></div>
<div>3</div> <div><div>↕</div><div>5 / 14</div><div>↕</div><div>257 / 763</div><div>Orange Ave (SR-75)</div></div> <div><div>↕</div><div>248 / 86</div><div>↕</div><div>1529 / 534</div><div>↕</div><div>1527 / 955</div><div>Third Street (SR-75)</div></div> <div><div>40 / 70</div><div>↕</div><div>93 / 242</div><div>↕</div></div>
<div>4</div> <div><div>↕</div><div>1409 / 1071</div><div>↕</div><div>432 / 669</div><div>Orange Ave (SR-75)</div></div> <div><div>498 / 1693</div><div>51 / 44</div><div>↕</div><div>↕</div></div> <div><div>↕</div><div>125 / 320</div><div>↕</div><div>194 / 412</div><div>Fourth St (SR-75)</div></div>
<div>5</div> <div><div>↕</div><div>1037 / 1112</div><div>Orange Ave (SR-75)</div></div> <div><div>↕</div><div>6 / 11</div><div>↕</div><div>204 / 163</div><div>Pomona Ave</div></div> <div><div>↕</div><div>1043 / 812</div><div>↕</div><div>567 / 648</div><div>Silver Strand Blvd (SR-75)</div></div>
<div>6</div> <div><div>↕</div><div>34 / 143</div><div>↕</div><div>1170 / 1323</div><div>↕</div><div>37 / 63</div><div>Silver Strand Blvd (SR-75)</div></div> <div><div>↕</div><div>5 / 23</div><div>↕</div><div>0 / 9</div><div>↕</div><div>7 / 24</div><div>Avenidas De Las Arenas</div></div> <div><div>44 / 135</div><div>2 / 9</div><div>9 / 27</div><div>↕</div><div>↕</div><div>↕</div></div> <div><div>↕</div><div>18 / 21</div><div>↕</div><div>1245 / 1383</div><div>↕</div><div>24 / 46</div><div>↕</div></div>

CORONADO

Study intersections 1 - 6

CORONADO

Study intersections 1 - 6



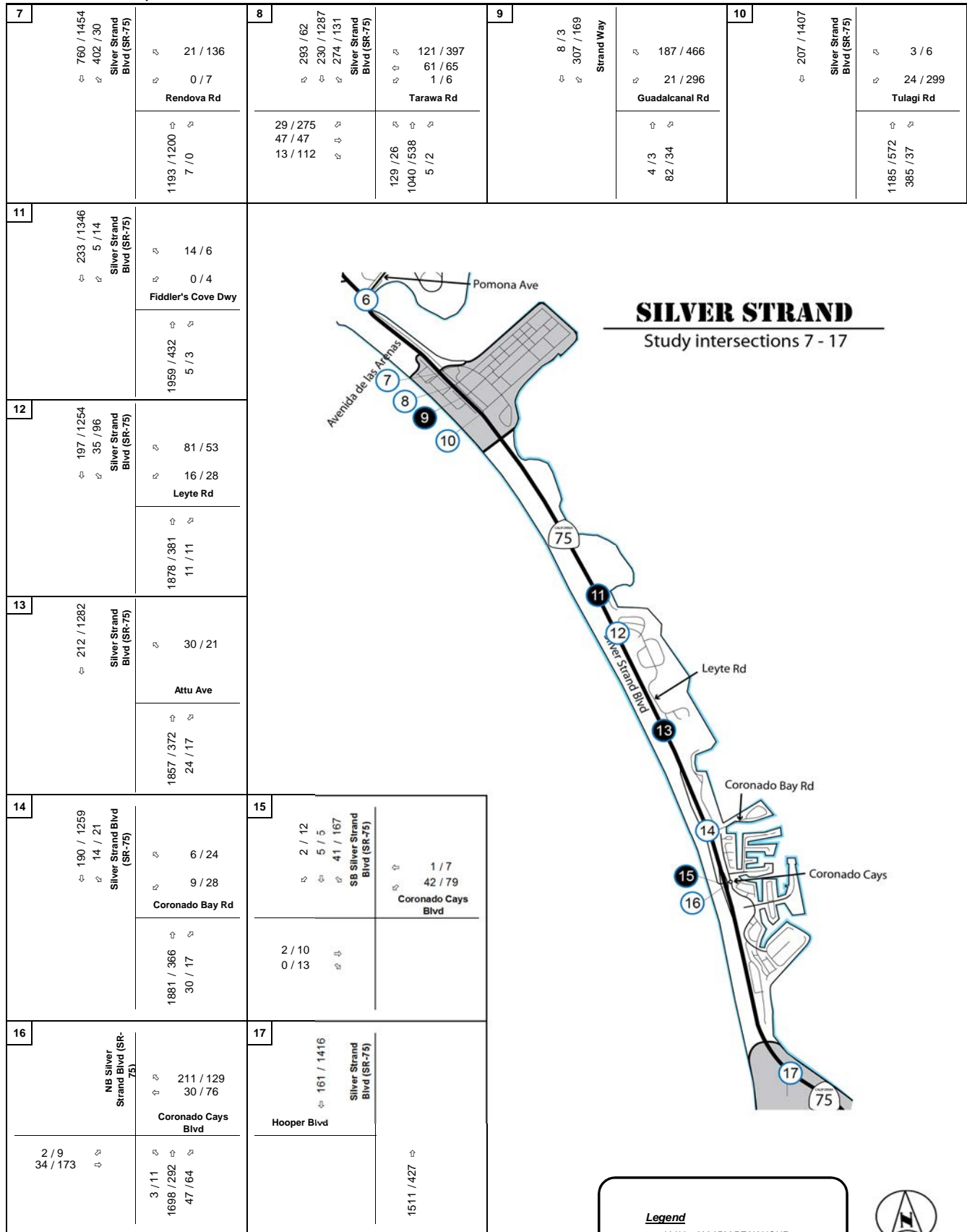
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

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<div>18</div> <div> <div>41 / 180</div> <div>118 / 1001</div> <div>0 / 1</div> <div>Silver Strand Blvd (SR-75)</div> <div>2 / 0</div> <div>1 / 1</div> <div>2 / 1</div> <div>Rainbow Dr</div> <div>367 / 81</div> <div>36 / 63</div> <div>24 / 68</div> <div>1399 / 292</div> <div>0 / 11</div> </div>	<div>19</div> <div> <div>48 / 19</div> <div>38 / 24</div> <div>18 / 22</div> <div>7th St</div> <div>16 / 32</div> <div>1266 / 327</div> <div>Silver Strand Blvd (SR-75)</div> <div>7 / 53</div> <div>164 / 959</div> <div>13 / 54</div> <div>35 / 12</div> <div>21 / 37</div> <div>1 / 4</div> </div>	<div>20</div> <div> <div>12 / 3</div> <div>Delaware St</div> <div>8 / 35</div> <div>1274 / 362</div> <div>368 / 467</div> <div>Silver Strand Blvd (SR-75)</div> <div>181 / 987</div> </div>	<div>21</div> <div> <div>4 / 8</div> <div>47 / 103</div> <div>Silver Strand Blvd</div> <div>103 / 40</div> <div>127 / 303</div> <div>Palm Ave</div> <div>9 / 3</div> <div>231 / 211</div> <div>Dwy</div> </div>
<div>22</div> <div> <div>14 / 13</div> <div>10 / 33</div> <div>11 / 28</div> <div>3rd St</div> <div>24 / 24</div> <div>207 / 317</div> <div>26 / 84</div> <div>Palm Ave</div> <div>7 / 7</div> <div>269 / 292</div> <div>4 / 12</div> <div>11 / 14</div> <div>14 / 38</div> <div>125 / 67</div> </div>	<div>23</div> <div> <div>68 / 139</div> <div>17 / 52</div> <div>Rainbow Dr</div> <div>151 / 39</div> <div>330 / 452</div> <div>Palm Ave</div> <div>223 / 72</div> <div>422 / 419</div> </div>	<div>24</div> <div> <div>27 / 30</div> <div>21 / 40</div> <div>1 / 12</div> <div>7th St</div> <div>0 / 3</div> <div>331 / 454</div> <div>26 / 31</div> <div>Palm Ave</div> <div>16 / 28</div> <div>415 / 428</div> <div>15 / 29</div> <div>65 / 54</div> <div>35 / 19</div> <div>80 / 22</div> </div>	<div>25</div> <div> <div>499 / 475</div> <div>4 / 8</div> <div>Delaware St</div> <div>2 / 6</div> <div>5 / 2</div> <div>Palm Ave</div> </div>
<div>26</div> <div> <div>23 / 24</div> <div>43 / 75</div> <div>85 / 164</div> <div>41 / 124</div> <div>1425 / 730</div> <div>22 / 55</div> <div>Palm Ave (SR-75)</div> <div>20 / 39</div> <div>610 / 1278</div> <div>33 / 117</div> <div>154 / 92</div> <div>35 / 85</div> <div>48 / 59</div> </div>	<div>27</div> <div> <div>14 / 13</div> <div>10 / 12</div> <div>52 / 60</div> <div>Florida St</div> <div>11 / 52</div> <div>1590 / 1115</div> <div>19 / 46</div> <div>Palm Ave (SR-75)</div> <div>2 / 19</div> <div>829 / 1546</div> <div>33 / 54</div> <div>17 / 20</div> <div>4 / 10</div> <div>29 / 33</div> </div>	<div>28</div> <div> <div>14 / 19</div> <div>34 / 42</div> <div>160 / 146</div> <div>13th St</div> <div>49 / 77</div> <div>1453 / 1186</div> <div>91 / 149</div> <div>Palm Ave (SR-75)</div> <div>3 / 25</div> <div>896 / 1437</div> <div>60 / 187</div> <div>137 / 122</div> <div>18 / 38</div> <div>86 / 121</div> </div>	<div>29</div> <div> <div>20 / 10</div> <div>2 / 10</div> <div>36 / 22</div> <div>16th St</div> <div>11 / 15</div> <div>1576 / 1470</div> <div>41 / 162</div> <div>Palm Ave (SR-75)</div> <div>13 / 9</div> <div>1149 / 1558</div> <div>24 / 47</div> <div>15 / 37</div> <div>6 / 8</div> <div>46 / 77</div> </div>
<div>30</div> <div> <div>73 / 217</div> <div>88 / 228</div> <div>224 / 561</div> <div>19th St</div> <div>205 / 530</div> <div>1520 / 1478</div> <div>233 / 313</div> <div>Palm Ave (SR-75)</div> <div>87 / 180</div> <div>1162 / 1503</div> <div>28 / 23</div> <div>70 / 62</div> <div>69 / 169</div> <div>736 / 509</div> </div>	<div>31</div> <div> <div>964 / 1527</div> <div>148 / 420</div> <div>I-5 SB Exit Ramp</div> <div>996 / 800</div> <div>Palm Ave (SR-75)</div> <div>271 / 479</div> </div>	<div>32</div> <div> <div>I-5 NB Ramps</div> <div>500 / 239</div> <div>402 / 502</div> <div>Palm Ave (SR-75)</div> <div>420 / 893</div> <div>691 / 401</div> <div>1 / 2</div> <div>137 / 102</div> </div>	<div>33</div> <div> <div>13 / 36</div> <div>Silver Strand Blvd</div> <div>YMCA Dwy</div> <div>3 / 10</div> <div>4 / 8</div> <div>65 / 3</div> </div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



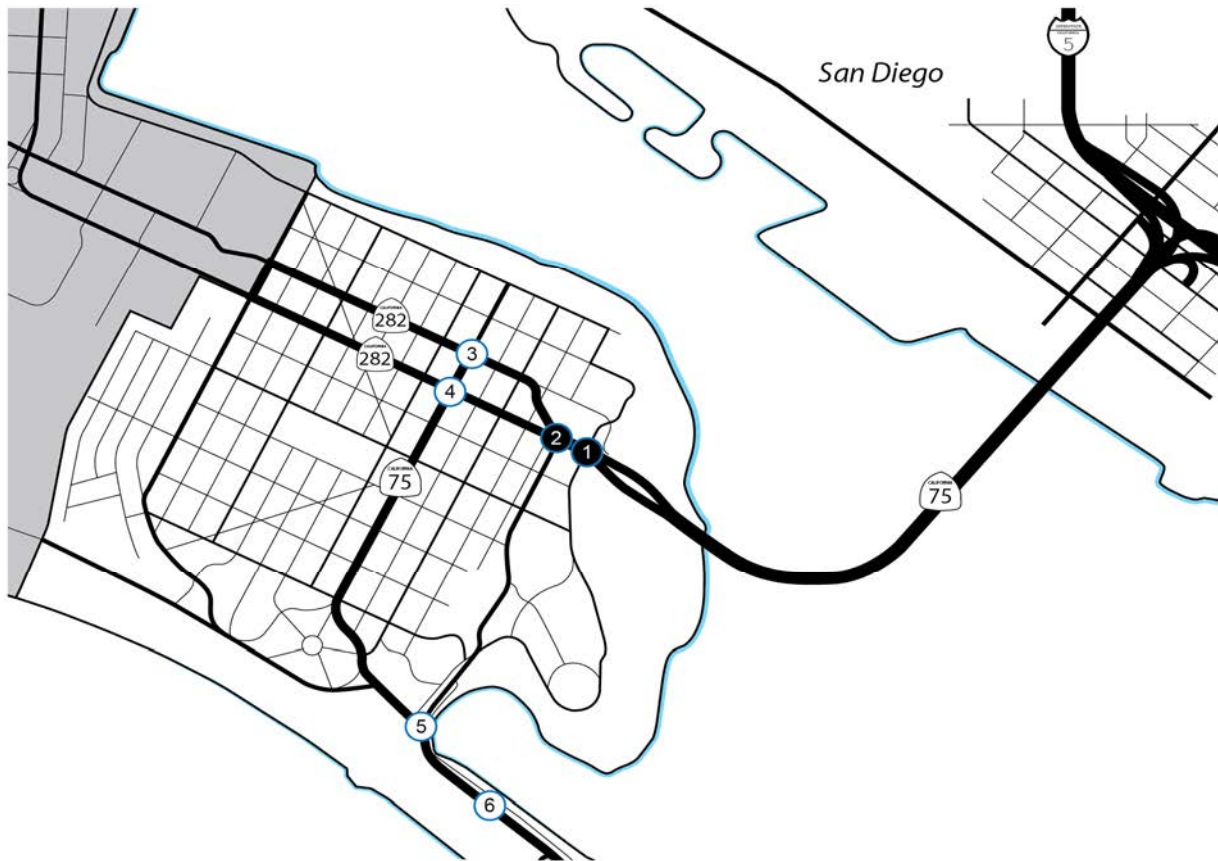
NOT TO SCALE

NBC Coastal Campus

<div>1</div> <div><div>↔</div><div>9 / 55</div><div>Glorietta Blvd</div></div> <div><div>↕</div><div>551 / 243</div><div>3789 / 1796</div></div> <div><div>↕</div><div>Fourth St (SR-75)</div></div> <div><div>↕</div><div>1396 / 4040</div><div>34 / 17</div><div>↕</div></div> <div><div>↕</div><div>475 / 906</div></div>	<div>2</div> <div><div>↕</div><div>3689 / 1833</div></div> <div><div>↕</div><div>Fourth St (SR-75)</div></div> <div><div>↕</div><div>1257 / 3806</div><div>201 / 130</div><div>↕</div><div>Pomona Ave</div></div> <div><div>↕</div><div>231 / 200</div></div>	<div>3</div> <div><div>↕</div><div>12 / 16</div><div>↕</div><div>277 / 859</div><div>Orange Ave (SR-75)</div></div> <div><div>↕</div><div>342 / 109</div><div>↕</div><div>1941 / 633</div><div>↕</div><div>1556 / 962</div><div>Third Street (SR-75)</div></div> <div><div>↕</div><div>105 / 86</div><div>↕</div><div>102 / 251</div></div>	<div>4</div> <div><div>↕</div><div>1439 / 1085</div><div>↕</div><div>450 / 759</div><div>Orange Ave (SR-75)</div></div> <div><div>↕</div><div>1 / 7</div><div>582 / 2106</div><div>↕</div><div>64 / 106</div></div> <div><div>↕</div><div>197 / 337</div><div>↕</div><div>198 / 433</div></div>
<div>5</div> <div><div>↕</div><div>1044 / 1146</div><div>Orange Ave (SR-75)</div></div> <div><div>↕</div><div>6 / 11</div><div>↕</div><div>204 / 163</div><div>Pomona Ave</div></div> <div><div>↕</div><div>1079 / 821</div><div>↕</div><div>567 / 648</div><div>Silver Strand Blvd (SR-75)</div></div>	<div>6</div> <div><div>↕</div><div>34 / 143</div><div>↕</div><div>1177 / 1357</div><div>↕</div><div>37 / 63</div><div>Silver Strand Blvd (SR-75)</div></div> <div><div>↕</div><div>5 / 23</div><div>↕</div><div>0 / 9</div><div>↕</div><div>7 / 24</div><div>Avenidas De Las Arenas</div></div> <div><div>↕</div><div>44 / 135</div><div>↕</div><div>2 / 9</div><div>↕</div><div>9 / 27</div></div> <div><div>↕</div><div>18 / 21</div><div>↕</div><div>1281 / 1392</div><div>↕</div><div>24 / 46</div></div>	<div><div><div>CORONADO</div><div>Study intersections 1 - 6</div></div></div>	

CORONADO

Study intersections 1 - 6



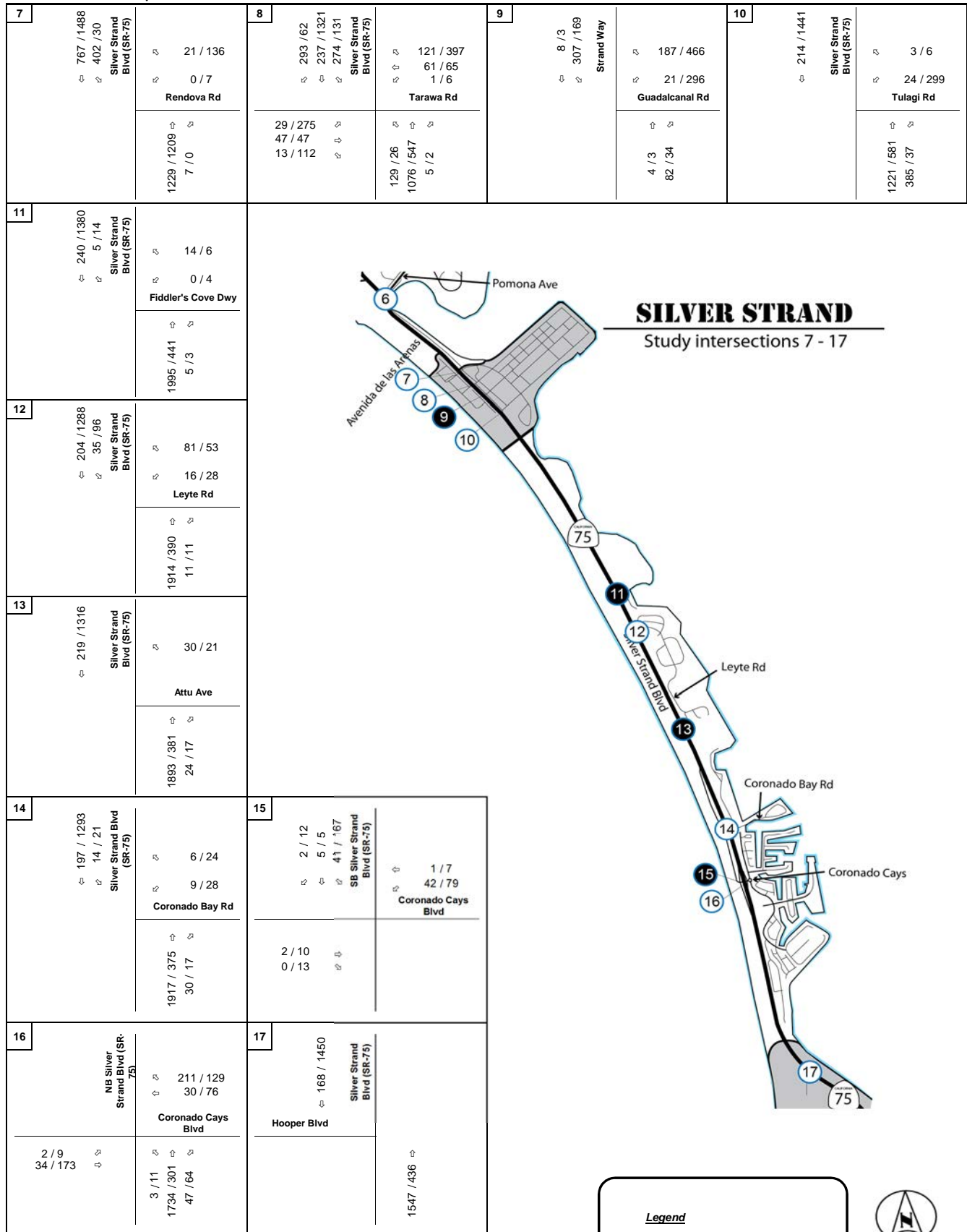
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus



NBC Coastal Campus

<div>18</div> <div> <div>41 / 180</div> <div>125 / 1035</div> <div>0 / 1</div> <div>Silver Strand Blvd (SR-75)</div> <div>2 / 0</div> <div>1 / 1</div> <div>2 / 1</div> <div>Rainbow Dr</div> <div>367 / 81</div> <div>36 / 63</div> <div>24 / 68</div> <div>1435 / 301</div> <div>0 / 11</div> </div>	<div>19</div> <div> <div>48 / 19</div> <div>38 / 24</div> <div>18 / 22</div> <div>7th St</div> <div>16 / 32</div> <div>1302 / 336</div> <div>Silver Strand Blvd (SR-75)</div> <div>7 / 53</div> <div>171 / 993</div> <div>13 / 54</div> <div>35 / 12</div> <div>21 / 37</div> <div>1 / 4</div> </div>	<div>20</div> <div> <div>12 / 3</div> <div>Delaware St</div> <div>8 / 35</div> <div>1310 / 371</div> <div>368 / 467</div> <div>Silver Strand Blvd (SR-75)</div> <div>188 / 1021</div> </div>	<div>21</div> <div> <div>4 / 8</div> <div>47 / 103</div> <div>Silver Strand Blvd</div> <div>103 / 40</div> <div>127 / 303</div> <div>Palm Ave</div> <div>9 / 3</div> <div>231 / 211</div> <div>Dwy</div> </div>
<div>22</div> <div> <div>14 / 13</div> <div>10 / 33</div> <div>11 / 28</div> <div>3rd St</div> <div>24 / 24</div> <div>207 / 317</div> <div>26 / 84</div> <div>Palm Ave</div> <div>7 / 7</div> <div>269 / 292</div> <div>4 / 12</div> <div>11 / 14</div> <div>14 / 38</div> <div>125 / 67</div> </div>	<div>23</div> <div> <div>68 / 139</div> <div>17 / 52</div> <div>Rainbow Dr</div> <div>151 / 39</div> <div>330 / 452</div> <div>Palm Ave</div> <div>223 / 72</div> <div>422 / 419</div> </div>	<div>24</div> <div> <div>27 / 30</div> <div>21 / 40</div> <div>1 / 12</div> <div>7th St</div> <div>0 / 3</div> <div>331 / 454</div> <div>26 / 31</div> <div>Palm Ave</div> <div>16 / 28</div> <div>415 / 428</div> <div>15 / 29</div> <div>65 / 54</div> <div>35 / 19</div> <div>80 / 22</div> </div>	<div>25</div> <div> <div>499 / 475</div> <div>4 / 8</div> <div>Delaware St</div> <div>2 / 6</div> <div>5 / 2</div> <div>Palm Ave</div> </div>
<div>26</div> <div> <div>23 / 24</div> <div>43 / 75</div> <div>85 / 164</div> <div>41 / 124</div> <div>1461 / 739</div> <div>22 / 55</div> <div>Palm Ave (SR-75)</div> <div>20 / 39</div> <div>617 / 1312</div> <div>33 / 117</div> <div>154 / 92</div> <div>35 / 85</div> <div>48 / 59</div> </div>	<div>27</div> <div> <div>14 / 13</div> <div>10 / 12</div> <div>52 / 60</div> <div>Florida St</div> <div>11 / 52</div> <div>1626 / 1124</div> <div>19 / 46</div> <div>Palm Ave (SR-75)</div> <div>2 / 19</div> <div>836 / 1580</div> <div>33 / 54</div> <div>17 / 20</div> <div>4 / 10</div> <div>29 / 33</div> </div>	<div>28</div> <div> <div>14 / 19</div> <div>34 / 42</div> <div>160 / 146</div> <div>13th St</div> <div>49 / 77</div> <div>1489 / 1195</div> <div>91 / 149</div> <div>Palm Ave (SR-75)</div> <div>3 / 25</div> <div>903 / 1471</div> <div>60 / 187</div> <div>137 / 122</div> <div>18 / 38</div> <div>86 / 121</div> </div>	<div>29</div> <div> <div>20 / 10</div> <div>2 / 10</div> <div>36 / 22</div> <div>16th St</div> <div>11 / 15</div> <div>1612 / 1479</div> <div>41 / 162</div> <div>Palm Ave (SR-75)</div> <div>13 / 9</div> <div>1156 / 1592</div> <div>24 / 47</div> <div>15 / 37</div> <div>6 / 8</div> <div>46 / 77</div> </div>
<div>30</div> <div> <div>73 / 217</div> <div>88 / 228</div> <div>224 / 561</div> <div>19th St</div> <div>205 / 530</div> <div>1556 / 1487</div> <div>233 / 313</div> <div>Palm Ave (SR-75)</div> <div>87 / 180</div> <div>1169 / 1537</div> <div>28 / 23</div> <div>70 / 62</div> <div>69 / 169</div> <div>736 / 509</div> </div>	<div>31</div> <div> <div>964 / 1527</div> <div>148 / 420</div> <div>I-5 SB Exit Ramp</div> <div>1032 / 809</div> <div>Palm Ave (SR-75)</div> <div>271 / 479</div> </div>	<div>32</div> <div> <div>I-5 NB Ramps</div> <div>500 / 239</div> <div>402 / 502</div> <div>Palm Ave (SR-75)</div> <div>420 / 893</div> <div>727 / 410</div> <div>1 / 2</div> <div>137 / 102</div> </div>	<div>33</div> <div> <div>13 / 36</div> <div>Silver Strand Blvd</div> <div>YMCA Dwy</div> <div>3 / 10</div> <div>4 / 8</div> <div>65 / 3</div> </div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

would be equal to or less than when two CVNs are in port due to the requirement to stagger work hours. Volumes with three CVNs in port are provided in Appendix E.

Table 3-2 displays the LOS analysis results for the study intersections under Existing No Action Alternative Conditions. **Table 3-3** displays the ILV analysis results for the Palm Avenue and I-5 interchange under the Existing No Action Alternative scenario. **Appendix G** contains the LOS calculation worksheets and **Appendix H** contains the ILV calculation worksheets. The results of the analyses are summarized below.

Conditions with 1 Carrier Vessel Nuclear (CVN)

No-Action Conditions

Intersection Analysis

All intersections operate at LOS D or better during both peak periods, except at the following locations:

- | | |
|--|------------------------------------|
| ▪ #1 Glorietta Boulevard and Fourth Street (SR-75) | <i>AM peak (LOS E)</i> |
| ▪ #2 Fourth Street (SR-75) and Pomona Avenue | <i>PM peak (LOS F)</i> |
| ▪ #4 Orange Ave (SR-75) & Fourth St (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #19 7th St & Silver Strand Blvd (SR-75) | <i>AM & PM peaks (LOS F/E)</i> |
| ▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75) | <i>PM peak (LOS F)</i> |

Intersecting Lane Vehicle Analysis

Both signalized intersections at the Palm Avenue and I-5 interchange operate below capacity during both peak periods with one CVN in port.

Conditions with 2 Carrier Vessels Nuclear (CVN)

No-Action Conditions

Intersection Analysis

All intersections operate at LOS D or better during both peak periods, except at the following locations:

- | | |
|--|------------------------------------|
| ▪ #1 Glorietta Boulevard and Fourth Street (SR-75) | <i>AM peak (LOS F)</i> |
| ▪ #2 Fourth Street (SR-75) and Pomona Avenue | <i>PM peak (LOS F)</i> |
| ▪ #4 Orange Ave (SR-75) & Fourth St (SR-75) | <i>PM peak (LOS F)</i> |
| ▪ #19 7th St & Silver Strand Blvd (SR-75) | <i>AM & PM peaks (LOS F/E)</i> |
| ▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75) | <i>PM peak (LOS F)</i> |

Intersecting Lane Vehicle Analysis

Both signalized intersections at the Palm Avenue and I-5 interchange operate below capacity during both peak periods with two CVNs in port.

Table 3-2. Existing No-Action Intersection Analysis

INTERSECTION		1 CVN		2 CVNs	
		AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	43.1 (E)	18.5 (C)	60.3 (F)	19.8 (C)
2	Fourth St (SR-75) & Pomona Ave	23.9 (C)	306.3 (F)	26.7 (D)	531.4 (F)
3	Orange Ave (SR-75) & Third St (SR-75)	27.4 (C)	37.7 (D)	45.1 (D)	40.9 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	37.1 (D)	59.1 (E)	38.0 (D)	105.6 (F)
5	Silver Strand Blvd/Orange Ave (SR-75) & Pomona Ave	11.6 (B)	14.0 (B)	12.0 (B)	14.0 (B)
6	Silver Strand Blvd (SR-75) & Avenida De Las Arenas	11.6 (B)	16.9 (B)	11.7 (B)	17.0 (B)
7	Silver Strand Blvd (SR-75) & Rendova Rd	16.5 (B)	10.8 (B)	16.4 (B)	10.9 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	45.3 (D)	53.8 (D)	45.6 (D)	54.3 (D)
9	Strand Way & Guadalcanal Rd	10.4 (B)	16.6 (C)	10.4 (B)	16.6 (C)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	2.8 (A)	46.5 (D)	2.8 (A)	51.7 (D)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	23.2 (C)	18.0 (C)	23.8 (C)	18.5 (C)
12	Silver Strand Blvd (SR-75) & Leyte Rd	20.9 (C)	6.8 (A)	21.9 (C)	6.8 (A)
13	Silver Strand Blvd (SR-75) & Attu Ave	23.3 (C)	9.8 (A)	23.9 (C)	9.8 (A)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	5.6 (A)	3.2 (A)	5.6 (A)	3.2 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.7 (A)	7.7 (A)	7.7 (A)	7.7 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	18.0 (B)	10.5 (B)	18.6 (B)	10.5 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd	**		**	
18	Silver Strand Blvd (SR-75) & Rainbow Dr	23.2 (C)	19.4 (B)	23.7 (C)	19.5 (B)
19	7th St & Silver Strand Blvd (SR-75)	83.9 (F)	56.5 (E)	83.3 (F)	56.5 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	8.0 (A)	10.6 (B)	7.8 (A)	10.5 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	13.0 (B)	19.6 (C)	13.0 (B)	19.6 (C)
22	3rd St & Palm Ave	10.9 (B)	19.0 (C)	10.9 (B)	19.0 (C)
23	Palm Ave & Rainbow Dr	32.0 (D)	25.1 (D)	32.0 (D)	25.1 (D)
24	7th St & Palm Ave	8.4 (A)	5.8 (A)	8.4 (A)	5.8 (A)
25	Delaware St & Palm Ave	11.9 (B)	12.6 (B)	11.9 (B)	12.6 (B)
26	9th St & Palm Ave (SR-75)	38.5 (D)	44.1 (D)	38.8 (D)	44.4 (D)
27	Florida St & Palm Ave (SR-75)	8.0 (A)	9.0 (A)	7.9 (A)	8.9 (A)
28	13th St & Palm Ave (SR-75)	35.9 (D)	42.5 (D)	36.1 (D)	43.1 (D)
29	16th St & Palm Ave (SR-75)	13.0 (B)	17.1 (B)	13.1 (B)	17.3 (B)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	42.9 (D)	147.7 (F)	43.2 (D)	151.3 (F)
31	I-5 SB Exit Ramp & Palm Avenue (SR-75)	24.7 (C)	30.4 (C)	27.1 (C)	31.3 (C)
32	I-5 NB Ramps & Palm Avenue (SR-75)	10.5 (B)	8.6 (A)	10.8 (B)	8.6 (A)
33	Silver Strand Blvd & YMCA Dwy	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)

Notes:

** Intersection does not exist under this scenario

Table reflects intersection Delay (LOS). **Bold** indicates intersections operating at an unacceptable LOS E or F.

Table 3-3. Existing No-Action ILV Analysis

INTERSECTION		PEAK HOUR	1 CVN		2 CVNs	
			ILV TOTAL	CAPACITY	ILV TOTAL	CAPACITY
31	I-5 SB Exit Ramp & Palm Avenue (SR-75)	AM	980	Below Capacity	998	Below Capacity
		PM	1164	Below Capacity	1169	Below Capacity
32	I-5 NB Ramps & Palm Avenue (SR-75)	AM	914	Below Capacity	933	Below Capacity
		PM	700	Below Capacity	704	Below Capacity

Notes:

Bold values indicate intersections operating above capacity.

4.0 ASSESSMENT OF PROPOSED ACTION

The Proposed Action has three alternatives that are being evaluated. Alternatives 1 and 2 both consolidate NSWC facilities to one location on SSTC-South. Alternative 3 would include all of the components as Alternatives 1 but would separate them across three installations: NAB Coronado, NASNI, and SSTC-South. This study analyzes the traffic impacts associated with each of the three alternatives and compares them to the No-Action alternative. In order to determine the traffic impacts for each alternative, trip generation and distribution was determined to quantify how much traffic each alternative will add or subtract from the roadway network, and where those trips will be added or removed. This section describes the methodology and assumptions used to determine traffic changes associated with each of the three Proposed Action alternatives.

Alternative 1

Road Network

The only roadway network change associated with Alternative 1 is implementation of P947, which would install a new entry control point at SSTC-South and signalize the intersection of Silver Strand Boulevard (SR-75) and Hooper Boulevard. Improvements to the intersection would include adding an exclusive southbound right-turn lane, lengthening the northbound left-turn lane, and developing the west leg to become a four-lane road with two exit lanes and two receiving lanes and provide access to the new SSTC-South ECP. All other roadways and intersections within the study area would remain the same with the addition of Alternative 1.

Traffic Volumes

Although Alternative 1 assumes that all of the proposed Naval Special Warfare facilities will be located within the expanded SSTC training site, trip generation and distribution was determined for both NAB Coronado and SSTC as the proposed project will affect both locations.

It is anticipated that 3,045 personnel will relocate from NAB Coronado to SSTC with the construction of the project. The new vacancy within NAB Coronado will allow an increase of 1,000 personnel from outside sources. Also, the Naval Base Coronado Planning Department is expecting personnel fluctuations independent of the project that must be captured in the NAB Coronado trip generation (549 increase and 123 decrease). Further, it is expected that 191 personnel from locations outside of NAB Coronado will use the facilities at SSTC during the peak hours. No personnel would be relocated to or from NASNI with the addition of this project. The change in personnel associated with Alternative 1 is summarized in **Table 4-1**.

Table 4-1. Alternative 1 Personnel Changes

<i>NAB Coronado</i>	<i>+ / -</i>	<i>Number</i>
Existing Total Personnel at NAB (2012) ¹		5,182
<i>Planned increase in personnel by Year 2024</i> ²	(+)	549
Future Total Baseline Personnel at NAB (2024)		5,731
<i>Personnel from NAB relocating to SSTC-South with project</i> ³	(-)	3,045
<i>Personnel relocating elsewhere by Year 2024</i> ²	(-)	123
<i>Increase in personnel with area abandoned by project's personnel relocation</i> ⁴	(+)	1,000
Total Net Personnel at NAB with project		3,563
<i>Change in personnel at NAB with project build out</i>		<i>-1,619</i>

<i>SSTC-South</i>		<i>Number</i>
Existing NSW personnel at SSTC-South ¹		117
<i>NSW personnel to relocate to SSTC-South with project</i> ³	(+)	3,045
<i>Other personnel to use project training facilities</i> ⁵	(+)	191
Total personnel at SSTC-South with project ³		3,353
<i>Change in personnel at SSTC-South with project build out</i>		<i>3,236</i>

<i>NASNI</i>		<i>Number</i>
Existing NSW personnel at NASNI ⁶		30
<i>NSW personnel to relocate to NASNI with project</i> ³	(+)	0
Total NSW personnel at NASNI with project ³		30
<i>Change in personnel at NASNI with project build out</i>		<i>0</i>

Notes:

¹ Existing personnel numbers at NAB obtained from the Naval Base Coronado Pre-final Activity Overview Plan, dated September 2010.

² This estimate was provided by a Naval Special Warfare representative in January 2012 and based on information known at that time.

³ This value was obtained from a point paper established in February 2013 that reflected anticipated personnel changes with the build out of the NBC Coastal Campus.

⁴ This estimate was provided by a Naval Base Coronado representative and based on an analysis of the potential building space at NAB vacated by the project.

⁵ This value represents the use of training facilities that would be developed as part of the Coastal Campus project by users not part of Naval Special Warfare. This value was calculated by subtracting the existing and future Naval Special Warfare personnel from the total population anticipated at SSTC-South (3,353-117-3,045 = 191).

⁶ This estimate was provided by a Naval Special Warfare representative in May 2013 and based on information known at that time.

The project's trip generation was determined based on the change in personnel. It was determined that 4,048 daily trips would be removed from NAB Coronado with the addition of Alternative 1; 364 trips (328 in, 36 out) would be removed from the morning peak hour; and 405 trips (81 in, 324 out) would be removed from the afternoon peak hour. Further, it was determined that 8,090 daily project trips would be added to SSTC-South; 728 trips (655 in, 73 out) would be added during the morning peak hour; and 809 trips (162 in, 647 out) would be added during the afternoon peak hour. **Table 4-2** displays the trip generation for Alternative 1 for both the NAB Coronado and SSTC-South locations.

Trip distribution for Alternative 1 was determined for NAB Coronado and SSTC-South based on regional models prepared by SANDAG and by information obtained from the Navy. Initially, a SANDAG Series 12 Select Zone Model was prepared for both NAB Coronado and SSTC. Modifications were then made to the distribution patterns based on interactions between installations relating to NSW operations, location of military housing, and to provide consistent with previous studies in the area. **Figure 4-1** and **Figure 4-2** show the general trip distribution through the study area for NAB Coronado and SSTC, respectively. **Figure 4-3** and **Figure 4-4** show the distribution at each study intersection for NAB Coronado and SSTC, respectively.

The project's trip generation was combined with the distribution to determine the project trip assignment at each of the study intersections for the NAB Coronado and SSTC-South locations. **Figure 4-5** shows the Alternative 1 project trips associated with NAB Coronado. The trips are negative because they represent the amount of traffic that will be removed from NAB Coronado in accordance with the personnel fluctuations previously explained. **Figure 4-6** shows the SSTC-South Alternative 1 project trips and are positive values because trips are being added to the network. The NAB Coronado and SSTC-South Alternative 1 project trip assignments were added together to get the total project area Alternative 1 project trips, as shown in **Figure 4-7**.

Table 4-2. Alternative 1 Trip Generation Calculations

<i>NAB Coronado</i>	<i>Number</i>
<i>Existing NSW personnel at NAB¹</i>	5,182
Current daily vehicle trips generated for NAB (2.5 trips / person)²	12,955
<i>Change in personnel at NAB with project build out</i>	-1,619
Daily vehicle project trips generated for NAB (2.5 trips / person)²	-4,048
<i>Morning peak hour project trips for NAB³</i>	-364
<i>Inbound / Outbound</i>	(-328 in / -36 out)
<i>Afternoon peak hour project trips for NAB³</i>	-405
<i>Inbound / Outbound</i>	(-81 in / -324 out)
Resulting daily vehicle trips for NAB Coronado	8,908

<i>SSTC-South</i>	<i>Number</i>
<i>Existing NSW personnel at SSTC-South¹</i>	117
Daily vehicle trips generated for SSTC-South (2.5 trips / person) ²	293
Existing daily trips between SSTC-South and NAB Coronado (non-peak) ⁴	504
Current total daily vehicle trips for SSTC-South⁵	796
<i>Change in personnel at SSTC-South with project build out</i>	3,236
Daily vehicle project trips generated for SSTC-South (2.5 trips / person)²	8,090
<i>Morning peak hour project trips for SSTC-South³</i>	728
<i>Inbound / Outbound</i>	(655 in / 73 out)
<i>Afternoon peak hour project trips for SSTC-South³</i>	809
<i>Inbound / Outbound</i>	(162 in / 647 out)
Resulting daily vehicle trips for SSTC-South	8,886

Notes:

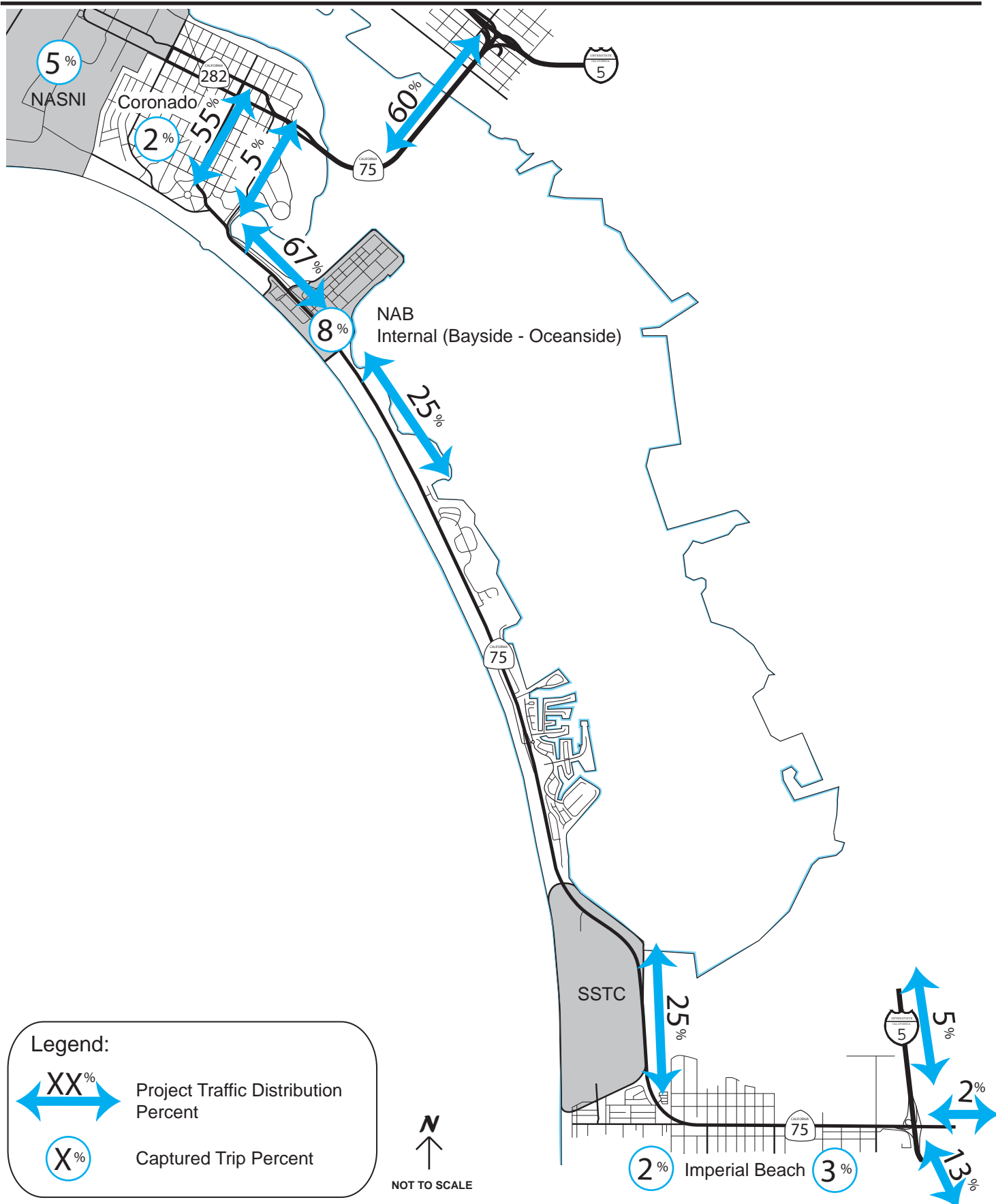
¹ Existing personnel numbers at NAB Coronado obtained from the Naval Base Coronado Pre-final Activity Overview Plan, dated September 2010.

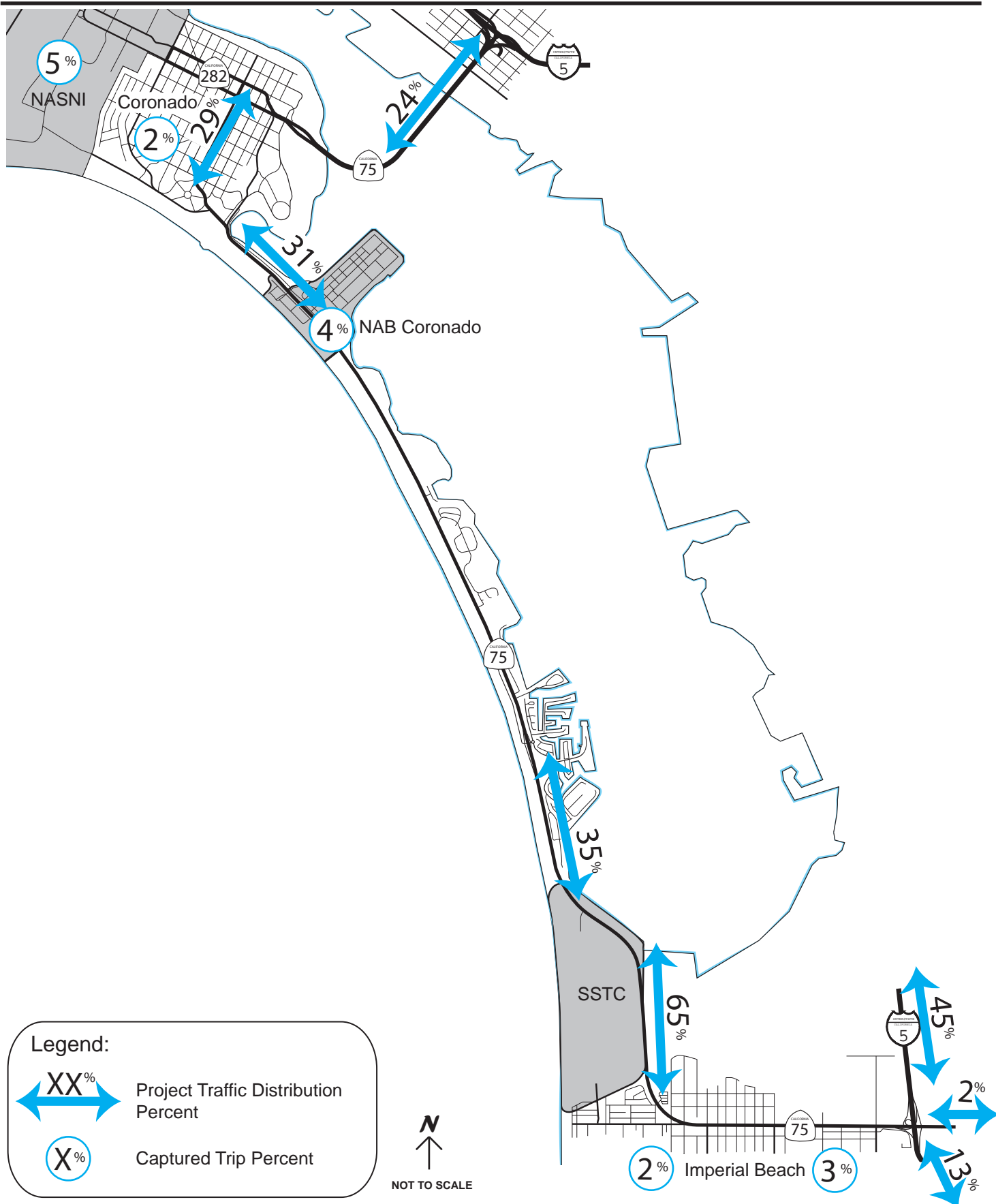
² Daily trips are assumed to be 2.5 trips per person. This rate is obtained from the Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, SANDAG, April 2002, and is consistent with the City of San Diego Land Development Code – Trip Generation Manual, May 2003.

³ Peak hour trip rates are obtained from the Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, SANDAG, April 2002.

⁴ This value is the difference between the calculated number of daily trips by existing personnel and the number of daily trips assumed in the SANDAG Series 12 Forecast Model to access SSTC-South during Year 2008.

⁵ Daily trips obtained from the SANDAG Series 12 Forecast Model, Year 2008, traffic analysis zone (TAZ) 4288.



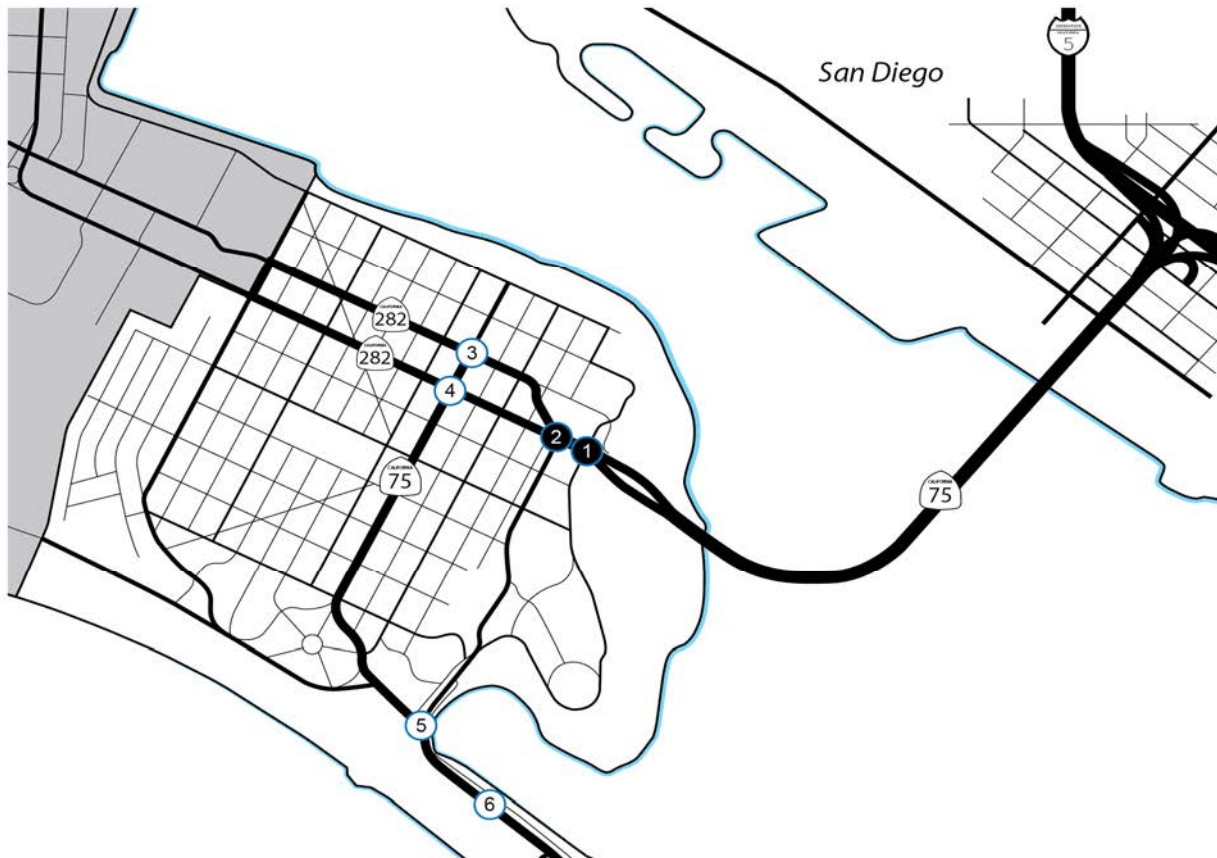


NBC Coastal Campus

1	Glorietta Blvd
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CORONADO

Study intersections 1 - 6



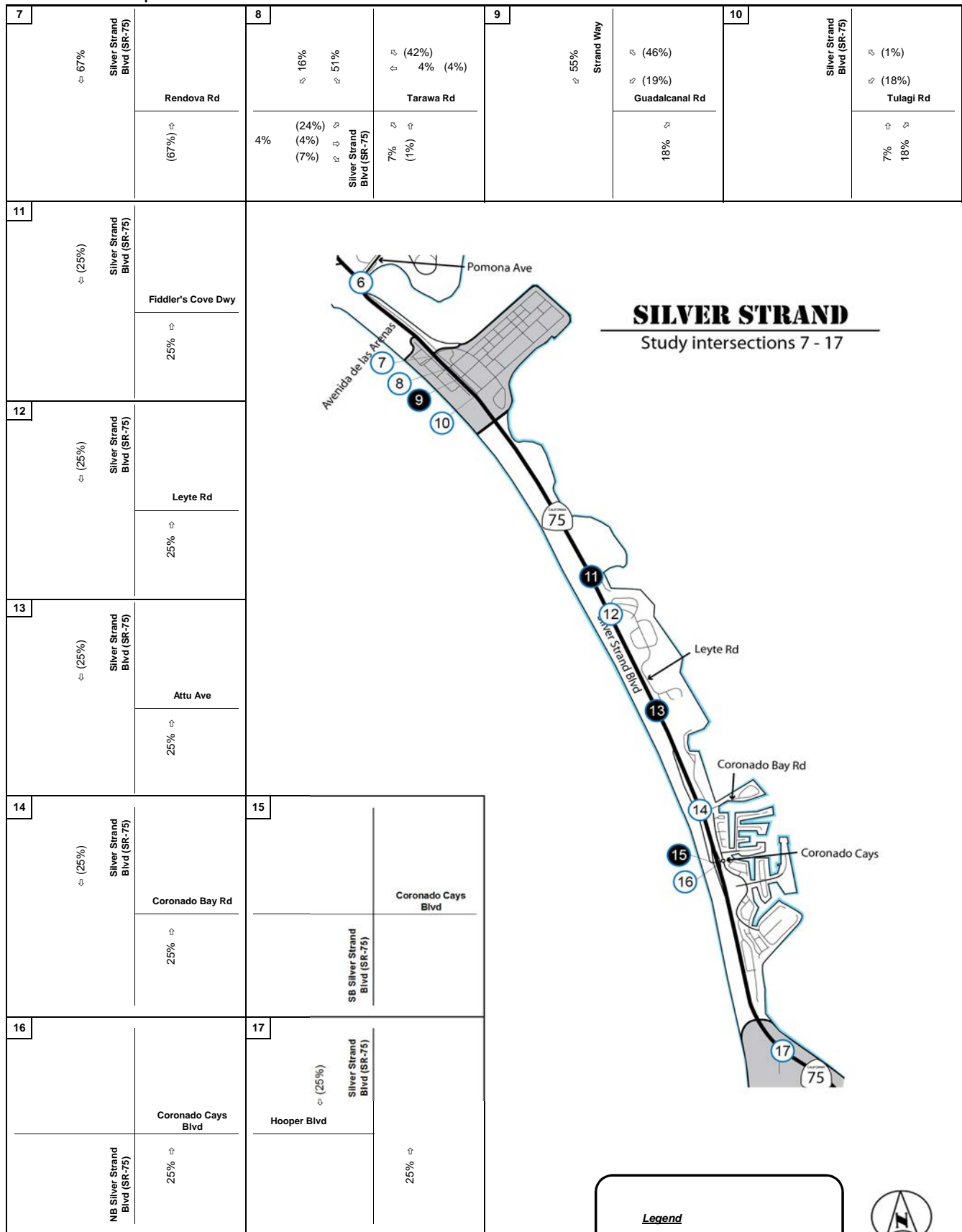
Legend

X% / (Y%) = IN / OUT PERCENT DISTRIBUTION



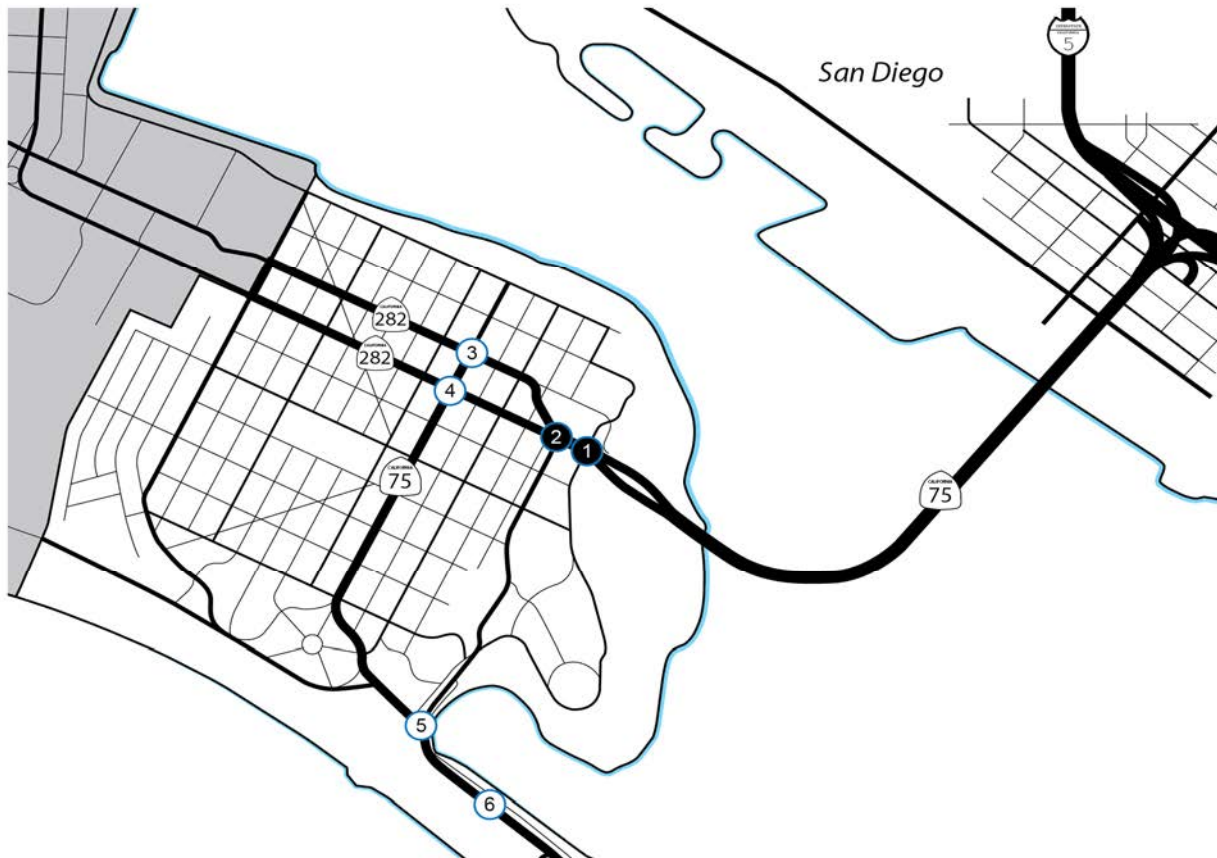
NOT TO SCALE

NBC Coastal Campus



NBC Coastal Campus

<div>1</div> <div>Glorietta Blvd</div> <div>⇄ 24%</div> <div>Fourth St (SR-75)</div> <div>(24%) ⇄</div>	<div>2</div> <div></div> <div>⇄ 24%</div> <div>Fourth St (SR-75)</div> <div>(24%) ⇄</div> <div>Pomona Ave</div>	<div>3</div> <div>Orange Ave (SR-75)</div> <div>⇄ 24%</div> <div>Third Street (SR-75)</div> <div>(5%) ⇄</div>	<div>4</div> <div></div> <div>⇄ 24%</div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> <div>5% ⇄</div> <div>(5%) ⇄</div> <div>(24%) ⇄</div>
<div>5</div> <div>⇄ 31%</div> <div>Orange Ave (SR-75)</div> <div>Pomona Ave</div> <div>Silver Strand Blvd (SR-75)</div> <div>(31%) ⇄</div>	<div>6</div> <div>⇄ 31%</div> <div>Silver Strand Blvd (SR-75)</div> <div>Avenidas De Las Arenas</div> <div>(31%) ⇄</div>	<div> <div>CORONADO</div> <div>Study intersections 1 - 6</div> </div>	



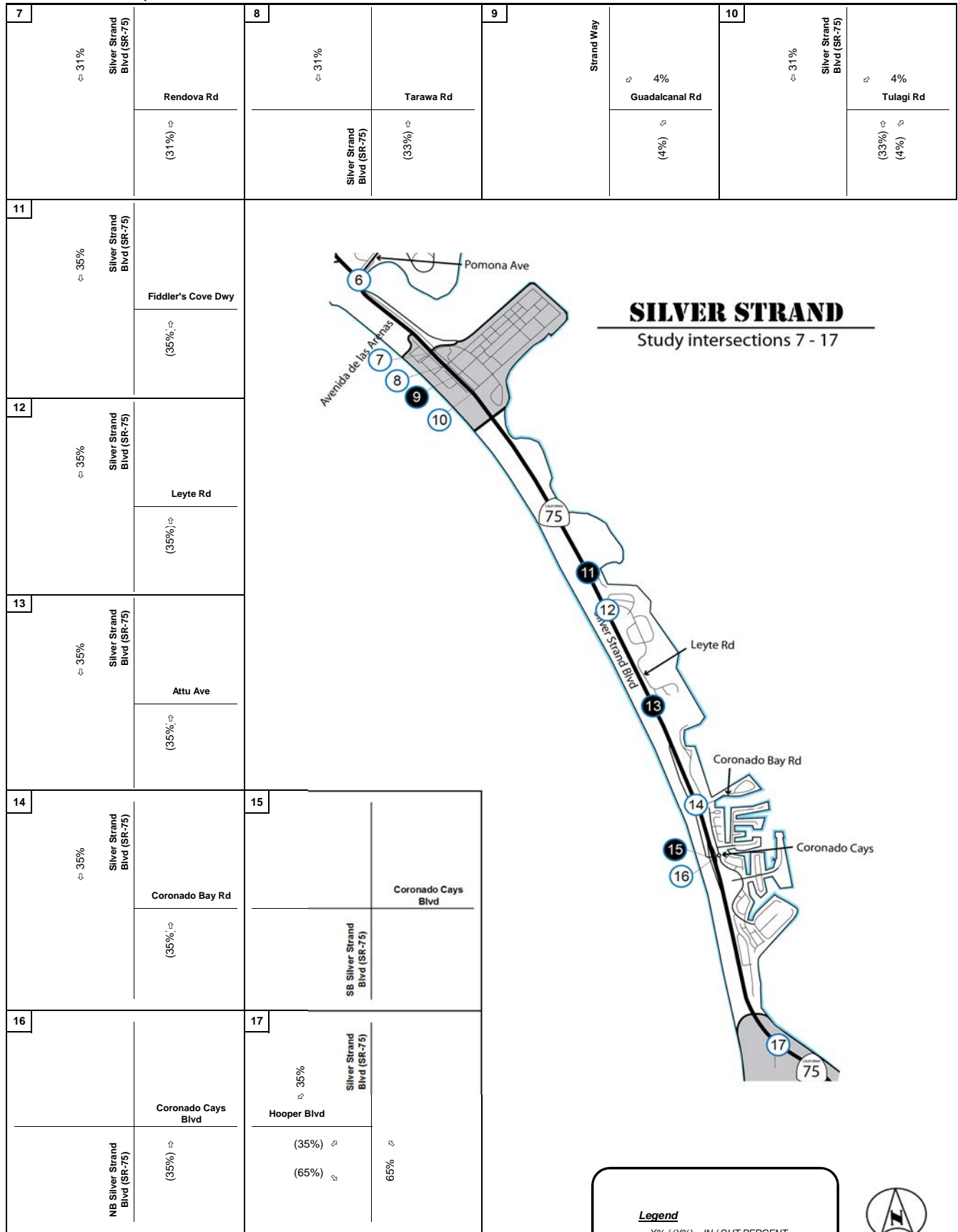
Legend

X% / (Y%) = IN / OUT PERCENT DISTRIBUTION



NOT TO SCALE

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18	<div><div><div>↻ (1%) ↻ (64%)</div><div>Rainbow Dr</div></div><div><div>Silver Strand Blvd (SR-75)</div><div></div></div></div>		19	<div><div>7th St</div><div></div></div> <div><div>↕ 63%</div><div>Silver Strand Blvd (SR-75)</div></div>	20	<div><div>Delaware St</div><div></div></div> <div><div>↕ 63%</div><div>Silver Strand Blvd (SR-75)</div></div>	21	<div><div>Silver Strand Blvd</div><div></div></div> <div><div>↕ (1%)</div><div>Palm Ave</div></div>	
	<div><div>1% ↘</div></div>	<div><div>↕ 64%</div></div>	<div><div>(63%) (1%) ↘ ↕</div></div>	<div><div>↘ 1%</div></div>	<div><div>(63%) ↘</div></div>		<div><div>1% ↘</div><div>Dwy</div></div>		
22	<div><div>3rd St</div><div></div></div> <div><div>↕ (1%)</div><div>Palm Ave</div></div>		23	<div><div>↻ (1%)</div><div>Rainbow Dr</div></div> <div><div>Palm Ave</div><div>Palm Ave</div></div>	24	<div><div>↘ (1%)</div><div>7th St</div></div> <div><div></div><div>Palm Ave</div></div>	25	<div><div></div><div></div></div> <div><div>Delaware St</div><div></div></div>	
	<div><div>1% ↘</div></div>		<div><div>1% ↘</div></div>		<div><div>↕ (1%)</div><div>1%</div></div>				
26		<div><div>↕ 62%</div><div>Palm Ave (SR-75)</div></div>	27	<div><div>Florida St</div><div></div></div> <div><div>↕ 62%</div><div>Palm Ave (SR-75)</div></div>	28	<div><div>13th St</div><div></div></div> <div><div>↕ 61%</div><div>Palm Ave (SR-75)</div></div>	29	<div><div>16th St</div><div></div></div> <div><div>↕ 61%</div><div>Palm Ave (SR-75)</div></div>	
	<div><div>(62%) (1%) ↘ ↕</div><div>9th St</div></div>	<div><div>1% ↘</div></div>	<div><div>(62%) ↘</div></div>		<div><div>(61%) (1%) ↘ ↕</div><div>1%</div></div>	<div><div>(61%) ↘</div></div>			
30	<div><div>19th St</div><div></div></div> <div><div>↕ 60%</div><div>Palm Ave (SR-75)</div></div>		31	<div><div>↘ 45%</div><div>I-5 SB Exit Ramp</div></div> <div><div>↕ 15%</div><div>Palm Ave (SR-75)</div></div>	32	<div><div>I-5 NB Ramps</div><div></div></div> <div><div>↕ 2%</div><div>Palm Ave (SR-75)</div></div>	33	<div><div>Silver Strand Blvd</div><div></div></div> <div><div>YMCA Dwy</div><div></div></div>	
	<div><div>(60%) (1%) ↘ ↕</div><div>Saturn Blvd</div></div>	<div><div>1% ↘</div></div>	<div><div>(2%) ↘</div></div>		<div><div>(2%) ↘</div></div>	<div><div>13% ↘</div></div>			



Study intersections 18 - 33

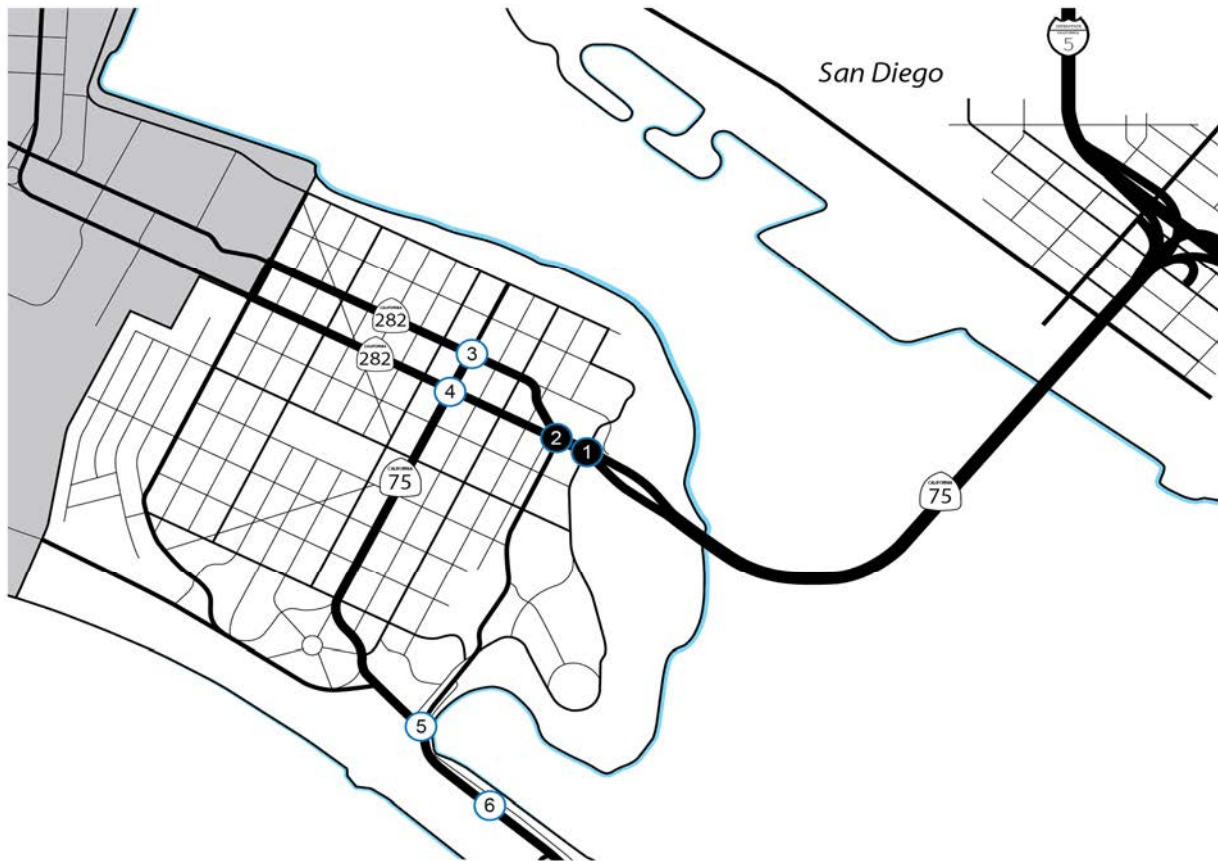
X% / (Y%) = IN / OUT PERCENT DISTRIBUTION



NOT TO SCALE

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<div>5</div> <div> <div>-220 / -55</div> <div>Orange Ave (SR-75)</div> </div> <div> <div>-23 / -201</div> <div>-2 / -17</div> </div> <div> <div></div> <div>Pomona Ave</div> </div> <div> <div></div> <div>Silver Strand Blvd (SR-75)</div> </div>	<div>6</div> <div> <div>-220 / -55</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>-25 / -218</div> <div></div> </div> <div> <div></div> <div>Avenidas De Las Arenas</div> </div>	<div> <div>CORONADO</div> <div>Study intersections 1 - 6</div> </div>	



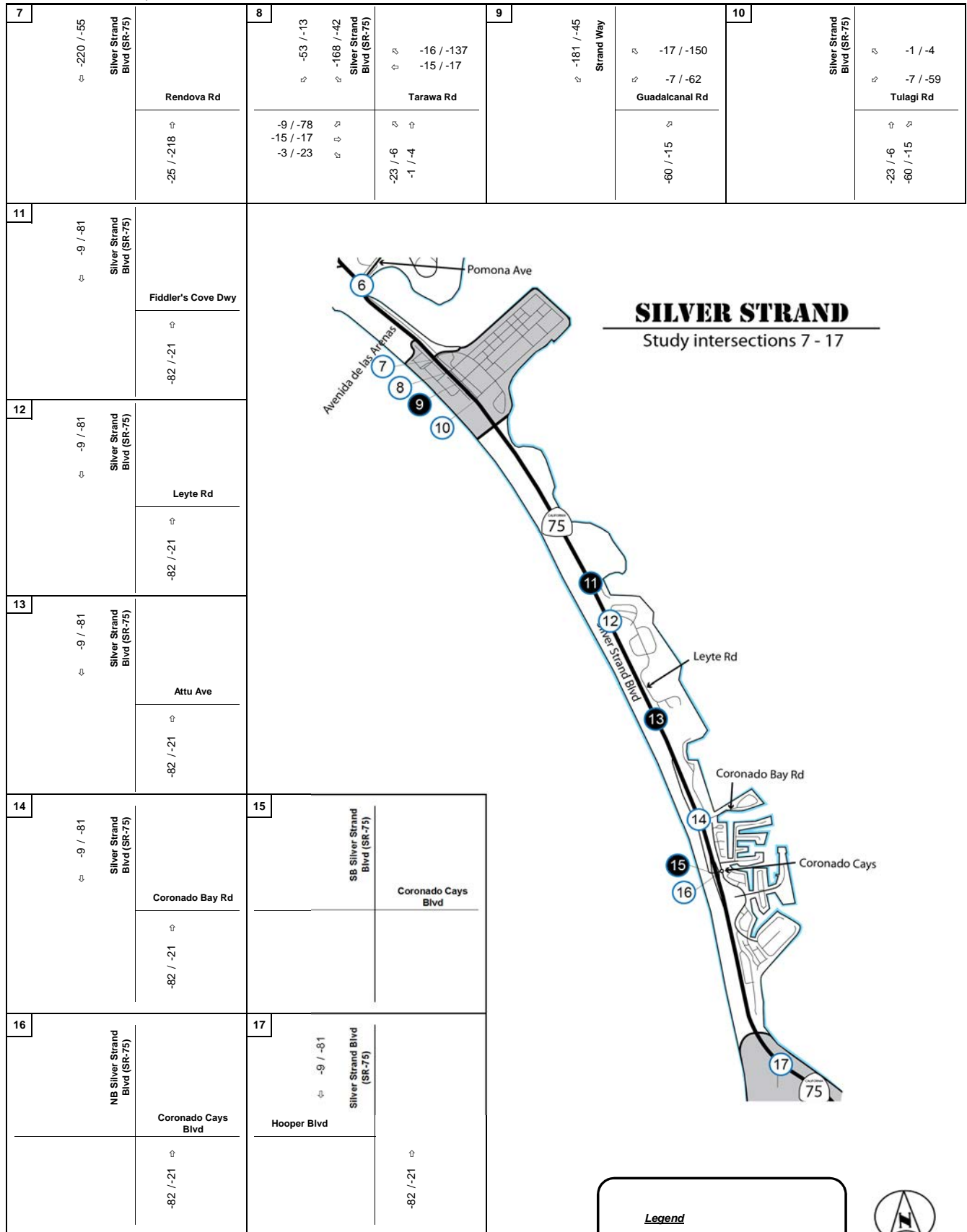
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES

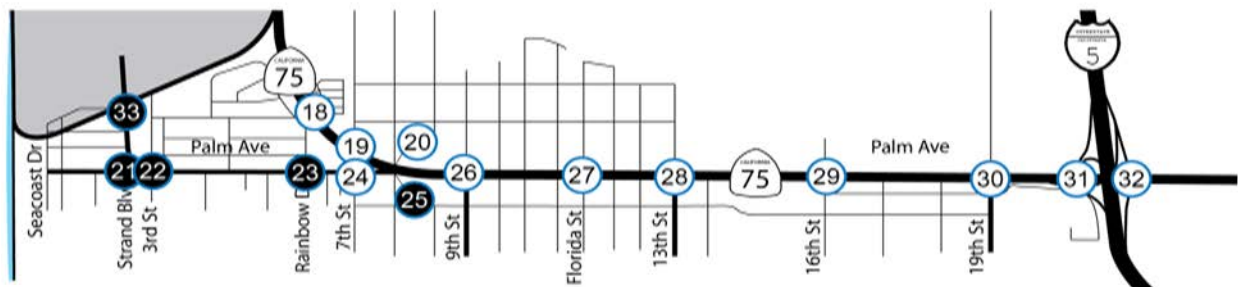


NOT TO SCALE

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18	-1 / -4 ↻ ↺ Silver Strand Blvd (SR-75)	Rainbow Dr	7th St	↻ -76 / -19 Silver Strand Blvd (SR-75)	Delaware St	↻ -76 / -19 Silver Strand Blvd (SR-75)	Silver Strand Blvd	Palm Ave
	-4 / -1 ↻	-79 / -20 ↻	-9 / -75 -1 / -4 ↻ ↺	-4 / -1 ↻	-9 / -75 ↻		Dwy	
22	3rd St	Palm Ave	-1 / -4 ↻ Rainbow Dr	Palm Ave	-1 / -4 ↻ 7th St	Palm Ave		Palm Ave
			-4 / -1 ↻			↻ -4 / -1	Delaware St	
26		↻ -73 / -18 Palm Ave (SR-75)	Florida St	↻ -73 / -18 Palm Ave (SR-75)	13th St	↻ -69 / -18 Palm Ave (SR-75)	16th St	↻ -69 / -18 Palm Ave (SR-75)
	-8 / -72 -1 / -4 ↻ ↺ 9th St	-4 / -1 ↻	-8 / -72 ↻		-8 / -69 -1 / -4 ↻ ↺	↻ -4 / -1	-8 / -69 ↻	
30	19th St	↻ -66 / -17 Palm Ave (SR-75)	I-5 SB Exit Ramp	↻ -50 / -13 Palm Ave (SR-75)	I-5 NB Ramps	↻ -7 / -2 Palm Ave (SR-75)	Silver Strand Blvd	
	-8 / -65 -1 / -4 ↻ ↺ Saturn Blvd	-4 / -1 ↻	-1 / -7 ↻		-1 / -7 ↻	↻ -43 / -11	YMCA Dwy	



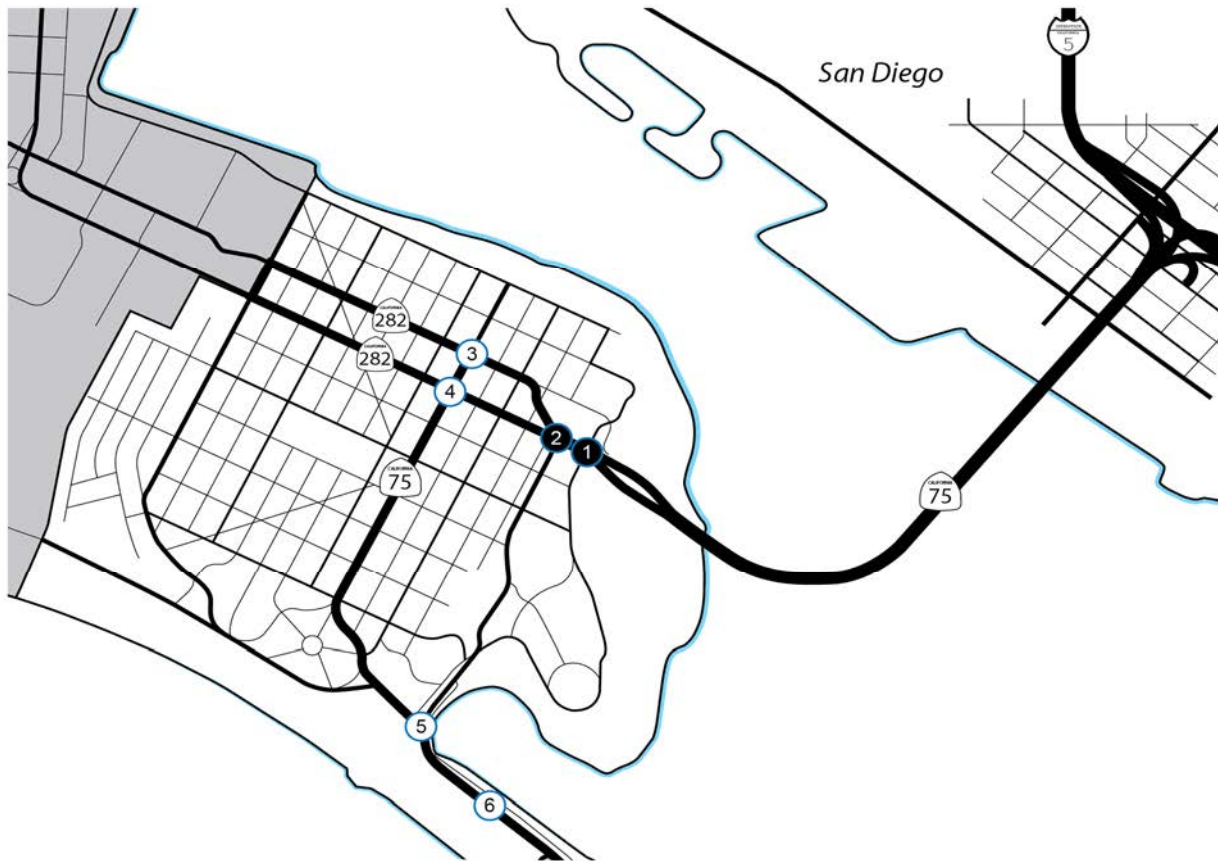
Study intersections 18 - 33

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NBC Coastal Campus

<div>1</div> <div>Glorietta Blvd</div> <div>157 / 39</div> <div>Fourth St (SR-75)</div> <div>18 / 155</div>	<div>2</div> <div></div> <div>157 / 39</div> <div>Fourth St (SR-75)</div> <div>18 / 155</div> <div>Pomona Ave</div>	<div>3</div> <div>Orange Ave (SR-75)</div> <div>157 / 39</div> <div>Third Street (SR-75)</div> <div>4 / 32</div>	<div>4</div> <div>157 / 39</div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> <div>33 / 8</div> <div>4 / 32</div> <div>18 / 155</div>
<div>5</div> <div>203 / 50</div> <div>Orange Ave (SR-75)</div> <div>Pomona Ave</div> <div>23 / 201</div> <div>Silver Strand Blvd (SR-75)</div>	<div>6</div> <div>203 / 50</div> <div>Silver Strand Blvd (SR-75)</div> <div>Avenidas De Las Arenas</div> <div>23 / 201</div>	<div>CORONADO</div> <div>Study intersections 1 - 6</div>	



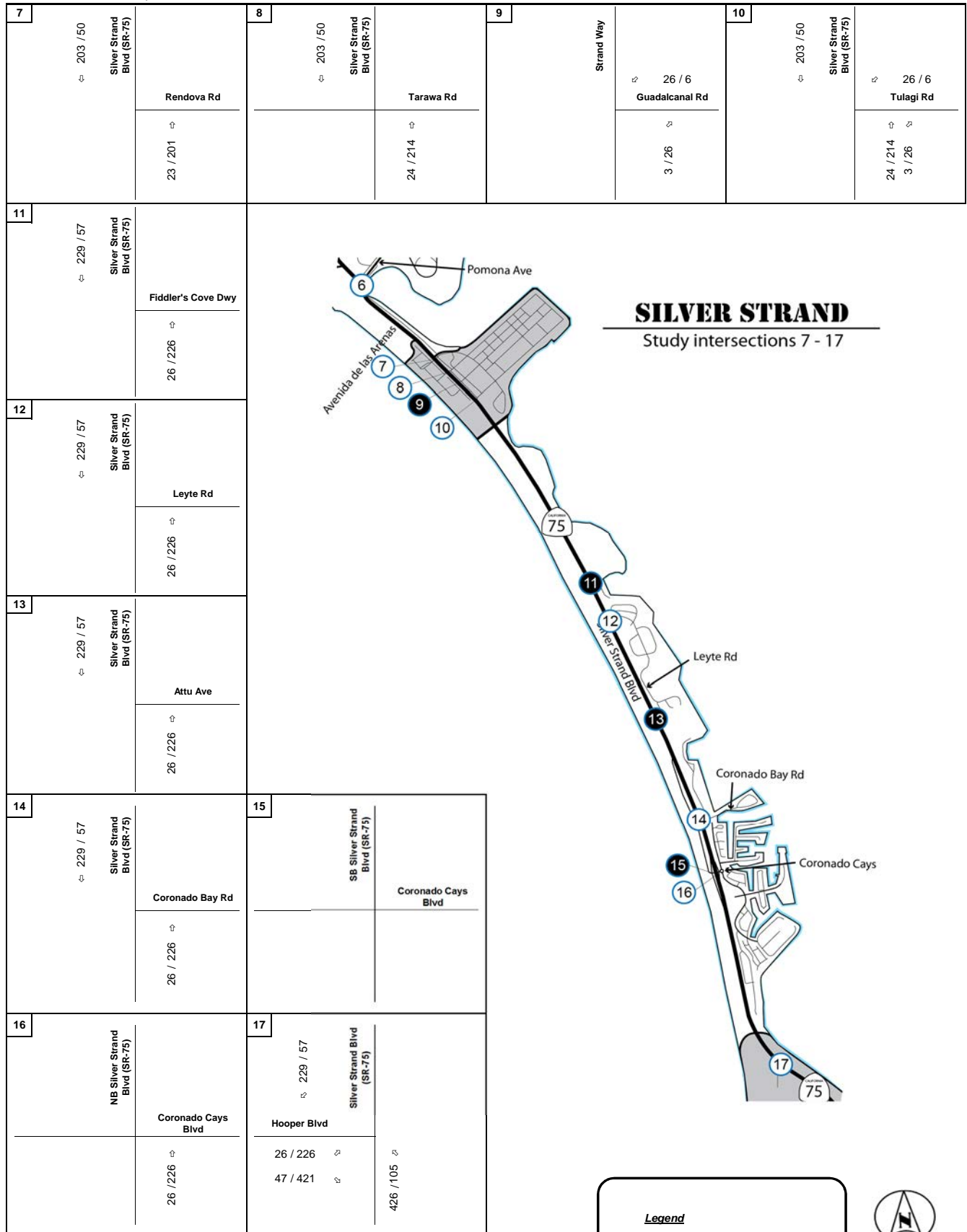
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



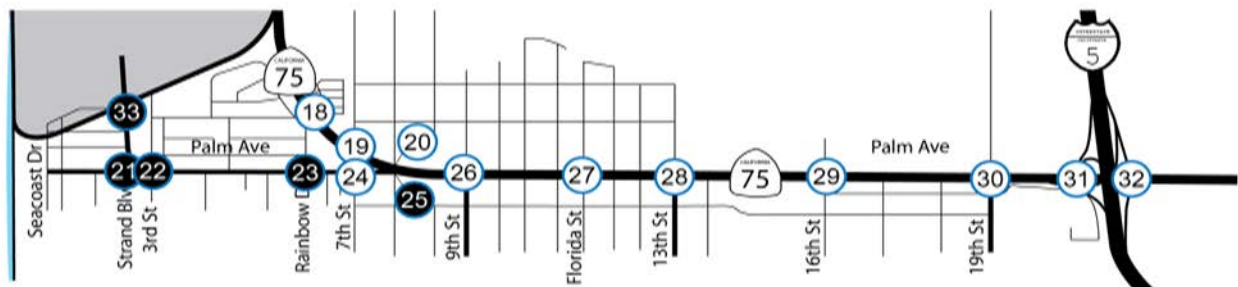
NOT TO SCALE

NBC Coastal Campus



NBC Coastal Campus

18	1 / 6 47 / 414 Silver Strand Blvd (SR-75) Rainbow Dr 7 / 2 419 / 104	19	7th St 413 / 102 Silver Strand Blvd (SR-75) 46 / 408 1 / 6 7 / 2	20	Delaware St 413 / 102 Silver Strand Blvd (SR-75) 46 / 408	21	Silver Strand Blvd 1 / 6 Palm Ave 7 / 2 Dwy
22	3rd St 1 / 6 Palm Ave 7 / 2	23	1 / 6 Rainbow Dr Palm Ave 7 / 2	24	1 / 6 7th St Palm Ave 7 / 2	25	Palm Ave Delaware St
26	406 / 100 Palm Ave (SR-75) 45 / 401 1 / 6 9th St 7 / 2	27	Florida St 406 / 100 Palm Ave (SR-75) 45 / 401	28	13th St 400 / 99 Palm Ave (SR-75) 45 / 395 1 / 6 7 / 2	29	16th St 400 / 99 Palm Ave (SR-75) 45 / 395
30	19th St 393 / 97 Palm Ave (SR-75) 44 / 388 1 / 6 Saturn Blvd 7 / 2	31	295 / 73 I-5 SB Exit Ramp 98 / 24 Palm Ave (SR-75) 1 / 13	32	I-5 NB Ramps 13 / 3 Palm Ave (SR-75) 1 / 13 85 / 21	33	Silver Strand Blvd YMCA Dwy



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES

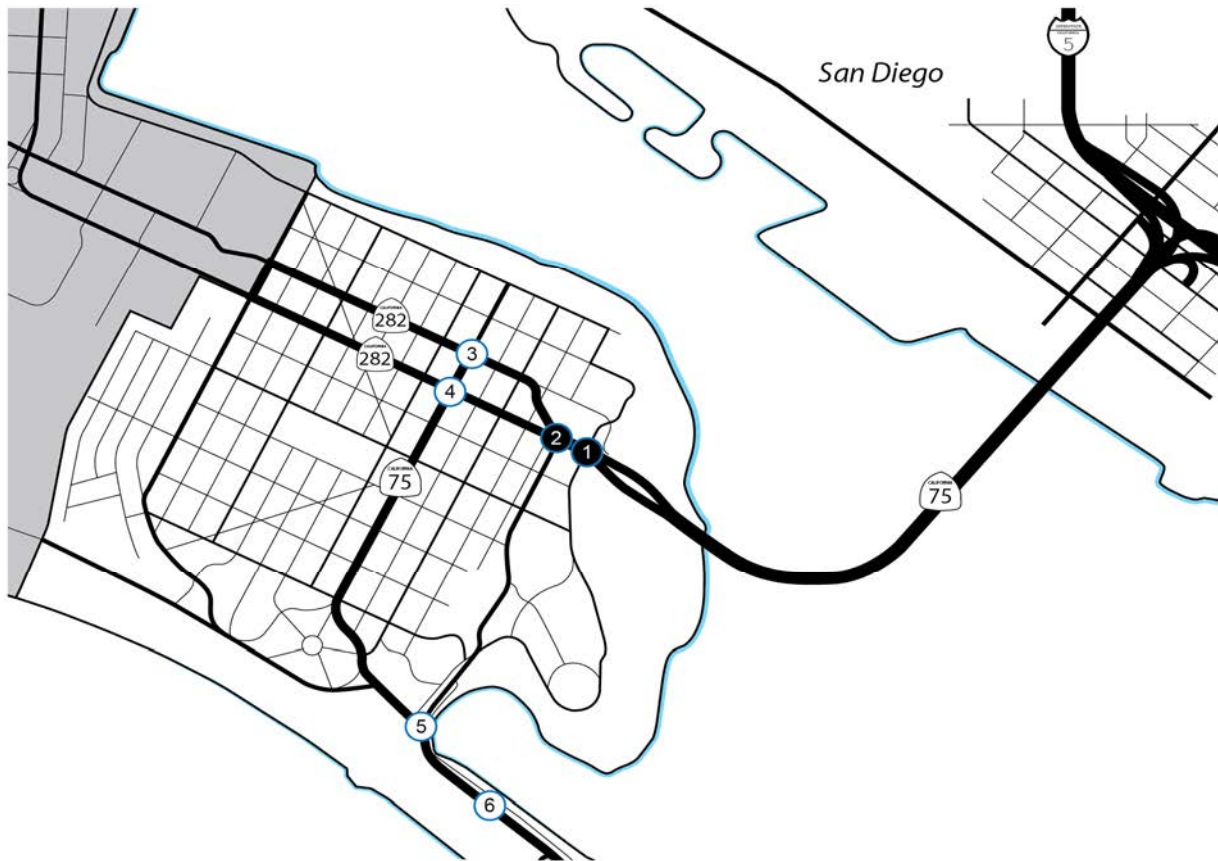


NBC Coastal Campus

<div>1</div> <div>Glorietta Blvd</div> <div> <div>-40 / -10</div> <div>Fourth St (SR-75)</div> </div> <div> <div>-2 / -24</div> <div></div> </div>	<div>2</div> <div></div> <div> <div>-40 / -10</div> <div>Fourth St (SR-75)</div> </div> <div> <div>-2 / -24</div> <div>Pomona Ave</div> </div> <div> <div>-2 / -17</div> <div></div> </div>	<div>3</div> <div>Orange Ave (SR-75)</div> <div> <div>-40 / -10</div> <div>Third Street (SR-75)</div> </div> <div> <div>2 / 15</div> <div></div> </div>	<div>4</div> <div>Orange Ave (SR-75)</div> <div> <div>-40 / -10</div> <div></div> </div> <div> <div>16 / 3</div> <div></div> </div> <div> <div>2 / 15</div> <div>-2 / -24</div> </div>
<div>5</div> <div>Orange Ave (SR-75)</div> <div> <div>-17 / -5</div> <div></div> </div> <div> <div>Pomona Ave</div> <div></div> </div> <div> <div>Silver Strand Blvd (SR-75)</div> <div>-2 / -17</div> </div>	<div>6</div> <div>Silver Strand Blvd (SR-75)</div> <div> <div>-17 / -5</div> <div></div> </div> <div> <div>Avenidas De Las Arenas</div> <div></div> </div> <div> <div>-2 / -17</div> <div></div> </div>		

CORONADO

Study intersections 1 - 6



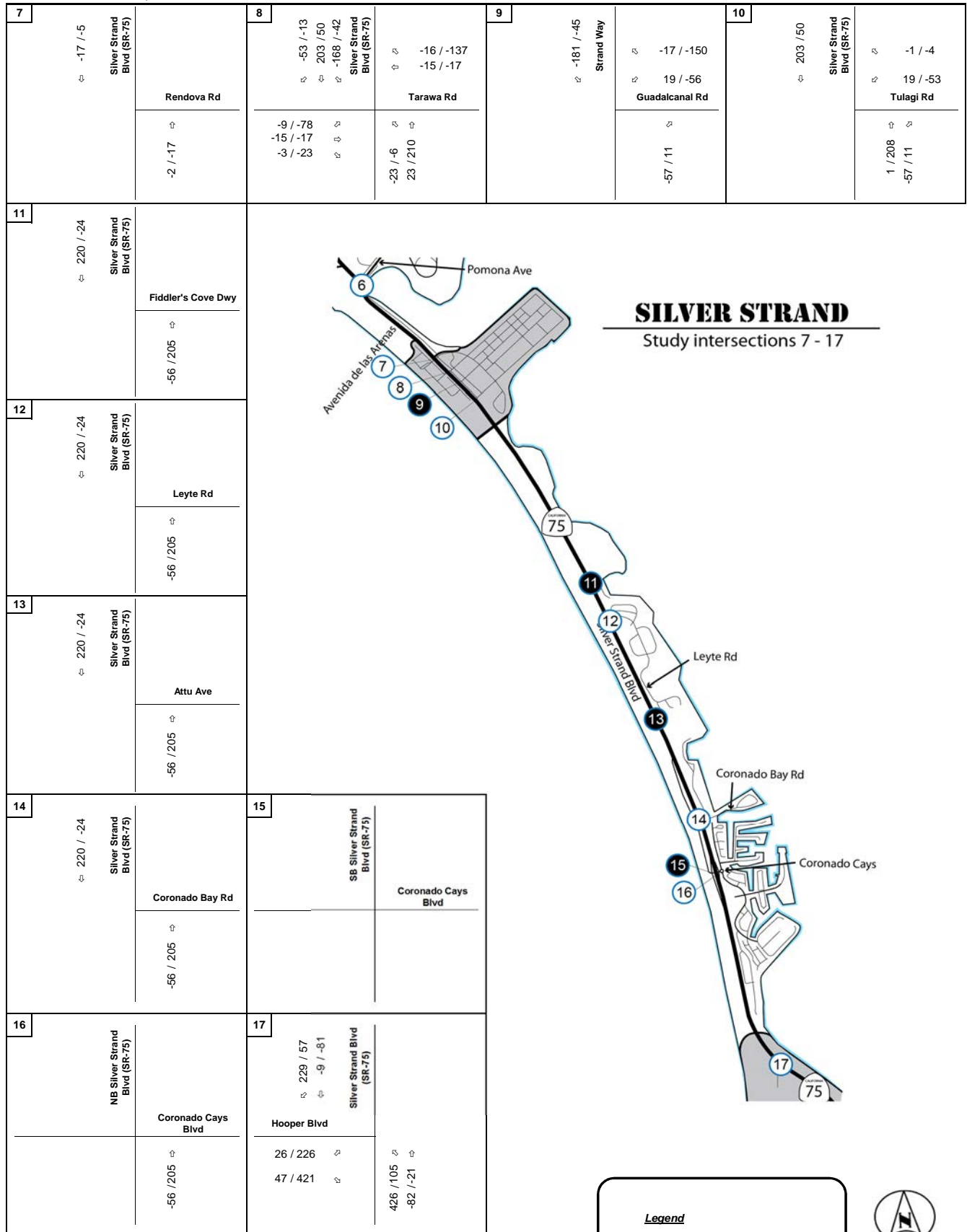
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus



NBC Coastal Campus

18	0 / 2 38 / 336 Silver Strand Blvd (SR-75)			19	7th St	337 / 83 Silver Strand Blvd (SR-75)	20	Delaware St	337 / 83 Silver Strand Blvd (SR-75)	21	Silver Strand Blvd	1 / 6 Palm Ave
3 / 1		340 / 84		37 / 333 0 / 2		3 / 1	37 / 333			7 / 2 Dwy		
22	3rd St	1 / 6 Palm Ave		23	0 / 2 Rainbow Dr		24	0 / 2 7th St		25		Palm Ave
7 / 2				3 / 1					3 / 1	Delaware St		
26		333 / 82 Palm Ave (SR-75)		27	Florida St	333 / 82 Palm Ave (SR-75)	28	13th St	331 / 81 Palm Ave (SR-75)	29	16th St	331 / 81 Palm Ave (SR-75)
37 / 329 0 / 2	9th St	3 / 1		37 / 329			37 / 326 0 / 2	3 / 1		37 / 326		
30	19th St	327 / 80 Palm Ave (SR-75)		31	278 / 68 I-5 SB Exit Ramp	48 / 11 Palm Ave (SR-75)	32	I-5 NB Ramps	6 / 1 Palm Ave (SR-75)	33	Silver Strand Blvd	
36 / 323 0 / 2	Saturn Blvd	3 / 1		0 / 6			0 / 6	42 / 10		YMCA Dwy		



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

Alternative 2

As previously established, the differences between Alternatives 1 and 2 are in the layout of buildings internal to SSTC-South and do not affect the personnel changes. Therefore, the external roadway network and traffic volumes for Alternative 2 are assumed to be identical to Alternative 1.

Alternative 3

Road Network

The same roadway network improvements associated with Alternative 1 will be applied to Alternative 3 conditions. These improvements consist of expanding and signalizing the SSTC-South entrance located at the intersection of Silver Strand Boulevard (SR-75) and Hooper Boulevard. All other roadways and intersections within the study area would remain the same as the No Action Alternative with the addition of Alternative 3.

Traffic Volumes

Alternative 3 assumes that proposed NSW facilities will be spread across three locations: the expanded SSTC-South training site, NASNI, and NAB Coronado. Trip generation and distribution was determined for each of these installations as the proposed project will affect all three locations.

It is anticipated that 2,507 personnel will relocate from NAB Coronado to SSTC with the construction of the project. The new vacancy within NAB Coronado will allow an increase of 1,000 personnel from outside sources. Also, the Naval Base Coronado Planning Department is expecting personnel fluctuations independent of the project that must be captured in the NAB Coronado trip generation (549 increase and 123 decrease). Further, it is expected that 191 personnel from locations outside of NAB Coronado will use the facilities at SSTC-South during the peak hours. It is anticipated that 50 personnel are anticipated to relocate to NASNI with the addition of this project. The change in personnel associated with Alternative 3 is summarized in **Table 4-3**.

The project's trip generation was determined based on the change in personnel. It was determined that 2,703 daily trips would be removed from NAB Coronado with the addition of Alternative 3; 243 trips (219 in, 24 out) would be removed from the morning peak hour; and 270 trips (54 in, 216 out) would be removed from the afternoon peak hour. Further, it was determined that 6,745 daily project trips would be added to SSTC-South; 607 trips (546 in, 61 out) would be added during the morning peak hour; and 675 trips (135 in, 540 out) would be added during the afternoon peak hour. Furthermore, it was estimated that 125 daily project trips would be added to NASNI; 11 trips (10 in, 1 out) would be added during the morning peak hour; and 13 trips (3 in, 10 out) would be added during the afternoon peak hour. **Table 4-4** displays the trip generation for Alternative 3 for the NAB Coronado, SSTC-South, and NASNI locations.

Table 4-3. Alternative 3 Personnel Changes

<i>NAB Coronado</i>	<i>+ / -</i>	<i>Number</i>
Existing Total Personnel at NAB (2012) ¹		5,182
<i>Planned increase in personnel by Year 2024</i> ²	(+)	549
Future Total Baseline Personnel at NAB (2024)		5,731
<i>Personnel from NAB relocating to SSTC-South with project</i> ³	(-)	2,507
<i>Personnel relocating elsewhere by Year 2024</i> ²	(-)	123
<i>Increase in personnel with area abandoned by project's personnel relocation</i> ⁴	(+)	1,000
Total Net Personnel at NAB (with project)		4,101
<i>Change in personnel at NAB Coronado with project build out</i>		<i>-1,081</i>

<i>SSTC-South</i>		<i>Number</i>
Existing NSW personnel at SSTC-South ¹		117
<i>NSW personnel to relocate to SSTC-South with project</i> ³	(+)	2,507
<i>Other personnel to use project training facilities</i> ⁵	(+)	191
Total personnel at SSTC-South with project ³		2,815
<i>Change in personnel at SSTC-South with project build out</i>		<i>2,698</i>

<i>NASNI</i>		<i>Number</i>
Existing NSW personnel at NASNI ⁶		30
<i>NSW personnel to relocate to NASNI with project</i> ³	(+)	50
Total NSW personnel at NASNI with project ³		80
<i>Change in personnel at NASNI with project build out</i>		<i>50</i>

Notes:

¹ Existing personnel numbers at NAB Coronado obtained from the Naval Base Coronado Pre-final Activity Overview Plan, dated September 2010.

² This estimate was provided by a Naval Special Warfare representative in January 2012 and based on information known at that time.

³ This value was obtained from a point paper established in February 2013 that reflected anticipated personnel changes with the build out of the NBC Coastal Campus.

⁴ This estimate was provided by a Naval Base Coronado representative and based on an analysis of the potential building space at NAB Coronado vacated by the project.

⁵ This value represents the use of training facilities that would be developed as part of the Coastal Campus project by users not part of Naval Special Warfare. This value was calculated by subtracting the existing and future Naval Special Warfare personnel from the total population anticipated at SSTC-South (3,353-117-3,045 = 191).

⁶ This estimate was provided by a Naval Special Warfare representative in May 2013 and based on information known at that time.

Table 4-4. Alternative 3 Trip Generation Calculations

<i>NAB Coronado</i>	<i>Number</i>
<i>Existing NSW personnel at NAB ¹</i>	<i>5,182</i>
Current daily vehicle trips generated for NAB (2.5 trips / person) ²	12,955
<i>Change in personnel at NAB with project build out</i>	<i>-1,081</i>
Daily vehicle project trips generated for NAB (2.5 trips / person) ²	-2,703
<i>Morning peak hour project trips for NAB ³</i>	<i>-243</i>
<i>Inbound / Outbound</i>	<i>(-219 in / -24 out)</i>
<i>Afternoon peak hour project trips for NAB ³</i>	<i>-270</i>
<i>Inbound / Outbound</i>	<i>(-54 in / -216 out)</i>
Resulting daily vehicle trips for NAB Coronado	10,253

<i>SSTC-South</i>	<i>Number</i>
<i>Existing NSW personnel at SSTC-South ¹</i>	<i>117</i>
Daily vehicle trips generated for SSTC-South (2.5 trips / person) ²	293
Existing daily trips between SSTC-South and NAB Coronado (non-peak) ⁴	504
Current total daily vehicle trips for SSTC-South ⁵	796
<i>Change in personnel at SSTC-South with project build out</i>	<i>2,698</i>
Daily vehicle project trips generated for SSTC-South (2.5 trips / person) ²	6,745
<i>Morning peak hour project trips for SSTC-South ³</i>	<i>607</i>
<i>Inbound / Outbound</i>	<i>(546 in / 61 out)</i>
<i>Afternoon peak hour project trips for SSTC-South ³</i>	<i>675</i>
<i>Inbound / Outbound</i>	<i>(135 in / 540 out)</i>
Resulting daily vehicle trips for SSTC-South	7,541

Notes:

¹ Existing personnel numbers at NAB Coronado obtained from the Naval Base Coronado Pre-final Activity Overview Plan, dated September 2010.

² Daily trips are assumed to be 2.5 trips per person. This rate is obtained from the Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, SANDAG, April 2002, and is consistent with the City of San Diego Land Development Code - Trip Generation Manual, May 2003.

³ Peak hour trip rates are obtained from the Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, SANDAG, April 2002.

⁴ This value is the difference between the calculated number of daily trips by existing personnel and the number of daily trips assumed in the SANDAG Series 12 Forecast Model to access SSTC-South during Year 2008.

⁵ Daily trips obtained from the SANDAG Series 12 Forecast Model, Year 2008, traffic analysis zone (TAZ) 4288.

Table 4-4. Alternative 3 Trip Generation Calculations (cont.)

<i>NASNI</i>	<i>Number</i>
<i>Existing NSW personnel at NASNI</i> ¹	30
Current daily NSW vehicle trips generated for NASNI (2.5 trips / person) ²	75
<i>Change in personnel at NASNI with project build out</i>	50
Daily vehicle project trips generated for NASNI (2.5 trips / person) ²	125
Morning peak hour project trips for NASNI ³	11
<i>Inbound / Outbound</i>	<i>(10 in / 1 out)</i>
Afternoon peak hour project trips for NASNI ³	13
<i>Inbound / Outbound</i>	<i>(3 in / 10 out)</i>

Notes:

¹ Existing personnel numbers at NAB Coronado obtained from the Naval Base Coronado Pre-final Activity Overview Plan, dated September 2010.

² Daily trips are assumed to be 2.5 trips per person. This rate is obtained from the Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, SANDAG, April 2002, and is consistent with the City of San Diego Land Development Code - Trip Generation Manual, May 2003.

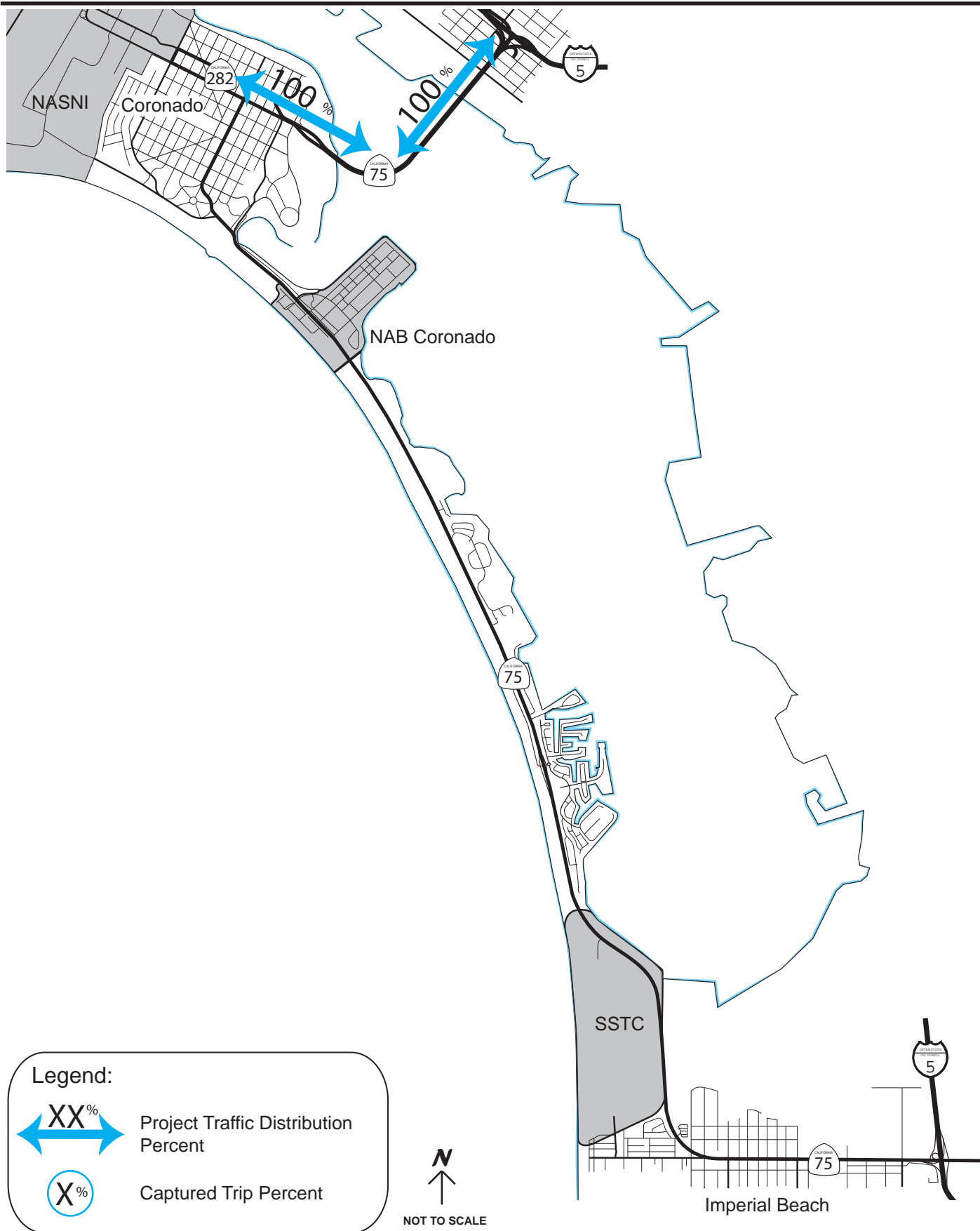
³ Peak hour trip rates are obtained from the Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, SANDAG, April 2002.

⁴ This value is the difference between the calculated number of daily trips by existing personnel and the number of daily trips assumed in the SANDAG Series 12 Forecast Model to access SSTC-South during Year 2008.

⁵ Daily trips obtained from the SANDAG Series 12 Forecast Model, Year 2008, traffic analysis zone (TAZ) 4288.

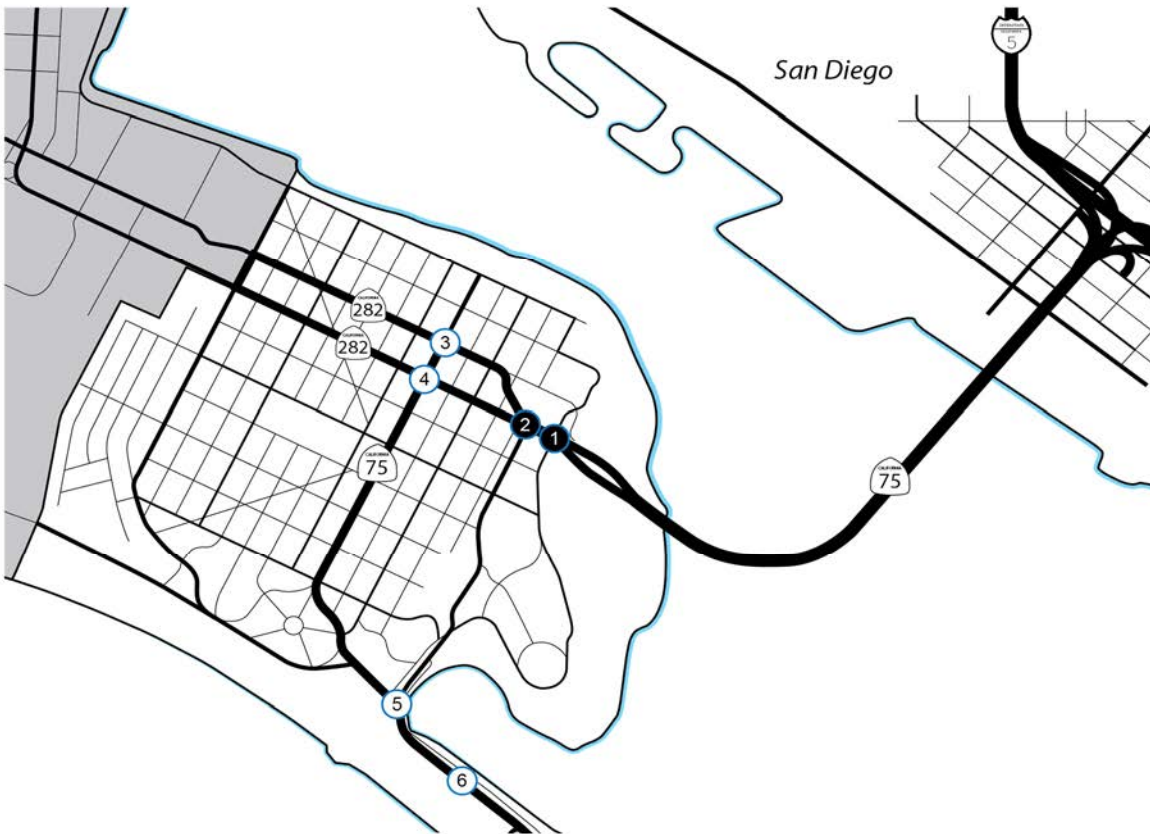
Alternative 3 trip distribution for NAB Coronado and SSTC-South is the same as Alternative 1 and are shown in Figures 4-1 and 4-2, respectively. It was assumed that all trips going to and from NASNI would travel along SR-75 east of the site. **Figure 4-8** shows the general trip distribution for NASNI. **Figure 4-9** shows the NASNI distribution at each study intersection.

The project's trip generation for each installation was combined with the distributions to determine the project trip assignment at each of the study intersections. **Figure 4-10** shows the Alternative 3 project trips associated with NAB Coronado. The trips are negative because they represent the amount of traffic that will be removed from NAB Coronado in accordance with the personnel fluctuations previously explained. **Figure 4-11** and **Figure 4-12** shows the Alternative 3 project trips for SSTC-South and NASNI, respectively. These trips are positive because they represent the increase in personnel at SSTC-South and NASNI. The NAB Coronado, SSTC-South, and NASNI Alternative 3 individual project trip assignments were added together to get the total Alternative 3 project trips, shown in **Figure 4-13**.



NBC Coastal Campus

1	Glorietta Blvd ⇄ 100% Fourth St (SR-75)	2	⇄ 100% Fourth St (SR-75)	3	Orange Ave (SR-75) ⇄ 100% Third Street (SR-75)	4	Orange Ave (SR-75) Fourth St (SR-75)
	(100%) ⇄		(100%) ⇄ Pomona Ave				(100%) ⇄
5	Orange Ave (SR-75) Silver Strand Blvd (SR-75)	6	Silver Strand Blvd (SR-75) Avenidas De Las Arenas	<div> <div>CORONADO</div> <div>Study intersections 1 - 6</div> </div>			
	Pomona Ave						



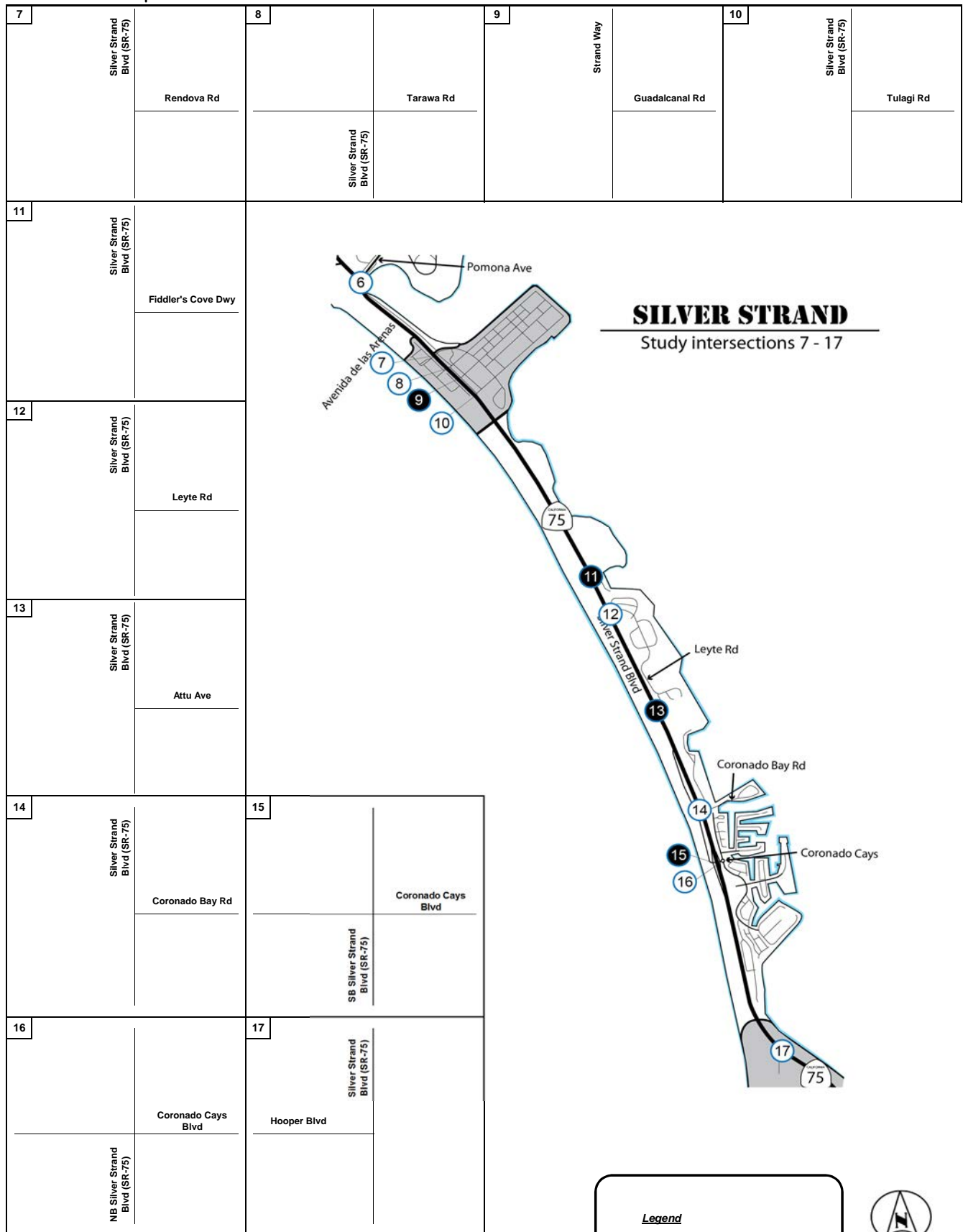
Legend

X% / (Y%) = IN / OUT PERCENT DISTRIBUTION



NOT TO SCALE

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18	Silver Strand Blvd (SR-75) Rainbow Dr	19	7th St Silver Strand Blvd (SR-75)	20	Delaware St Silver Strand Blvd (SR-75)	21	Silver Strand Blvd Palm Ave Dwy
22	3rd St Palm Ave	23	Rainbow Dr Palm Ave	24	7th St Palm Ave	25	Palm Ave Delaware St
26	Palm Ave (SR-75) 9th St	27	Florida St Palm Ave (SR-75)	28	13th St Palm Ave (SR-75)	29	16th St Palm Ave (SR-75)
30	19th St Palm Ave (SR-75) Saturn Blvd	31	I-5 SB Exit Ramp Palm Ave (SR-75)	32	I-5 NB Ramps Palm Ave (SR-75)	33	Silver Strand Blvd YMCA Dwy



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X% / (Y%) = IN / OUT PERCENT DISTRIBUTION



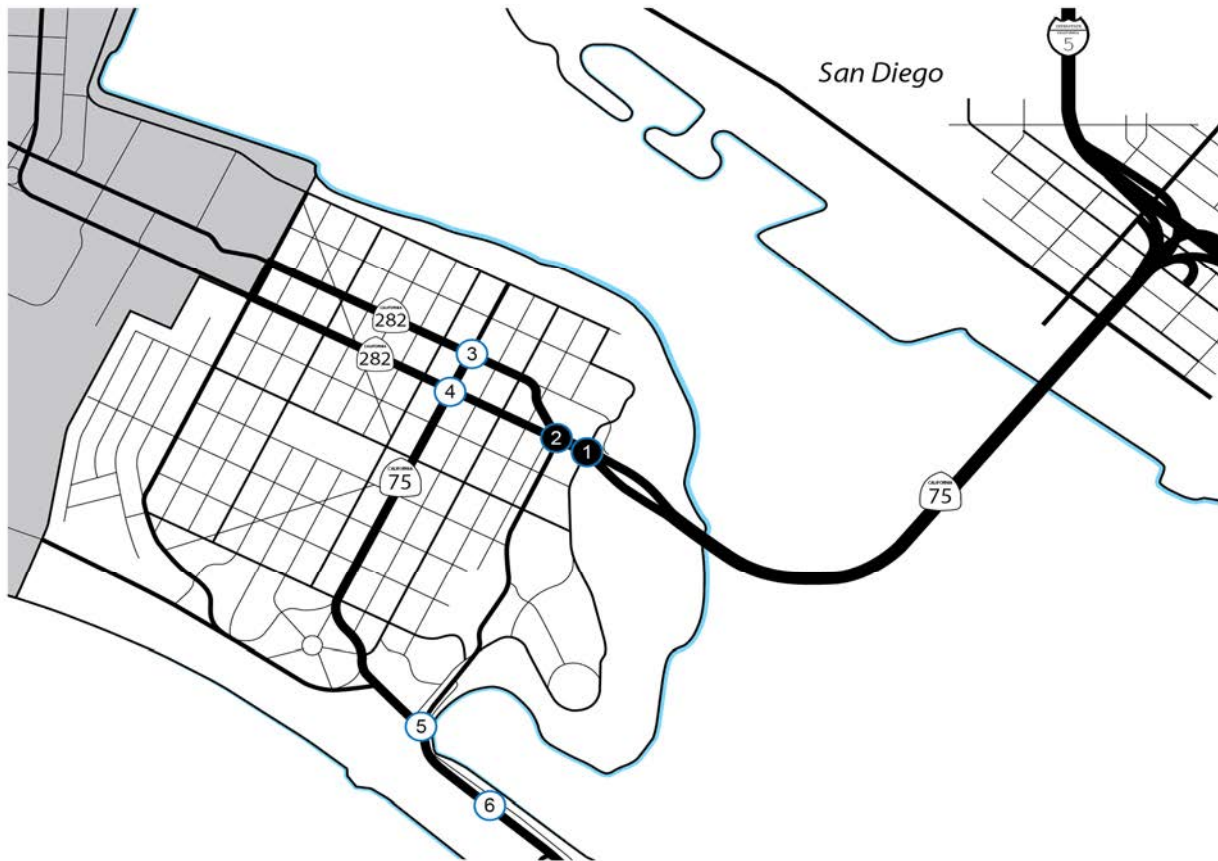
NOT TO SCALE

NBC Coastal Campus

<div>1</div> <div>Glorietta Blvd</div> <div>⇅ -132 / -33</div> <div>Fourth St (SR-75)</div> <div>-14 / -119 ⇅</div>	<div>2</div> <div></div> <div>⇅ -132 / -33</div> <div>Fourth St (SR-75)</div> <div>-14 / -119 ⇅</div> <div>Pomona Ave</div> <div>-2 / -11 ⇅</div>	<div>3</div> <div>Orange Ave (SR-75)</div> <div>⇅ -132 / -33</div> <div>Third Street (SR-75)</div> <div>-2 / -11 ⇅</div>	<div>4</div> <div>⇅ -132 / -33</div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> <div>-11 / -3 ⇅</div> <div>-2 / -11 ⇅</div> <div>-14 / -119 ⇅</div>
<div>5</div> <div>⇅ -147 / -37</div> <div>Orange Ave (SR-75)</div> <div>Silver Strand Blvd (SR-75)</div> <div>Pomona Ave</div> <div>⇅ -15 / -134</div> <div>⇅ -2 / -11</div>	<div>6</div> <div>⇅ -147 / -37</div> <div>Silver Strand Blvd (SR-75)</div> <div>Avenidas De Las Arenas</div> <div>-17 / -145 ⇅</div>		

CORONADO

Study intersections 1 - 6



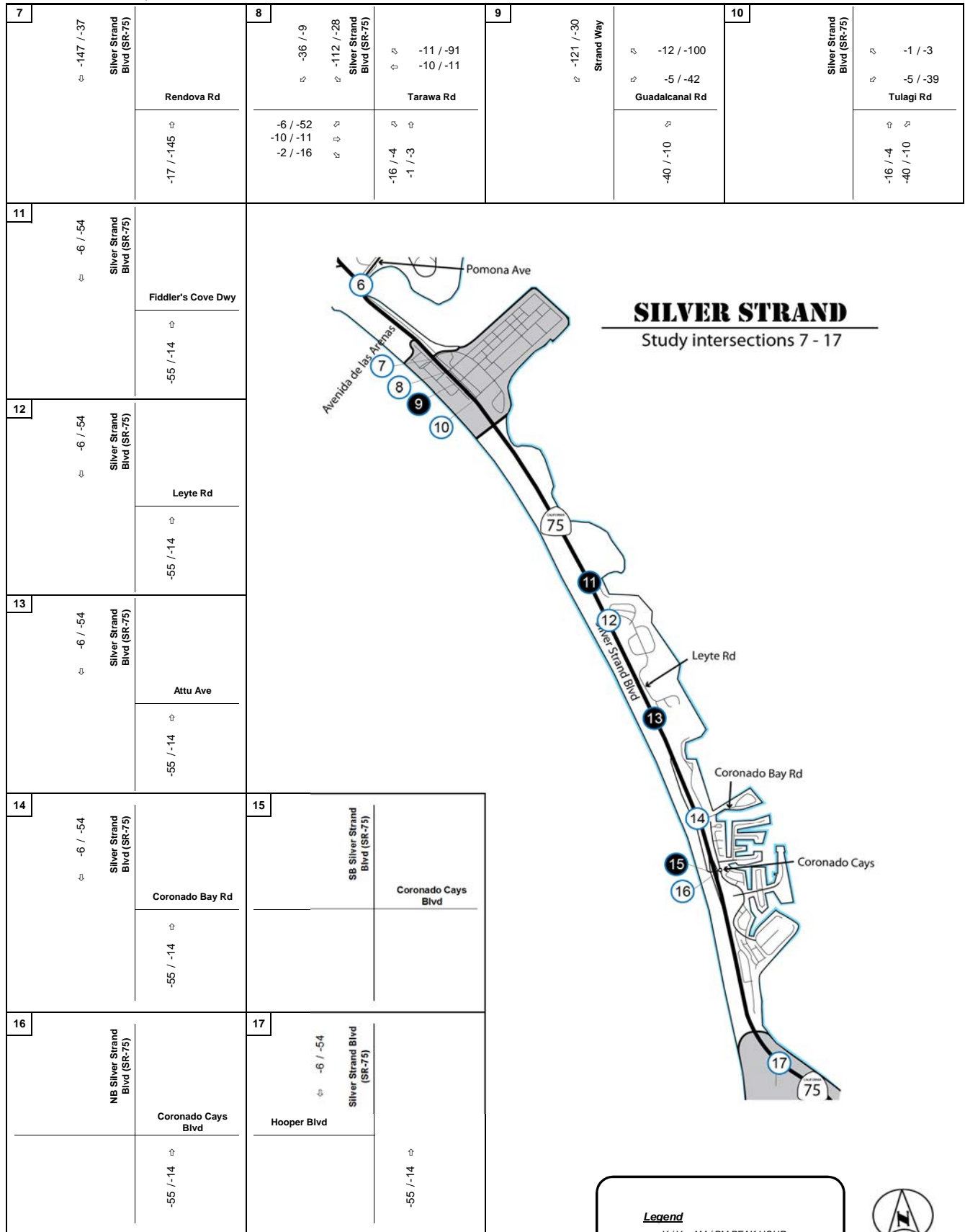
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

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18	-1 / -3 -6 / -52 Silver Strand Blvd (SR-75)	Rainbow Dr	7th St	-51 / -13 Silver Strand Blvd (SR-75)	Delaware St	-51 / -13 Silver Strand Blvd (SR-75)	Silver Strand Blvd	Palm Ave
	-3 / -1	-53 / -13	-6 / -50 -1 / -3	-3 / -1	-6 / -50		Dwy	
22	3rd St	Palm Ave	-1 / -3 Rainbow Dr	Palm Ave	-1 / -3 7th St	Palm Ave		Palm Ave
			-3 / -1			-3 / -1	Delaware St	
26		-49 / -12 Palm Ave (SR-75)	Florida St	-49 / -12 Palm Ave (SR-75)	13th St	-46 / -12 Palm Ave (SR-75)	16th St	-46 / -12 Palm Ave (SR-75)
	-6 / -48 -1 / -3 9th St	-3 / -1	-6 / -48		-6 / -46 -1 / -3	-3 / -1	-6 / -46	
30	19th St	-44 / -11 Palm Ave (SR-75)	I-5 SB Exit Ramp	-33 / -9 Palm Ave (SR-75)	I-5 NB Ramps	-5 / -2 Palm Ave (SR-75)	Silver Strand Blvd	
	-5 / -44 -1 / -3 Saturn Blvd	-3 / -1	-1 / -5		-1 / -5	-29 / -8	YMCA Dwy	



IMPERIAL BEACH

Study intersections 18 - 33

Legend

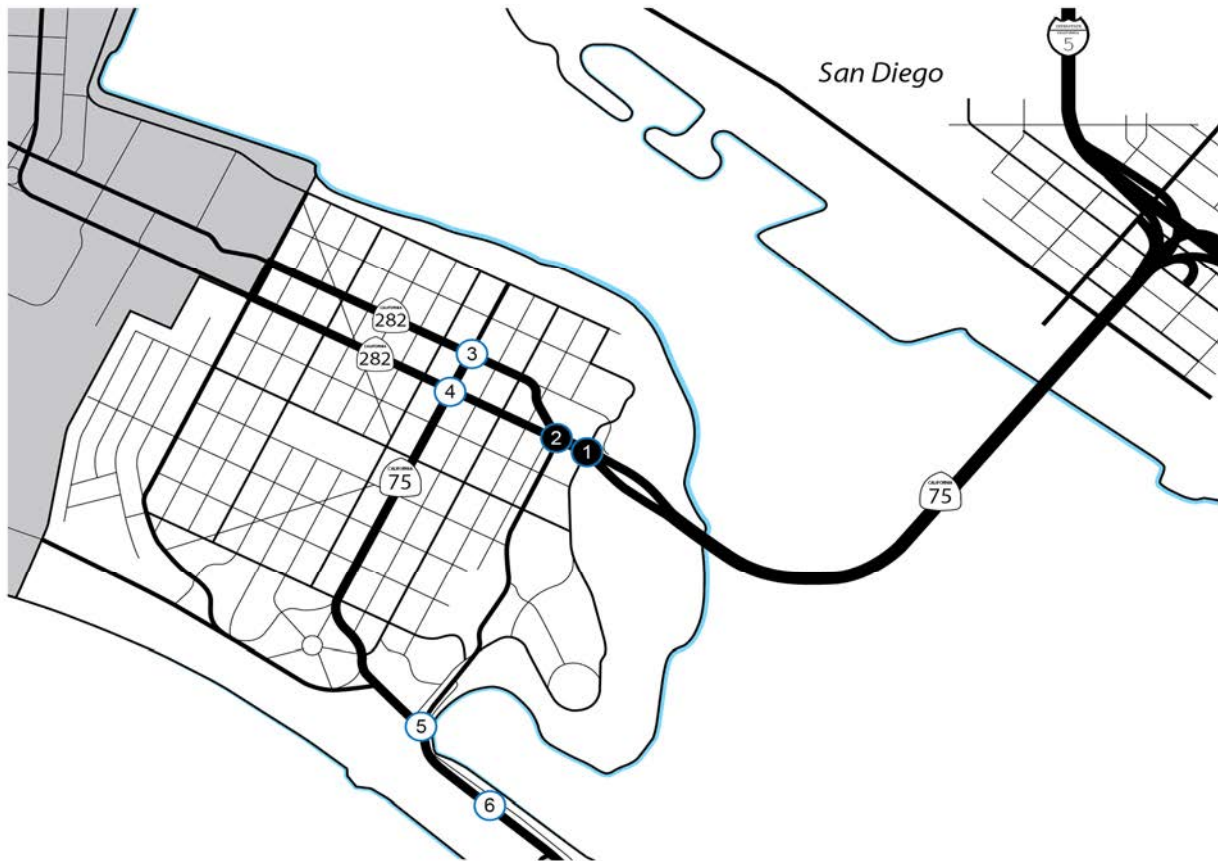
X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus

<div>1</div> <div>Glorietta Blvd</div> <div>131 / 32</div> <div>Fourth St (SR-75)</div> <div>15 / 130</div>	<div>2</div> <div>131 / 32</div> <div>Fourth St (SR-75)</div> <div>15 / 130</div> <div>Pomona Ave</div>	<div>3</div> <div>Orange Ave (SR-75)</div> <div>131 / 32</div> <div>Third Street (SR-75)</div> <div>3 / 27</div>	<div>4</div> <div>131 / 32</div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> <div>27 / 7</div> <div>3 / 27</div> <div>15 / 130</div>
<div>5</div> <div>169 / 42</div> <div>Orange Ave (SR-75)</div> <div>Pomona Ave</div> <div>19 / 167</div> <div>Silver Strand Blvd (SR-75)</div>	<div>6</div> <div>169 / 42</div> <div>Silver Strand Blvd (SR-75)</div> <div>Avenidas De Las Arenas</div> <div>19 / 167</div>	<div>CORONADO</div> <div>Study intersections 1 - 6</div>	



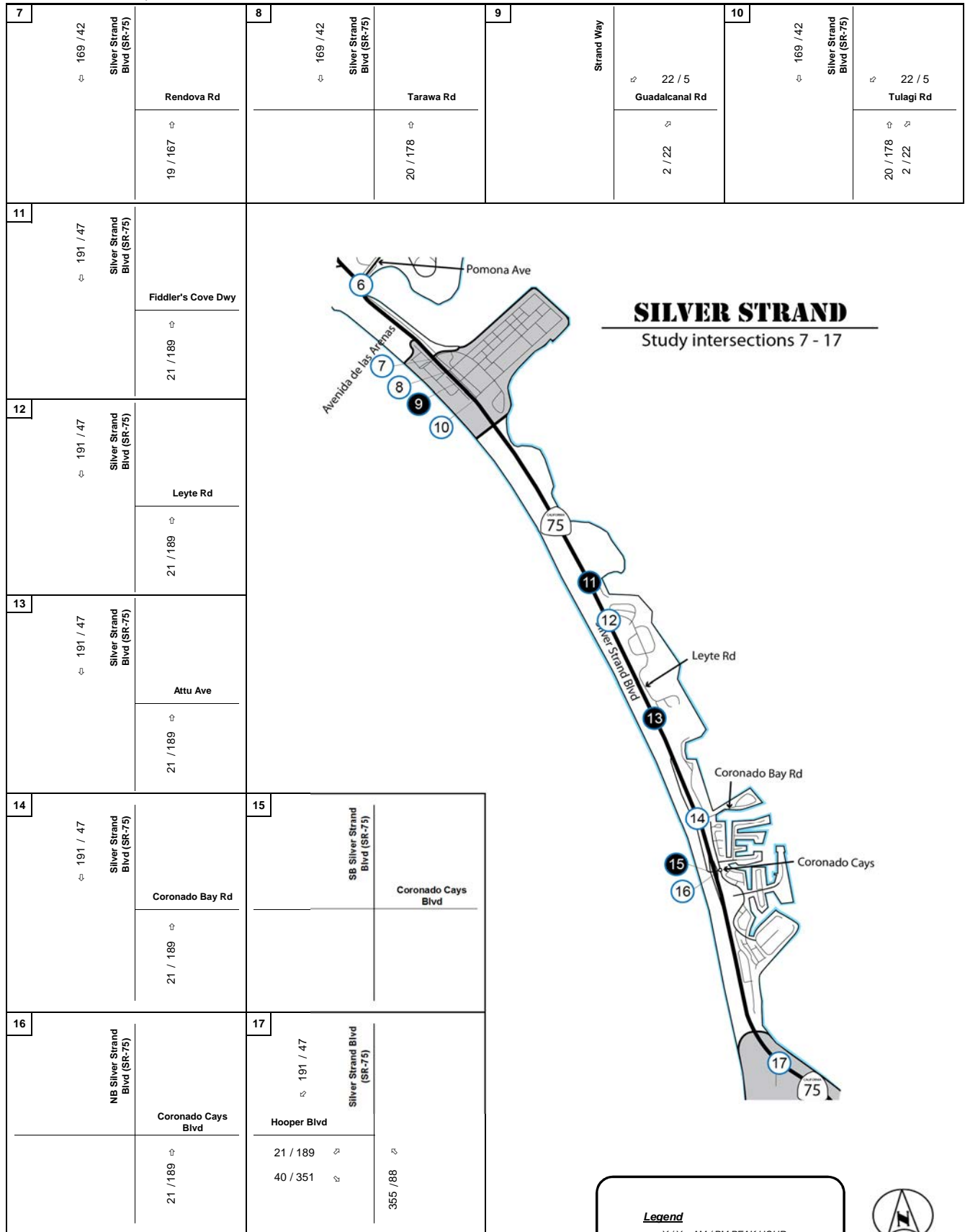
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

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18	1 / 5 39 / 346 Silver Strand Blvd (SR-75)	Rainbow Dr	7th St	344 / 85 Silver Strand Blvd (SR-75)	Delaware St	344 / 85 Silver Strand Blvd (SR-75)	Silver Strand Blvd	1 / 5 Palm Ave
	5 / 1	349 / 86	38 / 340 1 / 5	5 / 1	38 / 340		5 / 1 Dwy	
22	3rd St	1 / 5 Palm Ave	1 / 5 Palm Ave		1 / 5 7th St			Palm Ave
	5 / 1		5 / 1			5 / 1	Delaware St	
26		339 / 84 Palm Ave (SR-75)	Florida St	339 / 84 Palm Ave (SR-75)	13th St	333 / 82 Palm Ave (SR-75)	16th St	333 / 82 Palm Ave (SR-75)
	38 / 335 1 / 5 9th St	5 / 1	38 / 335		37 / 329 1 / 5	5 / 1	37 / 329	
30	19th St	328 / 81 Palm Ave (SR-75)	246 / 61 I-5 SB Exit Ramp	82 / 20 Palm Ave (SR-75)	I-5 NB Ramps	11 / 3 Palm Ave (SR-75)	Silver Strand Blvd	
	37 / 324 1 / 5 Saturn Blvd	5 / 1	1 / 11		1 / 11	71 / 18	YMCA Dwy	



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



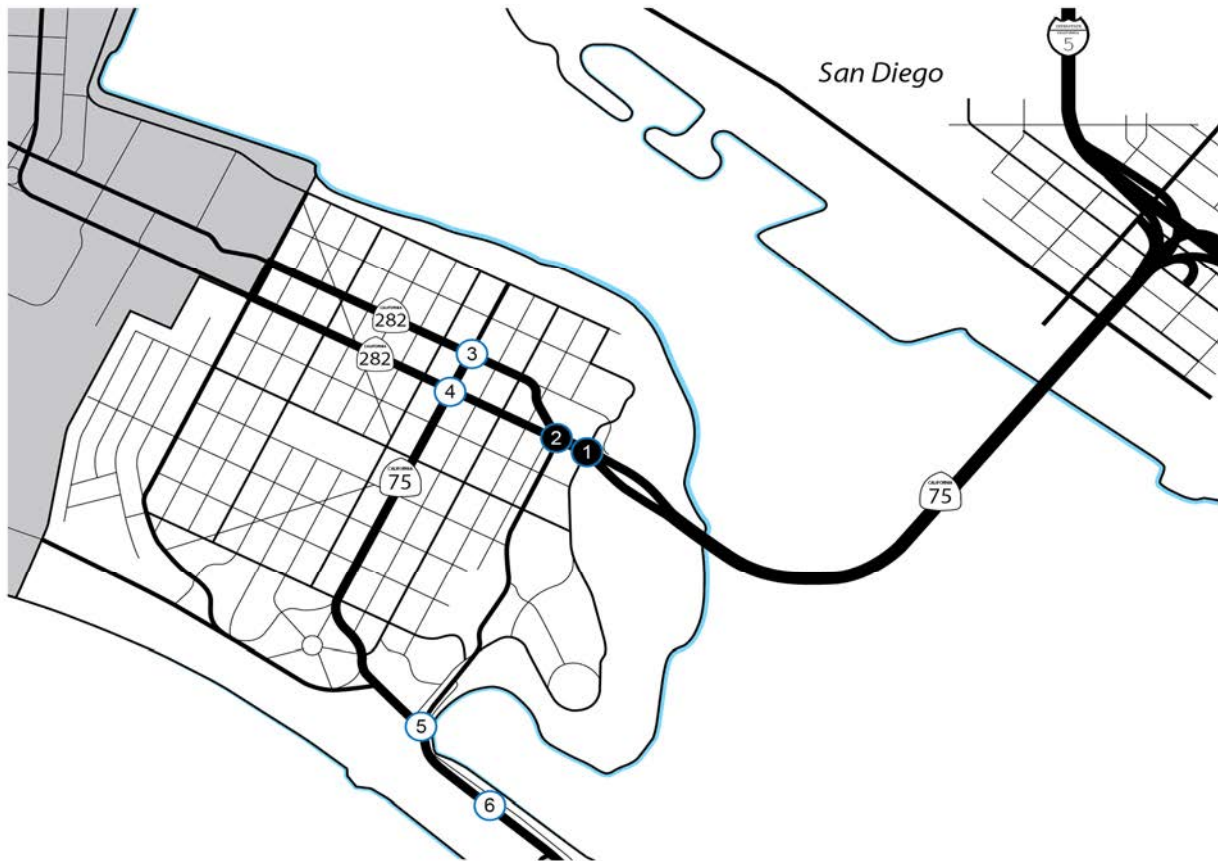
NOT TO SCALE

NBC Coastal Campus

<div>1</div> <div>Glorietta Blvd</div> <div>10 / 3</div> <div>Fourth St (SR-75)</div> <div>1 / 10</div>	<div>2</div> <div></div> <div>10 / 3</div> <div>Fourth St (SR-75)</div> <div>1 / 10</div> <div>Pomona Ave</div>	<div>3</div> <div>Orange Ave (SR-75)</div> <div>10 / 3</div> <div>Third Street (SR-75)</div>	<div>4</div> <div>Orange Ave (SR-75)</div> <div></div> <div>Fourth St (SR-75)</div> <div>1 / 10</div>
<div>5</div> <div>Orange Ave (SR-75)</div> <div>Silver Strand Blvd (SR-75)</div> <div>Pomona Ave</div>	<div>6</div> <div>Silver Strand Blvd (SR-75)</div> <div>Avenidas De Las Arenas</div>		

CORONADO

Study intersections 1 - 6



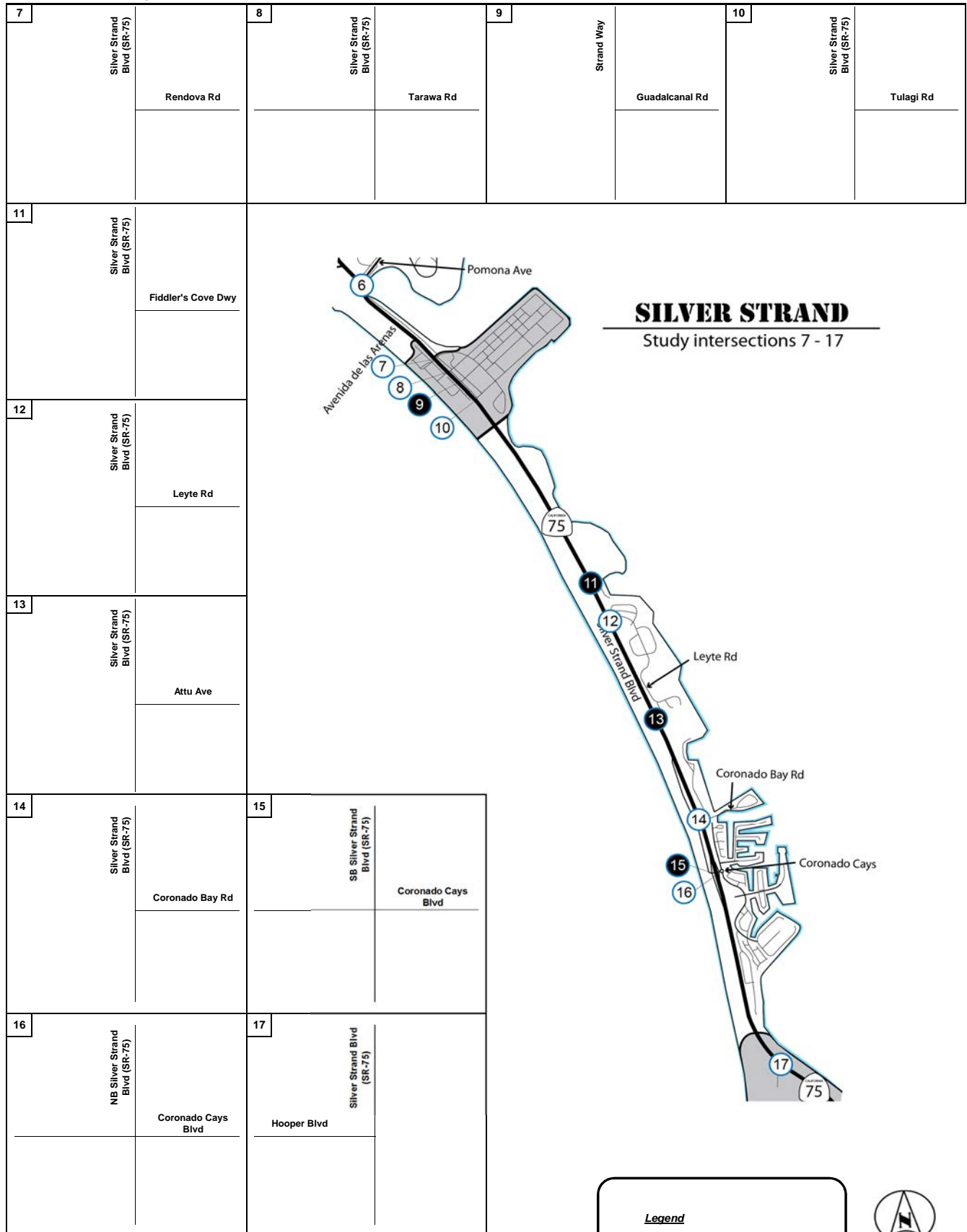
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus



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18	Silver Strand Blvd (SR-75)	Rainbow Dr	19	7th St	Silver Strand Blvd (SR-75)	20	Delaware St	Silver Strand Blvd (SR-75)	21	Silver Strand Blvd	Palm Ave
22	3rd St	Palm Ave	23	Rainbow Dr	Palm Ave	24	7th St	Palm Ave	25	Delaware St	Palm Ave
26	9th St	Palm Ave (SR-75)	27	Florida St	Palm Ave (SR-75)	28	13th St	Palm Ave (SR-75)	29	16th St	Palm Ave (SR-75)
30	19th St	Palm Ave (SR-75)	31	I-5 SB Exit Ramp	Palm Ave (SR-75)	32	I-5 NB Ramps	Palm Ave (SR-75)	33	Silver Strand Blvd	YMCA Dwy
	Saturn Blvd										



IMPERIAL BEACH

Study intersections 18 - 33

Legend

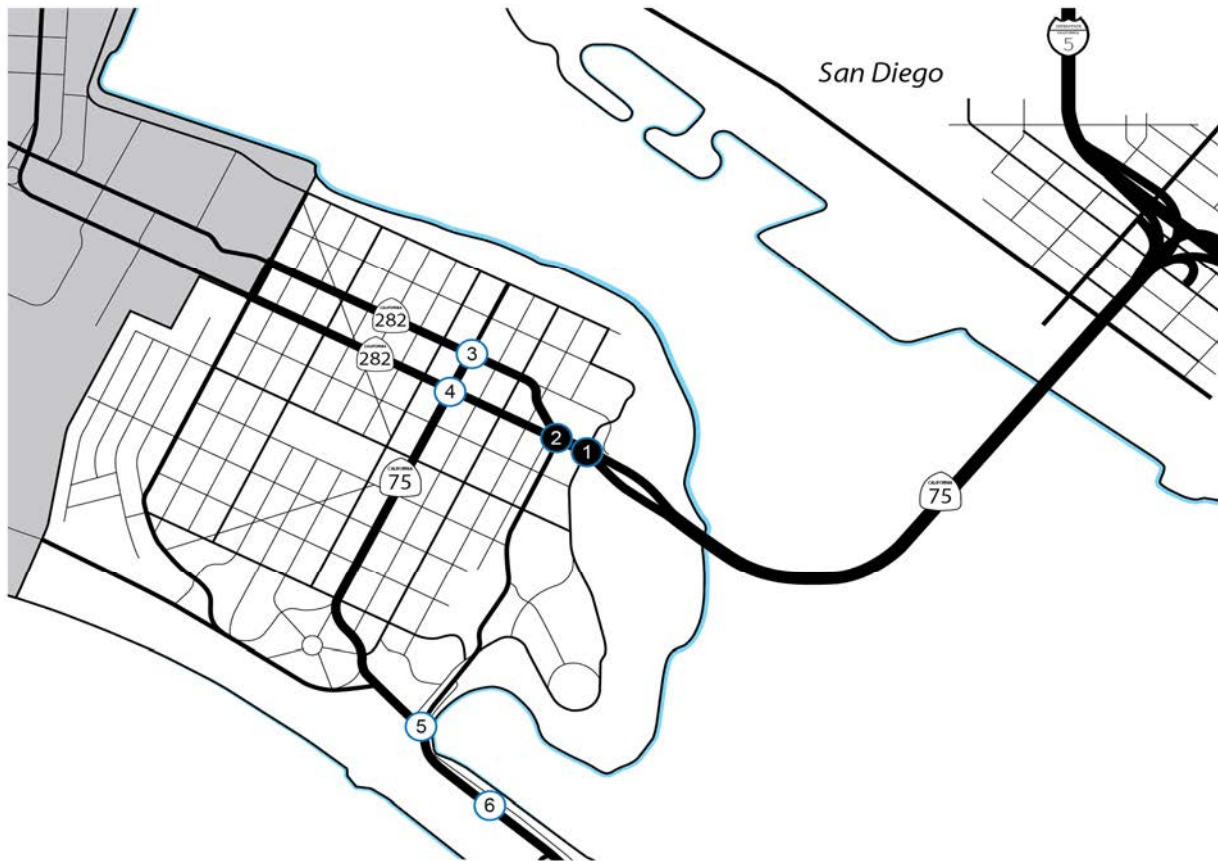
X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

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<div>1</div> <div>Glorietta Blvd</div> <div> <div> <div>9 / 2</div> <div>Fourth St (SR-75)</div> </div> <div> <div>2 / 21</div> <div></div> </div> </div>	<div>2</div> <div></div> <div> <div> <div>9 / 2</div> <div>Fourth St (SR-75)</div> </div> <div> <div>2 / 21</div> <div>Pomona Ave</div> </div> <div> <div>-2 / -11</div> <div></div> </div> </div>	<div>3</div> <div>Orange Ave (SR-75)</div> <div> <div> <div>10 / 3</div> <div>-1 / -1</div> <div>Third Street (SR-75)</div> </div> <div> <div>1 / 16</div> <div></div> </div> </div>	<div>4</div> <div>Orange Ave (SR-75)</div> <div> <div> <div>-1 / -1</div> <div></div> </div> <div> <div>1 / 10</div> <div>16 / 4</div> </div> <div> <div>1 / 16</div> <div>1 / 11</div> </div> <div> <div></div> <div>Fourth St (SR-75)</div> </div> </div>
<div>5</div> <div>Orange Ave (SR-75)</div> <div> <div> <div>22 / 5</div> <div></div> </div> <div> <div>4 / 33</div> <div>-2 / -11</div> </div> <div> <div></div> <div>Pomona Ave</div> </div> <div> <div>Silver Strand Blvd (SR-75)</div> <div></div> </div> </div>	<div>6</div> <div>Silver Strand Blvd (SR-75)</div> <div> <div> <div>22 / 5</div> <div></div> </div> <div> <div>2 / 22</div> <div>Avenidas De Las Arenas</div> </div> </div>	<div> <div>CORONADO</div> <div>Study intersections 1 - 6</div> </div>	



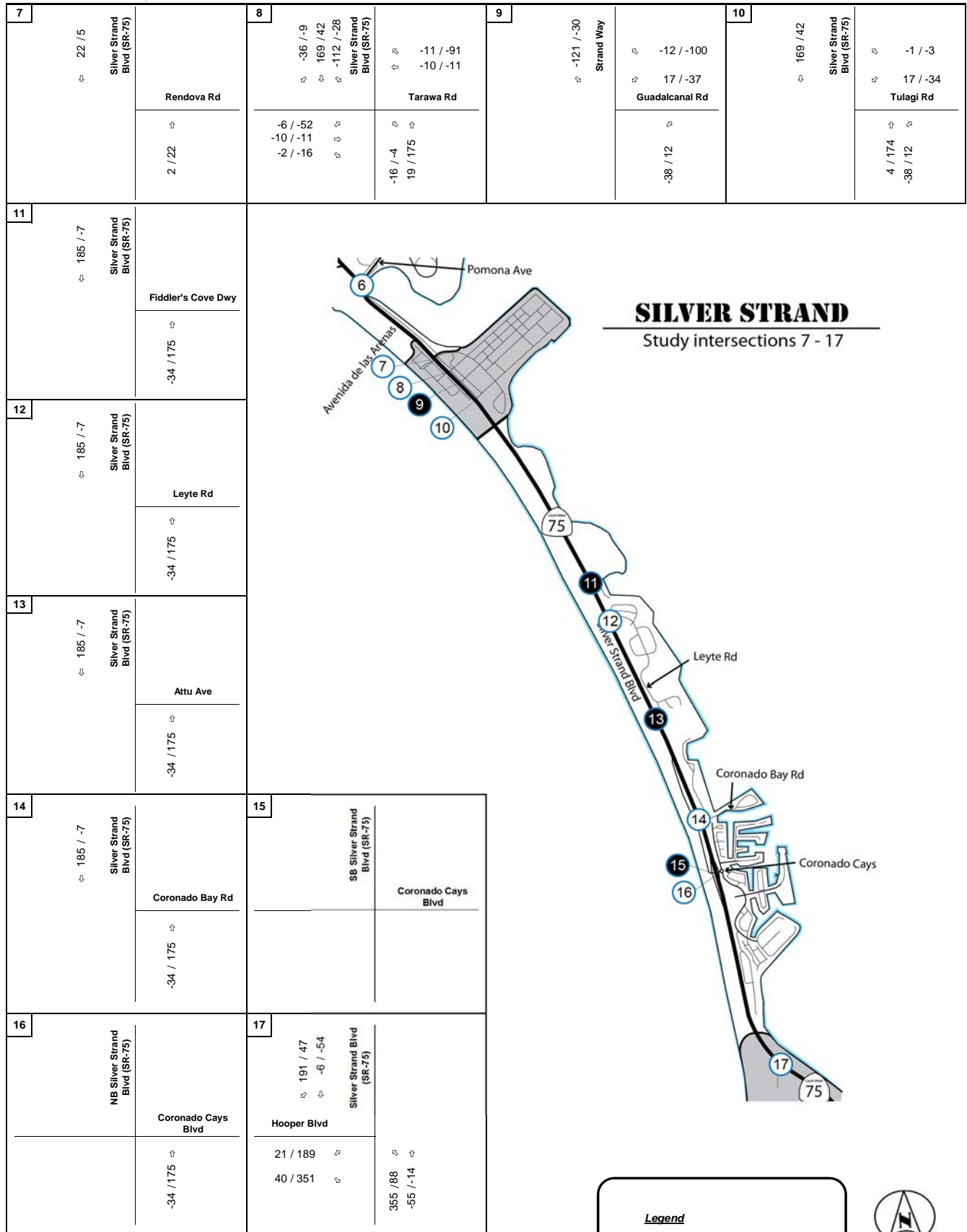
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



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18	0 / 2 33 / 294 Silver Strand Blvd (SR-75) Rainbow Dr 2 / 0 296 / 73	19	7th St 293 / 72 Silver Strand Blvd (SR-75) 32 / 290 0 / 2 2 / 0	20	Delaware St 293 / 72 Silver Strand Blvd (SR-75) 32 / 290	21	Silver Strand Blvd 1 / 5 Palm Ave 5 / 1 Dwy
22	3rd St 1 / 5 Palm Ave 5 / 1	23	0 / 2 Rainbow Dr Palm Ave 2 / 0	24	0 / 2 7th St Palm Ave 2 / 0	25	Palm Ave Delaware St
26	290 / 72 Palm Ave (SR-75) 32 / 287 0 / 2 9th St 2 / 0	27	Florida St 290 / 72 Palm Ave (SR-75) 32 / 287	28	13th St 287 / 70 Palm Ave (SR-75) 31 / 283 0 / 2 2 / 0	29	16th St 287 / 70 Palm Ave (SR-75) 31 / 283
30	19th St 284 / 70 Palm Ave (SR-75) 32 / 280 0 / 2 Saturn Blvd 2 / 0	31	235 / 58 I-5 SB Exit Ramp 49 / 11 Palm Ave (SR-75) 0 / 6	32	I-5 NB Ramps 6 / 1 Palm Ave (SR-75) 0 / 6 42 / 10	33	Silver Strand Blvd YMCA Dwy



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES

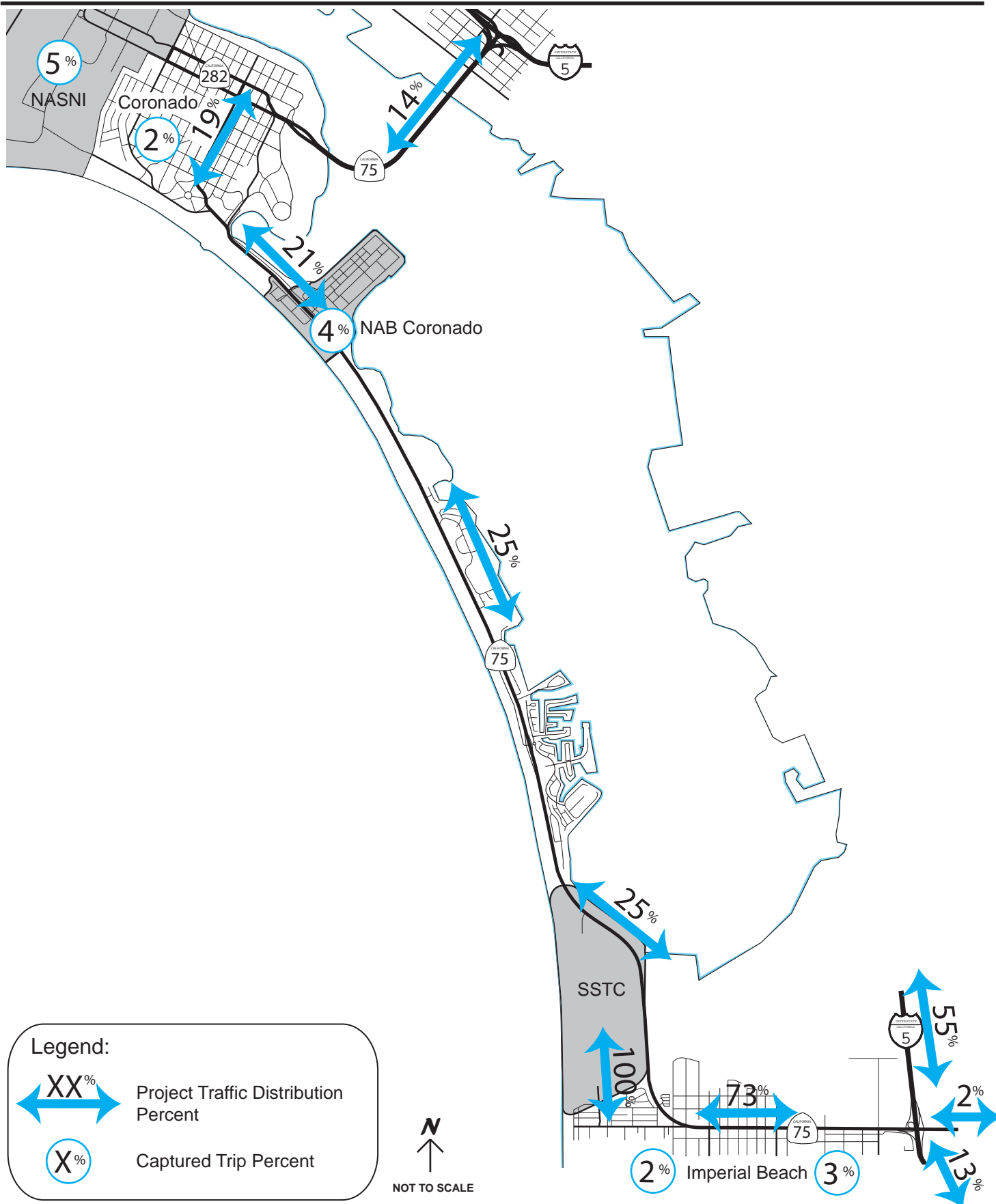


NOT TO SCALE

Evaluation without a New Entry Control Point (P947)

P947 is one of the multiple construction projects included in the Proposed Action. This project would construct a new Entry Control Point (ECP) located along Silver Strand Boulevard (SR-75) that would serve as the main access to SSTC-South. The implementation of P947 would provide traffic relief from the local streets within Imperial Beach by shifting access to SSTC-South onto SR-75. As part of the Proposed Action, it is assumed that P947 is in place and that traffic is able to utilize the new ECP. Without P947, the main access to SSTC-South would remain at its current location in Imperial Beach and traffic patterns would be different than what is assumed for the Proposed Action. Although P947 is part of the Proposed Action, the timing of the improvement within the ten-year development period is based on funding availability and is not guaranteed. To determine traffic impacts if P947 is not constructed until the end of the ten-year development period or not implemented at all, scenarios without P947 were included in the analyses.

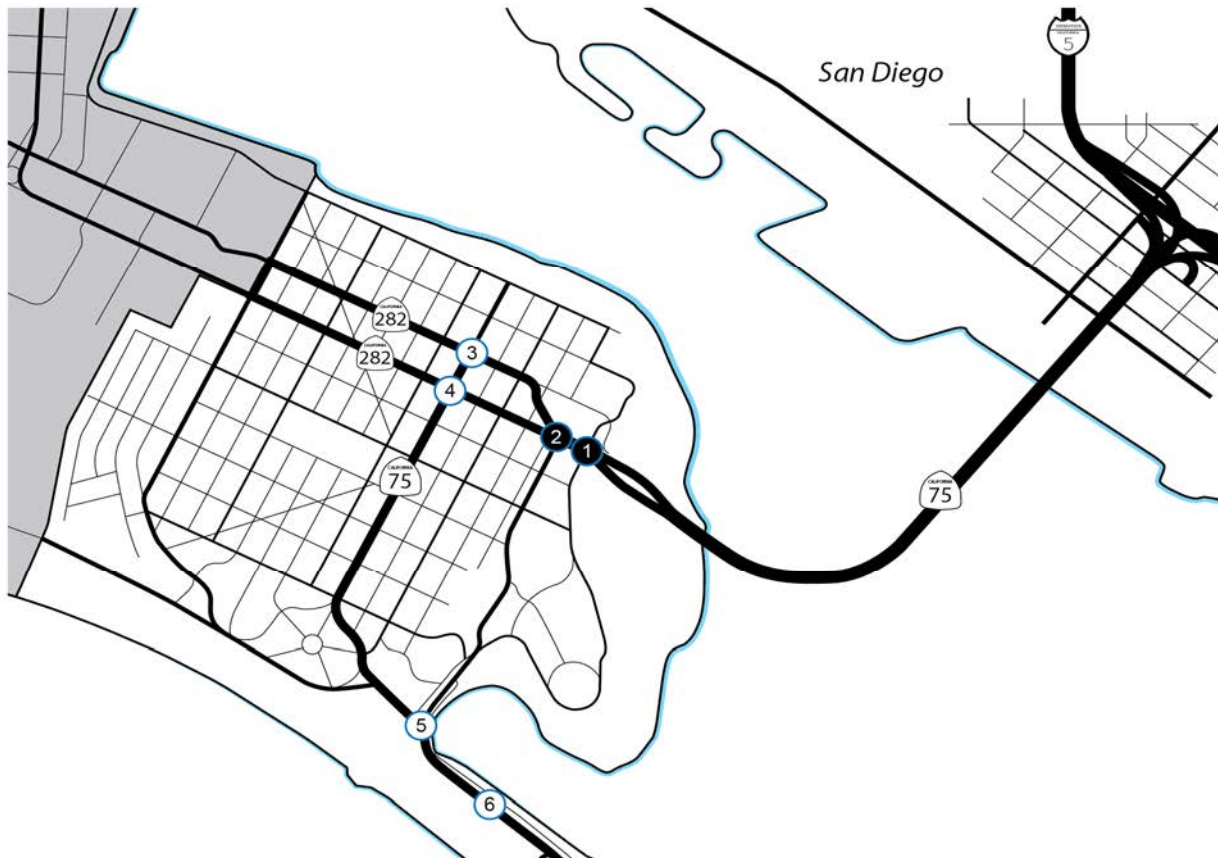
P947 is a facility that would not generate trips upon completion, therefore the trip generation volumes for each the alternatives would still be accurate. However, without the new ECP along SR-75, traffic distribution would be different for SSTC-South as vehicles would use the existing access in Imperial Beach. **Figure 4-14** illustrates the general trip distribution for SSTC-South without P947 in operation and **Figure 4-15** shows the distribution at each study intersection. **Figures 4-16** and **4-17** provide the resulting SSTC-South and combined trip assignment for Alternative 1, respectively. **Figures 4-18** and **4-19** provide the resulting SSTC-South and combined trip assignment for Alternative 3, respectively.



NBC Coastal Campus

1	Glorietta Blvd
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CORONADO Study intersections 1 - 6



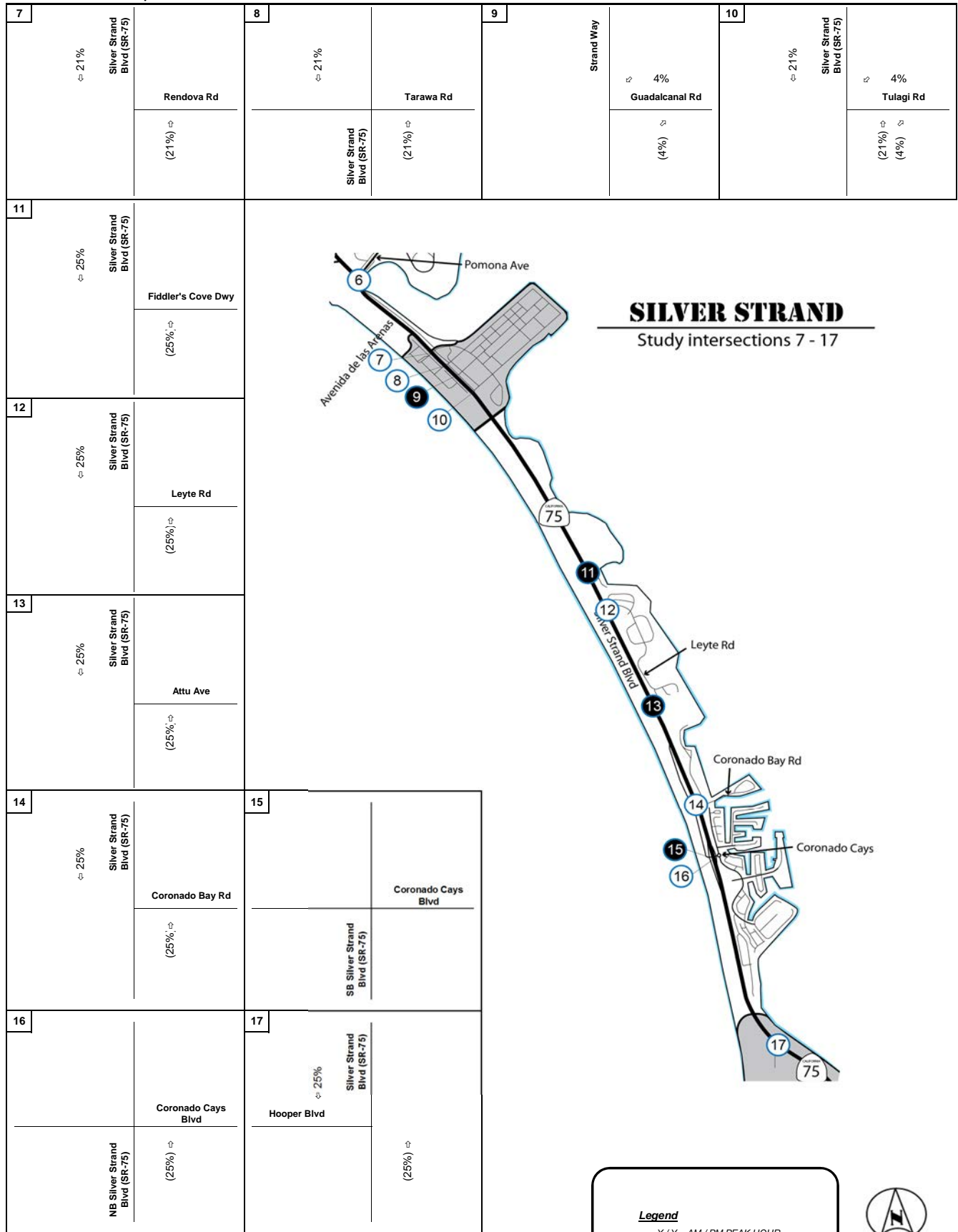
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus



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18	<div> <div> <div>↖ 25%</div> <div>Rainbow Dr</div> </div> <div> <div>↗ (25%)</div> </div> </div> <div> <div>Silver Strand Blvd (SR-75)</div> </div>	19	<div> <div>7th St</div> </div> <div> <div>Silver Strand Blvd (SR-75)</div> </div>	20	<div> <div>Delaware St</div> </div> <div> <div>↖ 73%</div> <div>Silver Strand Blvd (SR-75)</div> </div>	21	<div> <div>↖ (1%)</div> <div>↗ (99%)</div> <div>Silver Strand Blvd</div> </div> <div> <div>↖ 99%</div> <div>Palm Ave</div> </div> <div> <div>1%</div> <div>Dwy</div> </div>
22	<div> <div>3rd St</div> </div> <div> <div>↖ 99%</div> <div>Palm Ave</div> </div> <div> <div>↖ (99%)</div> </div>	23	<div> <div>↖ 25%</div> <div>Rainbow Dr</div> </div> <div> <div>↖ 74%</div> <div>Palm Ave</div> </div> <div> <div>↖ (25%)</div> <div>↖ (74%)</div> </div>	24	<div> <div>7th St</div> </div> <div> <div>↖ 73%</div> <div>Palm Ave</div> </div> <div> <div>↖ (73%)</div> <div>↖ (1%)</div> <div>1%</div> </div>	25	<div> <div>Palm Ave</div> </div> <div> <div>↖ (73%)</div> <div>Delaware St</div> </div>
26	<div> <div>↖ 72%</div> <div>Palm Ave (SR-75)</div> </div> <div> <div>↖ (72%)</div> <div>↖ (1%)</div> <div>9th St</div> </div> <div> <div>1%</div> </div>	27	<div> <div>Florida St</div> </div> <div> <div>↖ 72%</div> <div>Palm Ave (SR-75)</div> </div> <div> <div>↖ (72%)</div> </div>	28	<div> <div>13th St</div> </div> <div> <div>↖ 71%</div> <div>Palm Ave (SR-75)</div> </div> <div> <div>↖ (71%)</div> <div>↖ (1%)</div> <div>1%</div> </div>	29	<div> <div>16th St</div> </div> <div> <div>↖ 71%</div> <div>Palm Ave (SR-75)</div> </div> <div> <div>↖ (71%)</div> </div>
30	<div> <div>19th St</div> </div> <div> <div>↖ 70%</div> <div>Palm Ave (SR-75)</div> </div> <div> <div>↖ (70%)</div> <div>↖ (1%)</div> <div>Saturn Blvd</div> </div> <div> <div>1%</div> </div>	31	<div> <div>↖ 55%</div> <div>I-5 SB Exit Ramp</div> </div> <div> <div>↖ 15%</div> <div>Palm Ave (SR-75)</div> </div> <div> <div>↖ (2%)</div> <div>↖ (68%)</div> </div>	32	<div> <div>I-5 NB Ramps</div> </div> <div> <div>↖ 2%</div> <div>Palm Ave (SR-75)</div> </div> <div> <div>↖ (2%)</div> <div>13%</div> </div>	33	<div> <div>↖ (100%)</div> <div>Silver Strand Blvd</div> </div> <div> <div>YMCA Dwy</div> </div> <div> <div>####</div> </div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



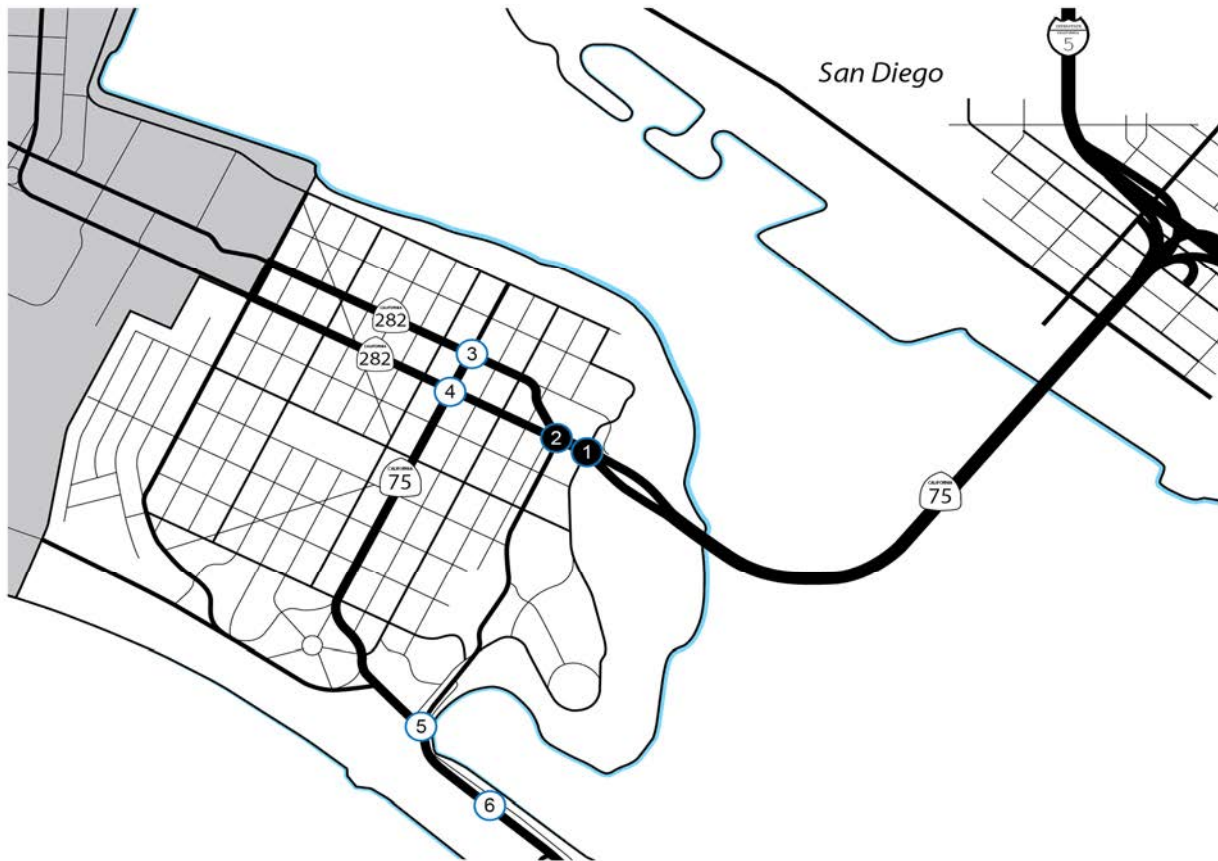
NOT TO SCALE

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<div>1</div> <div>Glorietta Blvd</div> <div>92 / 23</div> <div>Fourth St (SR-75)</div> <div>10 / 91</div>	<div>2</div> <div>92 / 23</div> <div>Fourth St (SR-75)</div> <div>10 / 91</div> <div>Pomona Ave</div>	<div>3</div> <div>Orange Ave (SR-75)</div> <div>92 / 23</div> <div>Third Street (SR-75)</div> <div>4 / 32</div>	<div>4</div> <div>92 / 23</div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> <div>33 / 8</div> <div>4 / 32</div> <div>10 / 91</div>
<div>5</div> <div>138 / 34</div> <div>Orange Ave (SR-75)</div> <div>Pomona Ave</div> <div>15 / 136</div> <div>Silver Strand Blvd (SR-75)</div>	<div>6</div> <div>138 / 34</div> <div>Silver Strand Blvd (SR-75)</div> <div>Avenidas De Las Arenas</div> <div>15 / 136</div>		

CORONADO

Study intersections 1 - 6



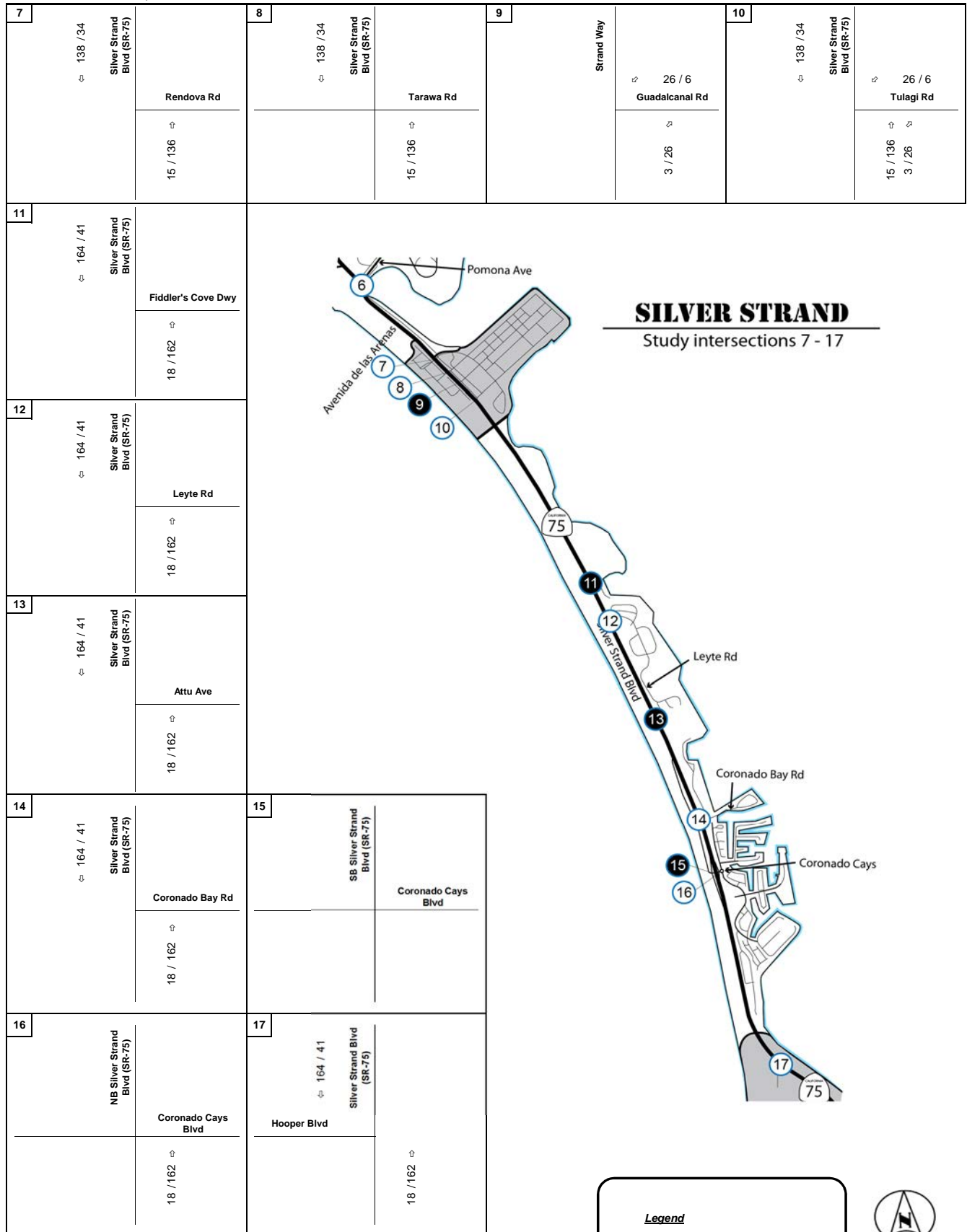
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



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18	164 / 41 Silver Strand Blvd (SR-75) Rainbow Dr 18 / 162	19	7th St Silver Strand Blvd (SR-75)	20	Delaware St 478 / 118 Silver Strand Blvd (SR-75)	21	1 / 6 72 / 641 Silver Strand Blvd 648 / 160 Palm Ave 7 / 2 Dwy
22	3rd St 648 / 160 Palm Ave 72 / 641	23	164 / 41 Rainbow Dr Palm Ave 485 / 120 Palm Ave 18 / 162 54 / 479	24	7th St 478 / 118 Palm Ave 53 / 472 1 / 6 7 / 2	25	Palm Ave 53 / 472 Delaware St
26	472 / 117 Palm Ave (SR-75) 53 / 466 1 / 6 9th St 7 / 2	27	Florida St 472 / 117 Palm Ave (SR-75) 53 / 466	28	13th St 465 / 115 Palm Ave (SR-75) 52 / 459 1 / 6 7 / 2	29	16th St 465 / 115 Palm Ave (SR-75) 52 / 459
30	19th St 459 / 113 Palm Ave (SR-75) 51 / 453 1 / 6 Saturn Blvd 7 / 2	31	360 / 89 I-5 SB Exit Ramp 98 / 24 Palm Ave (SR-75) 1 / 13 50 / 440	32	I-5 NB Ramps 13 / 3 Palm Ave (SR-75) 1 / 13 85 / 21	33	73 / 647 Silver Strand Blvd YMCA Dwy 655 / 162



IMPERIAL BEACH

Study intersections 18 - 33

Legend

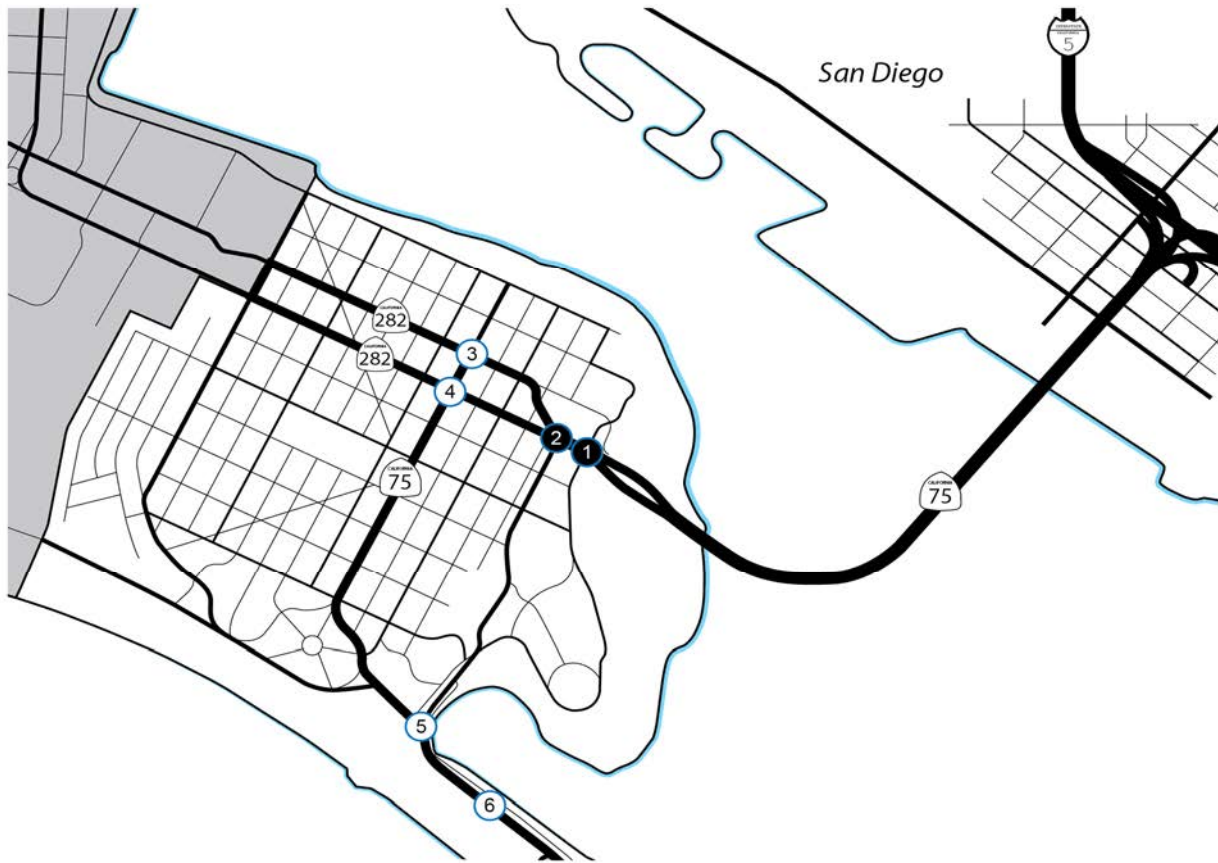
X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus

<div>1</div> <div>Glorietta Blvd</div> <div> <div>-105 / -26</div> <div>Fourth St (SR-75)</div> </div> <div> <div>-10 / -88</div> <div></div> </div>	<div>2</div> <div></div> <div> <div>-105 / -26</div> <div>Fourth St (SR-75)</div> </div> <div> <div>-10 / -88</div> <div>Pomona Ave</div> </div> <div> <div>-2 / -17</div> <div></div> </div>	<div>3</div> <div>Orange Ave (SR-75)</div> <div> <div>-105 / -26</div> <div>Third Street (SR-75)</div> </div> <div> <div>2 / 15</div> <div></div> </div>	<div>4</div> <div> <div>-105 / -26</div> <div>Orange Ave (SR-75)</div> </div> <div> <div>16 / 3</div> <div></div> </div> <div> <div>2 / 15</div> <div>-10 / -88</div> </div>
<div>5</div> <div> <div>-82 / -21</div> <div>Orange Ave (SR-75)</div> </div> <div> <div>Pomona Ave</div> <div> <div>-8 / -65</div> <div>-2 / -17</div> </div> </div> <div> <div>Silver Strand Blvd (SR-75)</div> <div></div> </div>	<div>6</div> <div> <div>-82 / -21</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>Avenidas De Las Arenas</div> <div>-10 / -82</div> </div>	<div> <div>CORONADO</div> <div>Study intersections 1 - 6</div> </div>	



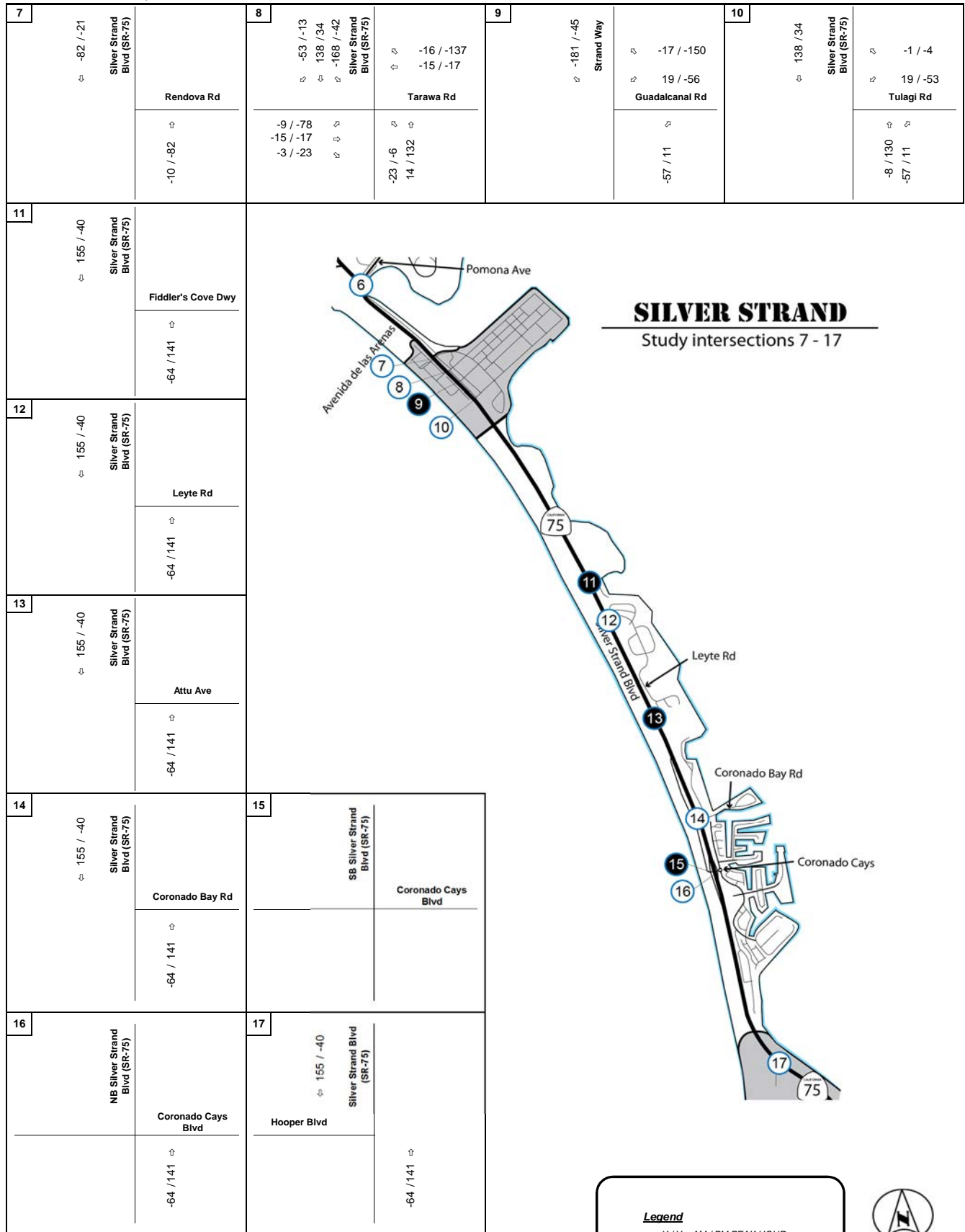
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus



NBC Coastal Campus

18	163 / 37 ↻ ↻ Silver Strand Blvd (SR-75)	Rainbow Dr	14 / 161 ↻	19	7th St	-76 / -19 Silver Strand Blvd (SR-75)	-9 / -75 -1 / -4 ↻ ↻ -4 / -1	20	Delaware St	-76 / -19 478 / 118 Silver Strand Blvd (SR-75)	-9 / -75 ↻	21	1 / 6 ↻ ↻ 72 / 641 Silver Strand Blvd	648 / 160 Palm Ave	7 / 2 ↻ Dwy
22	3rd St	648 / 160 Palm Ave	72 / 641 ↻	23	163 / 37 ↻ Rainbow Dr	485 / 120 Palm Ave	14 / 161 54 / 479 ↻ ↻	24	-1 / -4 ↻ ↻ 7th St	478 / 118 Palm Ave	53 / 472 1 / 6 ↻ ↻ 7 / 2 -4 / -1	25		Palm Ave	53 / 472 ↻ Delaware St
26		399 / 99 Palm Ave (SR-75)	45 / 394 0 / 2 ↻ ↻ 9th St	27	Florida St	399 / 99 Palm Ave (SR-75)	45 / 394 ↻	28	13th St	396 / 97 Palm Ave (SR-75)	44 / 390 0 / 2 ↻ ↻ 3 / 1	29	16th St	396 / 97 Palm Ave (SR-75)	44 / 390 ↻
30	19th St	393 / 96 Palm Ave (SR-75)	43 / 388 0 / 2 ↻ ↻ Saturn Blvd	31	343 / 84 ↻ I-5 SB Exit Ramp	48 / 11 Palm Ave (SR-75)	0 / 6 50 / 440 ↻ ↻	32	I-5 NB Ramps	6 / 1 Palm Ave (SR-75)	0 / 6 ↻ 42 / 10	33	73 / 647 ↻ Silver Strand Blvd	YMCA Dwy	655 / 162 ↻



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



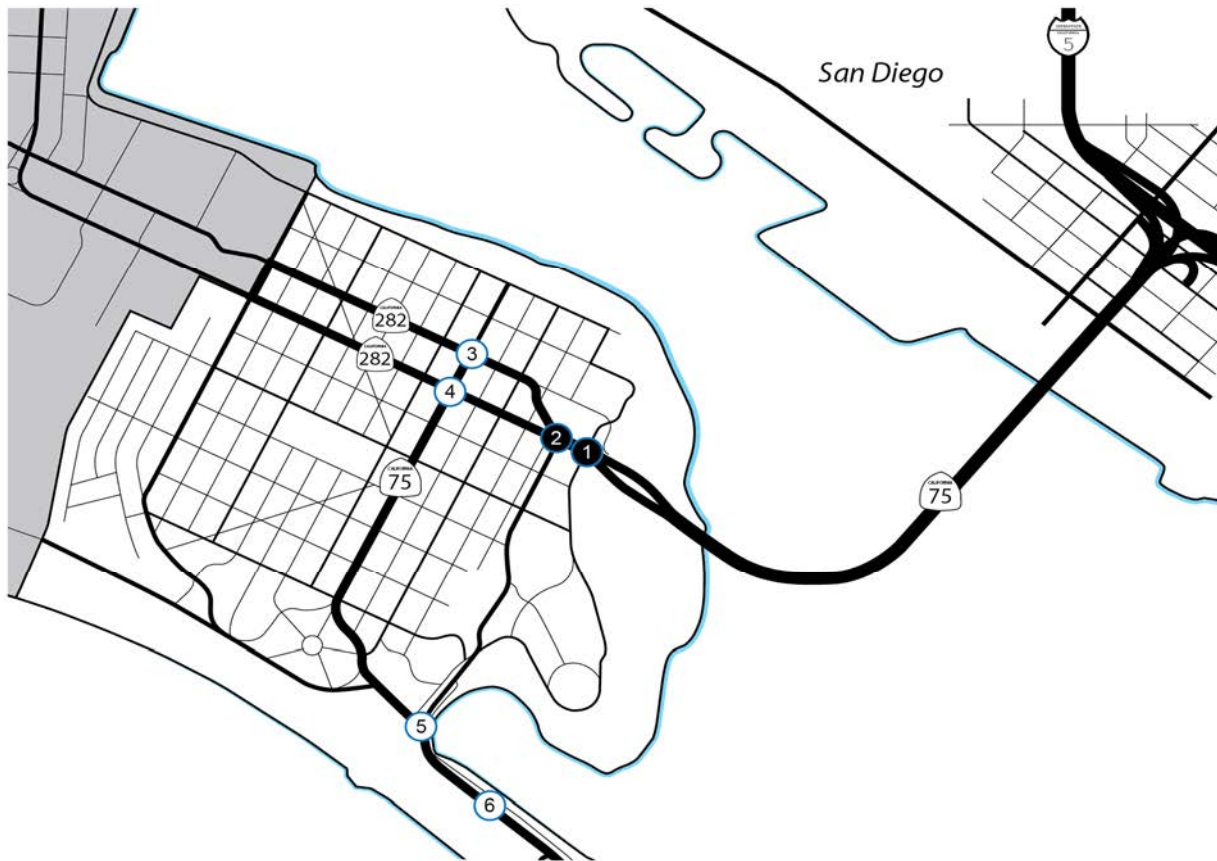
NOT TO SCALE

NBC Coastal Campus

<div>1</div> <div>Glorietta Blvd</div> <div>76 / 19</div> <div>Fourth St (SR-75)</div> <div>9 / 76</div>	<div>2</div> <div></div> <div>76 / 19</div> <div>Fourth St (SR-75)</div> <div>9 / 76</div> <div>Pomona Ave</div>	<div>3</div> <div>Orange Ave (SR-75)</div> <div>76 / 19</div> <div>Third Street (SR-75)</div> <div>3 / 27</div>	<div>4</div> <div>76 / 19</div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> <div>27 / 7</div> <div>3 / 27</div> <div>9 / 76</div>
<div>5</div> <div>115 / 28</div> <div>Orange Ave (SR-75)</div> <div>Pomona Ave</div> <div>Silver Strand Blvd (SR-75)</div> <div>13 / 113</div>	<div>6</div> <div>115 / 28</div> <div>Silver Strand Blvd (SR-75)</div> <div>Avenidas De Las Arenas</div> <div>13 / 113</div>		

CORONADO

Study intersections 1 - 6



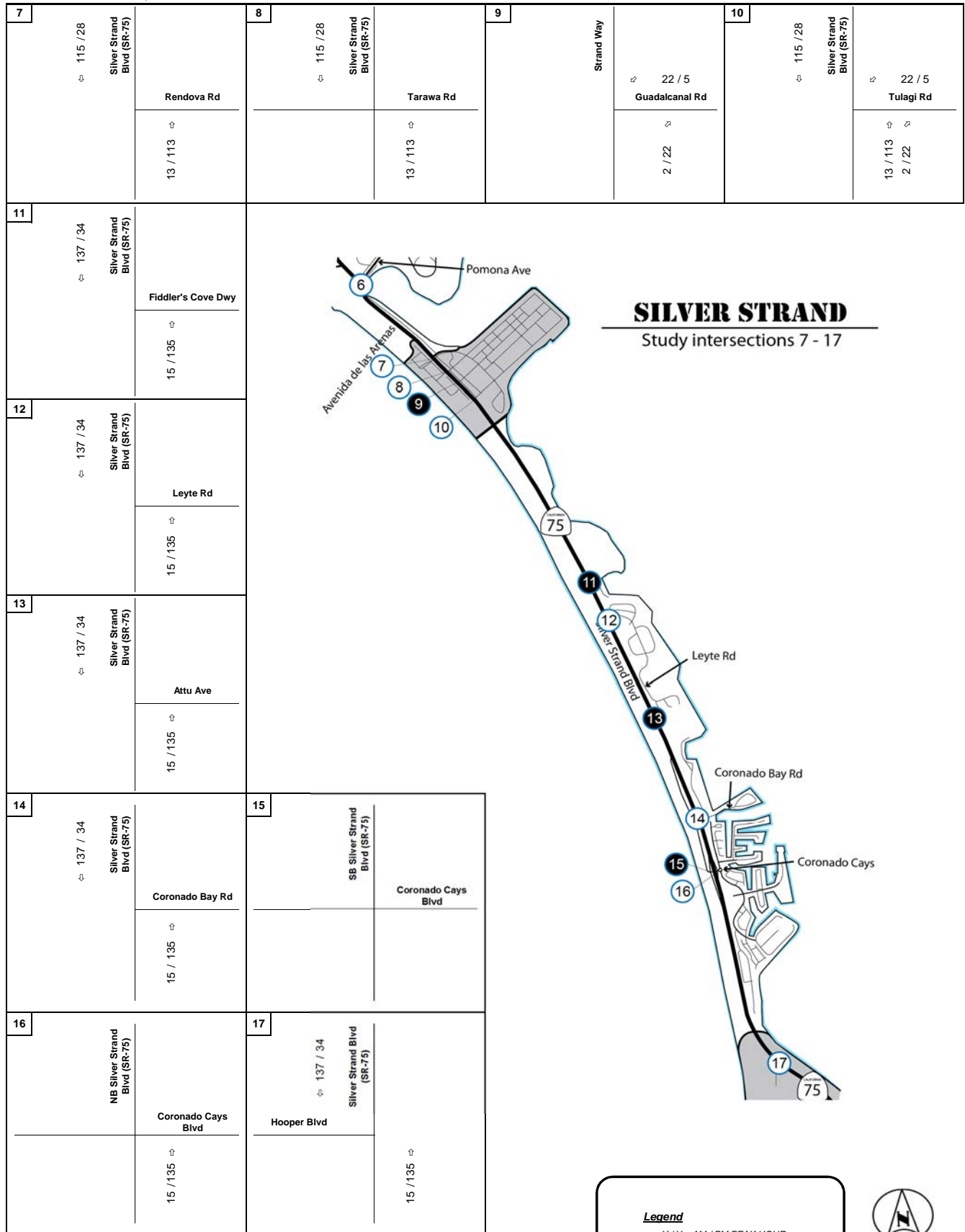
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X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



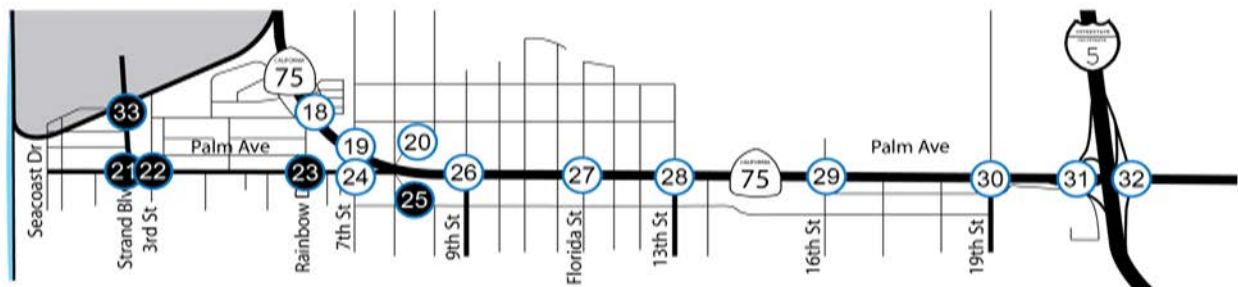
NOT TO SCALE

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18	137 / 34 Silver Strand Blvd (SR-75) Rainbow Dr 15 / 135	19	7th St Silver Strand Blvd (SR-75)	20	Delaware St 399 / 99 Silver Strand Blvd (SR-75)	21	1 / 5 60 / 535 Silver Strand Blvd 541 / 134 Palm Ave 5 / 1 Dwy
22	3rd St 541 / 134 Palm Ave 60 / 535	23	137 / 34 Rainbow Dr Palm Ave 404 / 100 Palm Ave 15 / 135 45 / 400	24	7th St 399 / 99 Palm Ave 45 / 394 1 / 5 5 / 1	25	Palm Ave 45 / 394 Delaware St
26	393 / 97 Palm Ave (SR-75) 44 / 389 1 / 5 9th St 5 / 1	27	Florida St 393 / 97 Palm Ave (SR-75) 44 / 389	28	13th St 388 / 96 Palm Ave (SR-75) 43 / 383 1 / 5 5 / 1	29	16th St 388 / 96 Palm Ave (SR-75) 43 / 383
30	19th St 382 / 95 Palm Ave (SR-75) 43 / 378 1 / 5 Saturn Blvd 5 / 1	31	300 / 74 I-5 SB Exit Ramp 82 / 20 Palm Ave (SR-75) 1 / 11 41 / 367	32	I-5 NB Ramps 11 / 3 Palm Ave (SR-75) 1 / 11 71 / 18	33	61 / 540 Silver Strand Blvd YMCA Dwy 546 / 135



IMPERIAL BEACH

Study intersections 18 - 33

Legend

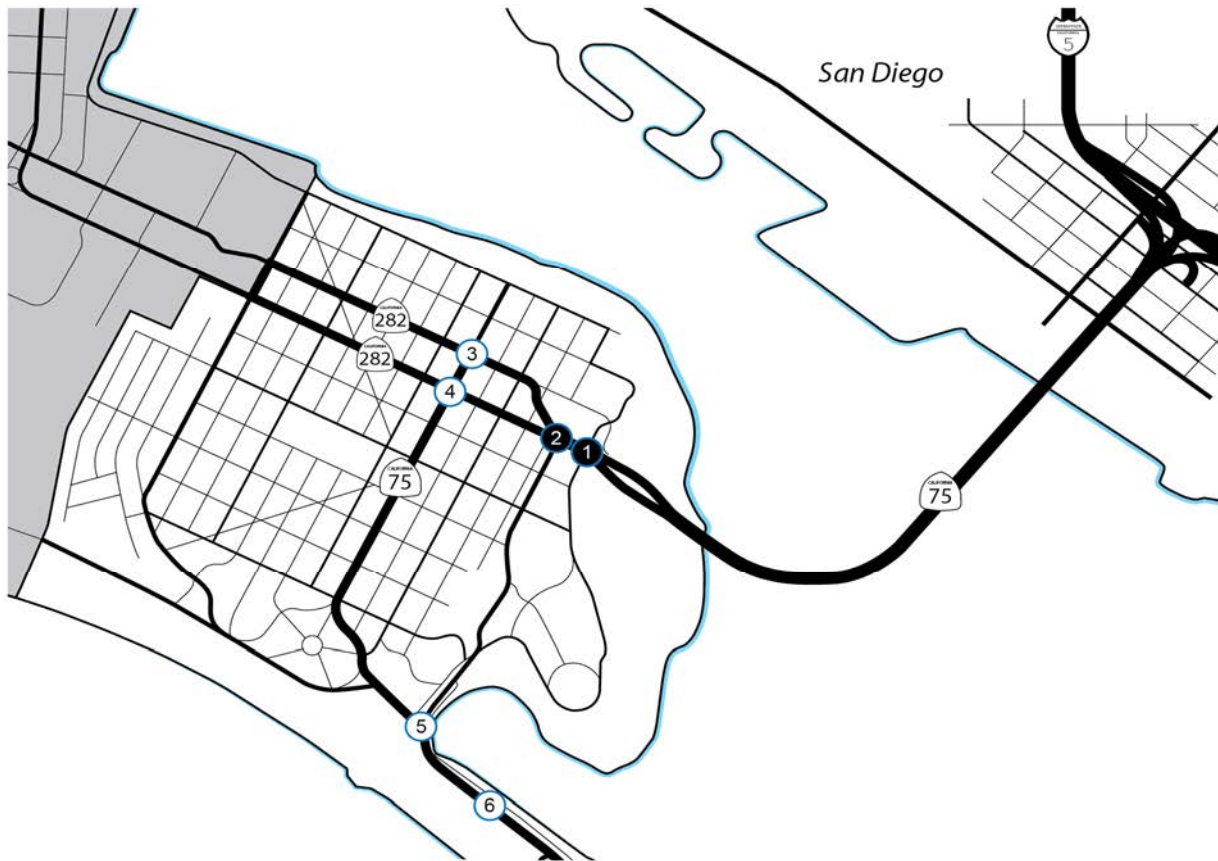
X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus

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<div>5</div> <div> <div>-32 / -9</div> <div>Orange Ave (SR-75)</div> </div> <div> <div></div> <div>Pomona Ave</div> </div> <div> <div>-2 / -21</div> <div>-2 / -11</div> <div></div> </div> <div> <div></div> <div>Silver Strand Blvd (SR-75)</div> </div>	<div>6</div> <div> <div>-32 / -9</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div></div> <div>Avenidas De Las Arenas</div> </div> <div> <div>-4 / -32</div> <div></div> </div>	<div> <div>CORONADO</div> <div>Study intersections 1 - 6</div> </div>	



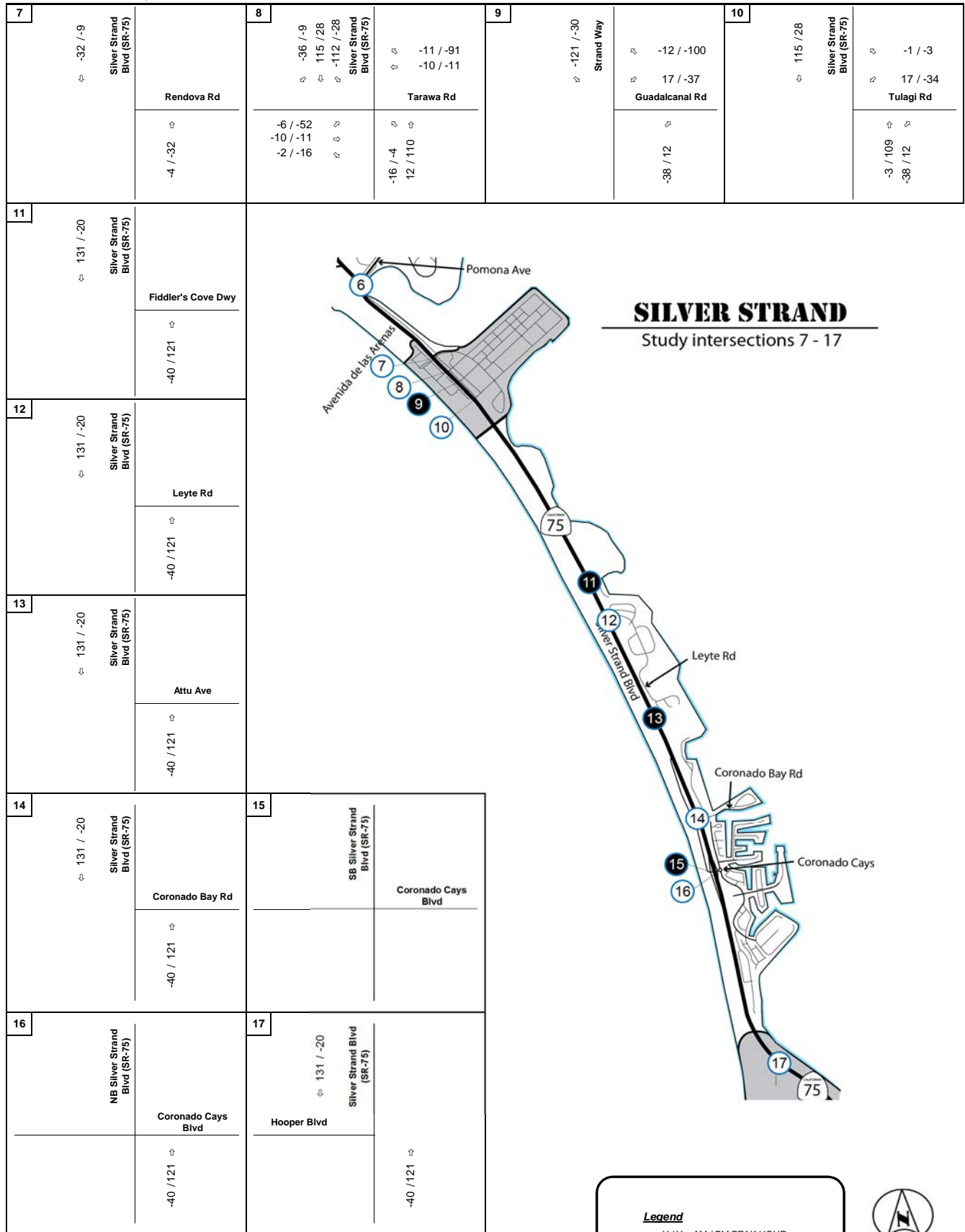
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



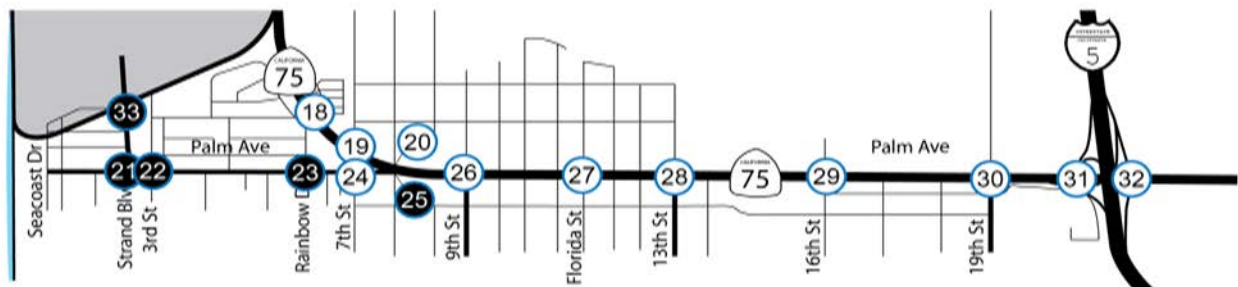
NOT TO SCALE

NBC Coastal Campus



NBC Coastal Campus

18	136 / 31 ↻ ↻ Silver Strand Blvd (SR-75)	Rainbow Dr	12 / 134 ↻	19	7th St	↻ -51 / -13 Silver Strand Blvd (SR-75)	↻ -6 / -50 -1 / -3 ↻	20	Delaware St	↻ -51 / -13 399 / 99 Silver Strand Blvd (SR-75)	↻ -6 / -50 ↻	21	1 / 5 ↻ 60 / 535 Silver Strand Blvd	↻ 541 / 134 Palm Ave	↻ 5 / 1 Dwy
22	3rd St	↻ 541 / 134 Palm Ave	60 / 535 ↻	23	136 / 31 ↻ Rainbow Dr	↻ 404 / 100 Palm Ave	12 / 134 45 / 400 ↻	24	↻ -1 / -3 7th St	↻ 399 / 99 Palm Ave	45 / 394 1 / 5 ↻	25	↻ 45 / 394 Delaware St	↻ 541 / 134 Palm Ave	↻ 5 / 1 -3 / -1
26	↻ 344 / 85 Palm Ave (SR-75)	↻ 38 / 341 0 / 2 9th St	2 / 0 ↻	27	Florida St	↻ 344 / 85 Palm Ave (SR-75)	↻ 38 / 341 ↻	28	13th St	↻ 342 / 84 Palm Ave (SR-75)	↻ 37 / 337 0 / 2 ↻	29	16th St	↻ 342 / 84 Palm Ave (SR-75)	↻ 37 / 337 ↻
30	19th St	↻ 338 / 84 Palm Ave (SR-75)	38 / 334 0 / 2 ↻ Saturn Blvd	31	289 / 71 ↻ I-5 SB Exit Ramp	↻ 49 / 11 Palm Ave (SR-75)	0 / 6 41 / 367 ↻	32	I-5 NB Ramps	↻ 6 / 1 Palm Ave (SR-75)	0 / 6 ↻	33	61 / 540 ↻ Silver Strand Blvd	↻ 546 / 135 ↻	↻ 546 / 135 ↻



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

5.0 YEAR 2024 CONDITIONS

Year 2024 is the year at which all proposed project construction is assumed to be completed and the new facilities are fully operational. A Year 2024 No Action Alternative was established to set baseline conditions. Year 2024 with the three Proposed Action alternatives were then compared to the No-Action Alternative to determine the Proposed Action's impact on the study area. As previously established, Alternatives 1 and 2 are identical from a traffic generation and features standpoint and therefore have identical results. Scenarios with one and two CVNs in port are included in the analysis. Additionally, scenarios with three CVNs in port were not analyzed since required staggering of work hours would result in peak hour traffic volumes that are less than the two CVN scenarios.

Conditions with 1 Carrier Vessel Nuclear (CVN)

Table 5-1 displays the LOS analysis results for the study intersections under Year 2024 with 1 CVN Conditions. **Table 5-2** displays the ILV analysis results for the Palm Avenue and I-5 interchange under the Year 2024 with 1 CVN Conditions. **Appendix G** contains the LOS calculation worksheets and **Appendix H** contains the ILV calculation worksheets. The results of the analyses are summarized below.

No-Action Conditions

Road Network

All intersections and roadway segments in the study area would remain the same as Existing Conditions.

Traffic Volumes

To determine Year 2024 traffic volumes with one CVN in port, linear interpolation was used as described in Chapter 2. To ensure that reasonably foreseeable projects in the area are included in the Year 2024 traffic volumes, traffic from projects in the area that are considered to be approved but not yet completed or occupied was added to existing intersection turning movements volumes and compared to the forecasted Year 2024 volumes. The higher of the two values were used in baseline conditions.

The Hotel Del Coronado expansion was one of two projects identified and added to the baseline volumes as a cumulative project. The Hotel Del Coronado expansion is a 144-room hotel expansion that is anticipated to generate 1,176 daily trips with 81 (49 in, 32 out) am peak-hour trips and 85 (45 in, 40 out) pm peak-hour trips. The other cumulative project identified is a housing development in Imperial Beach north of SR-75 by Rainbow Drive. The project's trip assignment was obtained from its traffic study and applied to the applicable intersections. **Appendix I** contains cumulative project information. **Figure 5-1** shows the Year 2024 No-Action Alternative volumes with one CVN in port.

Intersection Analysis

All intersections would operate at LOS D or better during both peak periods, except at the following locations:

- | | |
|--|------------------------------------|
| ▪ #1 Glorietta Boulevard and Fourth Street (SR-75) | <i>AM peak (LOS E)</i> |
| ▪ #2 Fourth Street (SR-75) and Pomona Avenue | <i>PM peak (LOS F)</i> |
| ▪ #4 Orange Avenue (SR-75) and Fourth Street (SR-75) | <i>PM Peak (LOS E)</i> |
| ▪ #8 Silver Strand Boulevard (SR-75) and Tarawa Road | <i>PM peak (LOS E)</i> |
| ▪ #9 Strand Way and Guadalcanal Road | <i>PM peak (LOS E)</i> |
| ▪ #10 Silver Strand Boulevard (SR-75) and Tulagi Road | <i>PM peak (LOS E)</i> |
| ▪ #18 Silver Strand Boulevard (SR-75) and Rainbow Drive | <i>AM peak (LOS E)</i> |
| ▪ #19 7 th Street and Silver Strand Boulevard (SR-75) | <i>AM & PM peaks (LOS F/E)</i> |
| ▪ #23 Palm Avenue and Rainbow Drive | <i>AM peak (LOS E)</i> |
| ▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75) | <i>PM peak (LOS F)</i> |

Table 5-1. Year 2024 with 1 CVN Intersection Analysis Summary

INTERSECTION		NO ACTION		PLUS PROJECT				PLUS PROJECT (W/O P947)			
				ALT. 1/2		ALT. 3		ALT. 1/2		ALT. 3	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	44.1 (E)	18.7 (C)	43.1 (E)	18.6 (C)	44.4 (E)	18.7 (C)	41.6 (E)	18.4 (C)	43.0 (E)	18.6 (C)
2	Fourth St (SR-75) & Pomona Ave	24.7 (C)	320.2 (F)	24.5 (C)	260.0 (F)	24.6 (C)	293.5 (F)	24.3 (C)	239.6 (F)	24.4 (C)	274.8 (F)
3	Orange Ave (SR-75) & Third St (SR-75)	28.0 (C)	40.3 (D)	30.7 (C)	40.9 (D)	31.2 (C)	41.8 (D)	30.0 (C)	39.6 (D)	30.5 (C)	40.7 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	37.3 (D)	59.6 (E)	37.1 (D)	59.6 (E)	37.3 (D)	60.4 (E)	36.9 (D)	59.6 (E)	37.1 (D)	60.3 (E)
5	Silver Strand Blvd/Orange Ave (SR-75) & Pomona Ave	15.1 (B)	15.8 (B)	15.2 (B)	15.7 (B)	15.1 (B)	15.9 (B)	15.2 (B)	15.4 (B)	15.2 (B)	15.6 (B)
6	Silver Strand Blvd (SR-75) & Avenida De Las Arenas	12.6 (B)	19.4 (B)	12.6 (B)	19.3 (B)	12.7 (B)	19.5 (B)	12.4 (B)	18.9 (B)	12.5 (B)	19.2 (B)
7	Silver Strand Blvd (SR-75) & Rendova Rd	18.0 (B)	12.3 (B)	17.6 (B)	12.2 (B)	17.6 (B)	12.3 (B)	17.9 (B)	12.0 (B)	17.8 (B)	12.1 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	50.2 (D)	70.7 (E)	42.1 (D)	42.8 (D)	42.6 (D)	49.4 (D)	41.2 (D)	42.3 (D)	42.1 (D)	48.5 (D)
9	Strand Way & Guadalcanal Rd	10.9 (B)	39.5 (E)	9.9 (A)	13.2 (B)	10.3 (B)	15.5 (C)	9.9 (A)	13.2 (B)	10.3 (B)	15.5 (C)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	3.0 (A)	70.7 (E)	3.6 (A)	78.1 (E)	3.5 (A)	76.6 (E)	3.6 (A)	76.1 (E)	3.6 (A)	74.8 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	27.5 (D)	21.3 (C)	26.3 (D)	28.3 (D)	26.8 (D)	27.3 (D)	26.2 (D)	25.4 (D)	26.7 (D)	25.0 (C)
12	Silver Strand Blvd (SR-75) & Leyte Rd	32.6 (C)	8.6 (A)	25.4 (C)	9.1 (A)	27.3 (C)	9.0 (A)	25.5 (C)	7.6 (A)	27.5 (C)	8.9 (A)
13	Silver Strand Blvd (SR-75) & Attu Ave	28.2 (D)	10.0 (A)	26.8 (D)	11.0 (B)	27.3 (D)	10.8 (B)	26.6 (D)	10.7 (B)	27.2 (D)	10.6 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	6.9 (A)	3.4 (A)	5.9 (A)	3.6 (A)	6.1 (A)	3.6 (A)	6.0 (A)	3.5 (A)	6.2 (A)	3.5 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	25.8 (C)	10.6 (B)	22.8 (C)	10.1 (B)	23.8 (C)	10.1 (B)	22.5 (C)	10.2 (B)	23.5 (C)	10.2 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd*	**		15.5 (B)	42.6 (D)	13.3 (B)	33.8 (C)	**		**	

Notes: P947 is a MILCON project that would construct a new ECP at SSTC-South along SR-75.

*Delay shown represents a signalized intersection and P947 improvements; the existing unsignalized intersection configuration would operate at LOS F. ** Intersection does not exist under this scenario Table reflects intersection Delay (LOS). **Bold** indicates intersections operating at an unacceptable LOS E or F. **Bold and shaded** cells indicate locations where the project has an impact.

Table 5-1. Year 2024 with 1 CVN Intersection Analysis Summary (cont.)

INTERSECTION		NO ACTION		PLUS PROJECT				PLUS PROJECT (W/O P947)			
				ALT. 1/2		ALT. 3		ALT. 1/2		ALT. 3	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
18	Silver Strand Blvd (SR-75) & Rainbow Dr	79.7 (E)	25.0 (C)	141.6 (F)	47.2 (D)	132.5 (F)	41.8 (D)	67.7 (E)	31.6 (C)	70.4 (E)	30.7 (C)
19	7th St & Silver Strand Blvd (SR-75)	114.9 (F)	67.1 (E)	112.4 (F)	69.1 (E)	111.7 (F)	68.7 (E)	117.2 (F)	67.7 (E)	116.4 (F)	67.3 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	8.1 (A)	10.7 (B)	7.5 (A)	12.2 (B)	7.6 (A)	11.5 (B)	13.7 (B)	11.7 (B)	12.6 (B)	11.6 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	13.1 (B)	20.3 (C)	13.3 (B)	20.7 (C)	13.2 (B)	20.6 (C)	30.5 (D)	>1000 (F)	24.7 (C)	854.1 (F)
22	3rd St & Palm Ave	11.1 (B)	20.3 (C)	11.2 (B)	20.8 (C)	11.2 (B)	20.7 (C)	167.6 (F)	385.0 (F)	113.6 (F)	303.7 (F)
23	Palm Ave & Rainbow Dr	35.5 (E)	26.5 (D)	36.3 (E)	26.7 (D)	36.0 (E)	26.6 (D)	392.4 (F)	669.1 (F)	244.1 (F)	424.7 (F)
24	7th St & Palm Ave	8.4 (A)	5.8 (A)	8.5 (A)	5.8 (A)	8.4 (A)	5.8 (A)	9.5 (A)	6.9 (A)	9.3 (A)	6.8 (A)
25	Delaware St & Palm Ave	12.0 (B)	12.7 (B)	12.0 (B)	12.7 (B)	12.0 (B)	12.7 (B)	12.6 (B)	22.4 (C)	12.5 (B)	20.2 (C)
26	9th St & Palm Ave (SR-75)	40.1 (D)	48.4 (D)	49.8 (D)	58.8 (E)	47.0 (D)	56.3 (E)	55.5 (E)	63.8 (E)	50.6 (D)	59.7 (E)
27	Florida St & Palm Ave (SR-75)	8.2 (A)	9.2 (A)	8.3 (A)	8.2 (A)	8.2 (A)	8.3 (A)	8.4 (A)	8.1 (A)	8.3 (A)	8.2 (A)
28	13th St & Palm Ave (SR-75)	37.1 (D)	47.3 (D)	40.2 (D)	59.4 (E)	39.6 (D)	56.7 (E)	41.2 (D)	64.0 (E)	40.3 (D)	60.1 (E)
29	16th St & Palm Ave (SR-75)	14.2 (B)	18.6 (B)	16.0 (B)	23.8 (C)	15.6 (B)	22.5 (C)	16.7 (B)	26.6 (C)	16.1 (B)	24.2 (C)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	50.9 (D)	175.5 (F)	61.1 (E)	215.7 (F)	58.9 (E)	210.0 (F)	65.6 (E)	224.6 (F)	61.9 (E)	217.1 (F)
31	I-5 SB Exit Ramp & Palm Avenue (SR-75)	32.2 (C)	45.6 (D)	42.7 (D)	53.5 (D)	40.8 (D)	52.5 (D)	47.6 (D)	55.3 (E)	43.4 (D)	53.8 (D)
32	I-5 NB Ramps & Palm Avenue (SR-75)	11.4 (B)	9.4 (A)	11.9 (B)	9.5 (A)	11.9 (B)	9.5 (A)	11.9 (B)	9.5 (A)	11.9 (B)	9.5 (A)
33	Silver Strand Blvd & YMCA Dwy	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)	9.4 (A)	17.8 (C)	9.3 (A)	15.3 (C)

Notes: P947 is a MILCON project that would construct a new ECP at SSTC-South along SR-75.

Table reflects intersection Delay (LOS). **Bold** indicates intersections operating at an unacceptable LOS E or F. **Bold and shaded** cells indicate locations where the project has an impact.

Table 5-2. Year 2024 with 1 CVN ILV Analysis Summary

INTERSECTION		PEAK HOUR	YEAR 2024 NO ACTION		YEAR 2024 ALTERNATIVE 1/2		YEAR 2024 ALTERNATIVE 3	
			ILV TOTAL	CAPACITY	ILV TOTAL	CAPACITY	ILV TOTAL	CAPACITY
31	I-5 SB Exit Ramp & Palm Avenue (SR-75)	AM	1065	Below Capacity	1228	Approaching Capacity	1207	Approaching Capacity
		PM	1265	Approaching Capacity	1304	Approaching Capacity	1299	Approaching Capacity
32	I-5 NB Ramps & Palm Avenue (SR-75)	AM	994	Below Capacity	1015	Below Capacity	1015	Below Capacity
		PM	760	Below Capacity	768	Below Capacity	768	Below Capacity

INTERSECTION		PEAK HOUR	YEAR 2024 ALTERNATIVE 1/2 WITHOUT P947		YEAR 2024 ALTERNATIVE 3 WITHOUT P947	
			ILV TOTAL	CAPACITY	ILV TOTAL	CAPACITY
31	I-5 SB Exit Ramp & Palm Avenue (SR-75)	AM	1260	Approaching Capacity	1234	Approaching Capacity
		PM	1312	Approaching Capacity	1305	Approaching Capacity
32	I-5 NB Ramps & Palm Avenue (SR-75)	AM	1015	Below Capacity	1015	Below Capacity
		PM	768	Below Capacity	768	Below Capacity

Notes:

P947 is a MILCON project that would construct a new ECP at SSTC-South along SR-75.

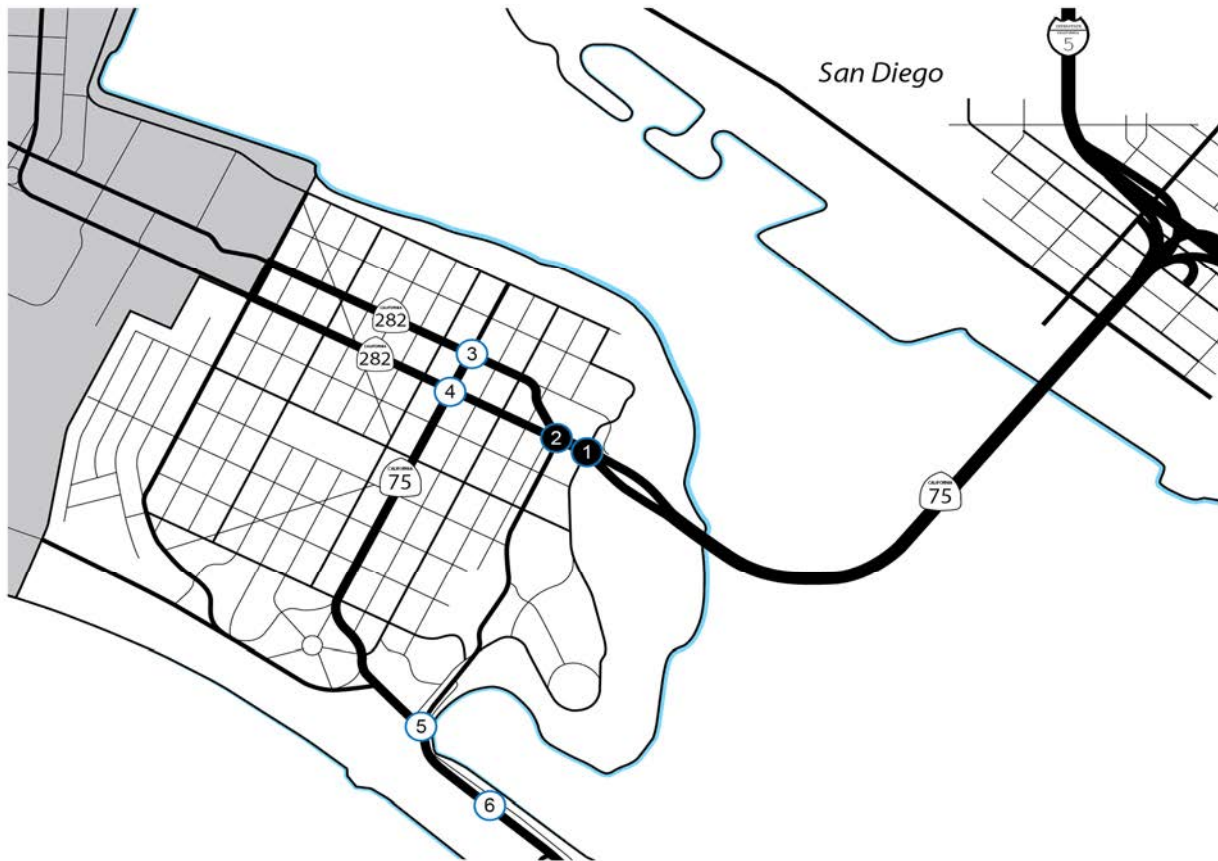
<1200 = Below Capacity; 1200 – 1500 = Approaching Capacity; >1500 = Above Capacity

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1 <div> <div>10 / 56</div> <div>Glorietta Blvd</div> <div> <div>532 / 240</div> <div>3269 / 1675</div> <div>Fourth St (SR-75)</div> </div> </div> <div> <div>1313 / 3544</div> <div>35 / 18</div> <div>477 / 903</div> </div>	2 <div> <div>3168 / 1712</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1174 / 3310</div> <div>203 / 131</div> <div>Pomona Ave</div> <div>233 / 201</div> </div>	3 <div> <div>6 / 15</div> <div>259 / 767</div> <div>Orange Ave (SR-75)</div> <div> <div>250 / 87</div> <div>1536 / 537</div> <div>1562 / 987</div> <div>Third Street (SR-75)</div> </div> </div> <div> <div>41 / 71</div> <div>94 / 244</div> </div>	4 <div> <div>1444 / 1103</div> <div>435 / 672</div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> </div> <div> <div>501 / 1701</div> <div>52 / 45</div> <div>126 / 322</div> <div>217 / 440</div> </div>
5 <div> <div>1144 / 1227</div> <div>Orange Ave (SR-75)</div> <div> <div>7 / 13</div> <div>225 / 181</div> <div>Pomona Ave</div> </div> </div> <div> <div>1151 / 896</div> <div>626 / 715</div> </div>	6 <div> <div>38 / 158</div> <div>1291 / 1460</div> <div>41 / 70</div> <div>Silver Strand Blvd (SR-75)</div> <div> <div>6 / 26</div> <div>0 / 11</div> <div>8 / 27</div> <div>Avenidas De Las Arenas</div> </div> </div> <div> <div>49 / 150</div> <div>3 / 11</div> <div>11 / 30</div> <div>21 / 24</div> <div>1374 / 1526</div> <div>27 / 52</div> </div>		

CORONADO

Study intersections 1 - 6



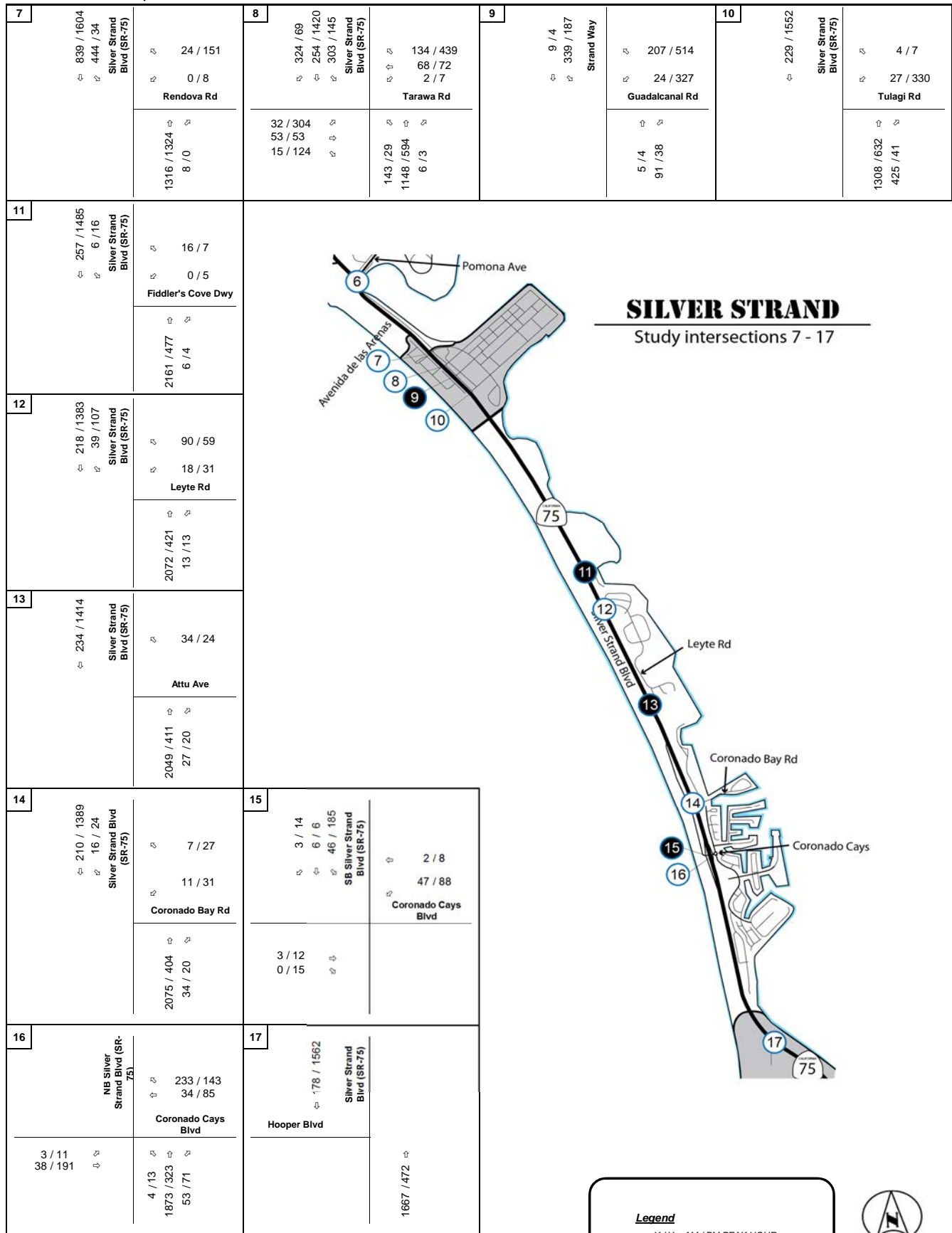
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

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18 <div> <div>46 / 199 ↻ ↻ ↻</div> <div>131 / 1105 ↻ ↻ ↻</div> <div>4 / 19 ↻ ↻ ↻</div> </div> <div> <div>21 / 7 ↻ ↻ ↻</div> <div>8 / 4 ↻ ↻ ↻</div> <div>50 / 19 ↻ ↻ ↻</div> </div> <div> <div>406 / 90 2 / 7 40 / 70</div> <div>↻ ↻ ↻</div> </div> <div> <div>27 / 76 1543 / 323 11 / 58</div> <div>↻ ↻ ↻</div> </div>	19 <div> <div>54 / 22 ↻ ↻ ↻</div> <div>43 / 27 ↻ ↻ ↻</div> <div>21 / 25 ↻ ↻ ↻</div> </div> <div> <div>18 / 36 ↻ ↻ ↻</div> <div>1397 / 381 ↻ ↻ ↻</div> </div> <div> <div>8 / 59 215 / 1058 20 / 60</div> <div>↻ ↻ ↻</div> </div> <div> <div>39 / 19 24 / 41 2 / 5</div> <div>↻ ↻ ↻</div> </div>	20 <div> <div>14 / 4 ↻ ↻ ↻</div> </div> <div> <div>9 / 39 ↻ ↻ ↻</div> <div>1406 / 416 ↻ ↻ ↻</div> <div>407 / 516 ↻ ↻ ↻</div> </div> <div> <div>232 / 1089 ↻ ↻ ↻</div> </div>	21 <div> <div>5 / 9 ↻ ↻ ↻</div> <div>48 / 105 ↻ ↻ ↻</div> </div> <div> <div>105 / 41 ↻ ↻ ↻</div> <div>129 / 308 ↻ ↻ ↻</div> </div> <div> <div>10 / 4 234 / 214</div> <div>↻ ↻ ↻</div> </div> <div> <div>3 / 7 ↻ ↻ ↻</div> <div>6 / 3 ↻ ↻ ↻</div> </div>
22 <div> <div>15 / 14 ↻ ↻ ↻</div> <div>11 / 34 ↻ ↻ ↻</div> <div>12 / 29 ↻ ↻ ↻</div> </div> <div> <div>25 / 25 ↻ ↻ ↻</div> <div>210 / 322 ↻ ↻ ↻</div> <div>27 / 86 ↻ ↻ ↻</div> </div> <div> <div>8 / 8 273 / 296 5 / 13</div> <div>↻ ↻ ↻</div> </div> <div> <div>12 / 15 15 / 39 127 / 69</div> <div>↻ ↻ ↻</div> </div>	23 <div> <div>70 / 142 ↻ ↻ ↻</div> <div>18 / 53 ↻ ↻ ↻</div> </div> <div> <div>154 / 40 ↻ ↻ ↻</div> <div>335 / 458 ↻ ↻ ↻</div> </div> <div> <div>226 / 74 428 / 425</div> <div>↻ ↻ ↻</div> </div> <div> <div>17 / 29 421 / 434 16 / 30</div> <div>↻ ↻ ↻</div> </div>	24 <div> <div>28 / 31 ↻ ↻ ↻</div> <div>28 / 43 ↻ ↻ ↻</div> <div>2 / 13 ↻ ↻ ↻</div> </div> <div> <div>0 / 4 ↻ ↻ ↻</div> <div>336 / 460 ↻ ↻ ↻</div> <div>27 / 32 ↻ ↻ ↻</div> </div> <div> <div>66 / 55 37 / 26 82 / 23</div> <div>↻ ↻ ↻</div> </div> <div> <div>506 / 482 5 / 9</div> <div>↻ ↻ ↻</div> </div>	25 <div> <div>22 / 11 ↻ ↻ ↻</div> <div>3 / 11 ↻ ↻ ↻</div> <div>40 / 25 ↻ ↻ ↻</div> </div> <div> <div>13 / 17 ↻ ↻ ↻</div> <div>1712 / 1596 ↻ ↻ ↻</div> <div>45 / 177 ↻ ↻ ↻</div> </div> <div> <div>15 / 10 1248 / 1692 27 / 52</div> <div>↻ ↻ ↻</div> </div> <div> <div>17 / 41 7 / 9 51 / 84</div> <div>↻ ↻ ↻</div> </div>
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IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



Intersecting Lane Vehicle Analysis

Both signalized intersections at the Palm Avenue and I-5 interchange would operate below or approaching capacity during both peak periods.

Plus Project Conditions

Alternatives 1 and 2

Alternative 1 would have the same external improvements and reallocation of personnel as Alternative 2. Therefore, the analysis for Alternative 2 would be identical to the findings for Alternative 1.

Road Network

The only roadway network change associated with Alternative 1 is implementation of P947, which would install a new entry control point at SSTC-South and signalize the intersection of Silver Strand Boulevard (SR-75) and Hooper Boulevard. All other roadways and intersections within the study area would remain the same with the addition of Alternative 1.

Traffic Volumes

Traffic associated with the completed construction of the Proposed Action Alternative 1 was added to the No-Action Alternative volumes. **Figure 5-2** shows the resulting Year 2024 Alternative 1 Conditions volumes with 1 CVN in port.

Intersection Analysis

All intersections would operate at LOS D or better during both peak periods, except at the following locations:

- | | |
|---|------------------------------------|
| ▪ #1 Glorietta Boulevard and Fourth Street (SR-75) | <i>AM peak (LOS E)</i> |
| ▪ #2 Fourth Street (SR-75) and Pomona Avenue | <i>PM peak (LOS F)</i> |
| ▪ #4 Orange Avenue (SR-75) and Fourth Street (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #10 Silver Strand Boulevard (SR-75) and Tulagi Road | <i>PM peak (LOS E)</i> |
| ▪ #18 Silver Strand Boulevard (SR-75) and Rainbow Drive | <i>AM peak (LOS E)</i> |
| ▪ #19 7 th Street and Silver Strand Boulevard (SR-75) | <i>AM & PM peaks (LOS F/E)</i> |
| ▪ #23 Palm Avenue and Rainbow Drive | <i>AM peak (LOS E)</i> |
| ▪ #26 9th Street and Palm Avenue (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #28 13th Street and Palm Avenue (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75) | <i>AM & PM peak (LOS E/F)</i> |

Of the intersections that operate at an unacceptable LOS E or F, five (shown in **bold**) would result in a significant impact that would need to be mitigated by the project.

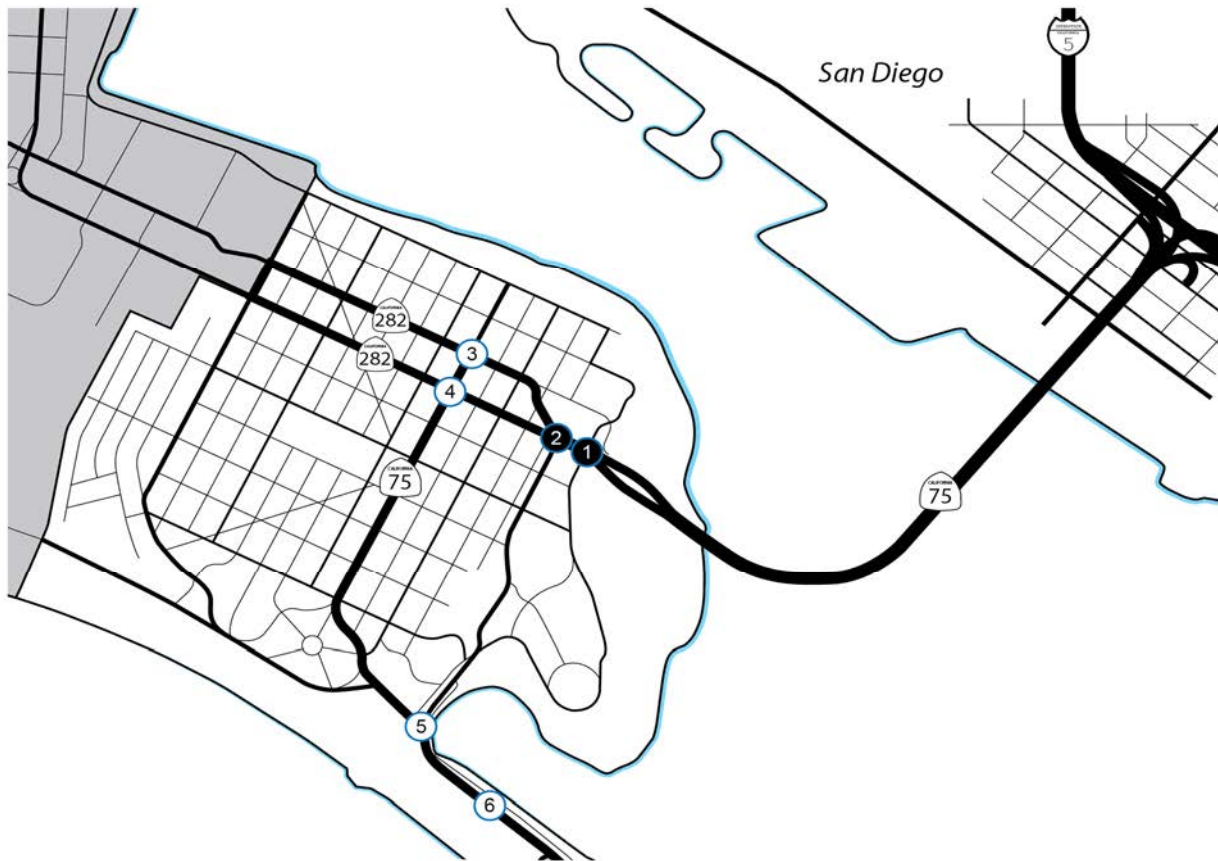
In general, the intersections in Coronado and at NAB Coronado have a decrease in delay with the addition of Alternative 1 and the intersections in Imperial Beach have an increase in delay. This is a result of a shift in destination from NAB Coronado to SSTC-South for the personnel that would utilize the Proposed Action.

Intersection Lane Vehicle Analysis

Both signalized intersections at the Palm Avenue and I-5 interchange would operate below or approaching capacity during both peak periods.

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1 <div> <div>10 / 56</div> <div>Glorietta Blvd</div> <div> <div>532 / 240</div> <div>3229 / 1665</div> </div> <div>Fourth St (SR-75)</div> </div> <div> <div>1311 / 3520</div> <div>35 / 18</div> </div> <div> <div>477 / 903</div> </div>	2 <div> <div>3128 / 1702</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1172 / 3286</div> <div>203 / 131</div> </div> <div> <div>Pomona Ave</div> <div>231 / 184</div> </div>	3 <div> <div>6 / 15</div> <div>259 / 767</div> </div> <div> <div>Orange Ave (SR-75)</div> <div> <div>250 / 87</div> <div>1536 / 537</div> <div>1522 / 977</div> </div> <div>Third Street (SR-75)</div> </div> <div> <div>43 / 86</div> <div>94 / 244</div> </div>	4 <div> <div>1404 / 1093</div> <div>435 / 672</div> </div> <div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> </div> <div> <div>501 / 1701</div> <div>68 / 48</div> </div> <div> <div>128 / 337</div> <div>215 / 416</div> </div>
5 <div> <div>1127 / 1222</div> <div>Orange Ave (SR-75)</div> <div> <div>7 / 13</div> <div>225 / 181</div> </div> <div>Pomona Ave</div> </div> <div> <div>1151 / 896</div> <div>624 / 698</div> </div> <div> <div>Silver Strand Blvd (SR-75)</div> </div>	6 <div> <div>38 / 158</div> <div>1274 / 1455</div> <div>41 / 70</div> </div> <div> <div>Silver Strand Blvd (SR-75)</div> <div> <div>6 / 26</div> <div>0 / 11</div> <div>8 / 27</div> </div> <div>Avenidas De Las Arenas</div> </div> <div> <div>49 / 150</div> <div>3 / 11</div> <div>11 / 30</div> </div> <div> <div>21 / 24</div> <div>1372 / 1509</div> <div>27 / 52</div> </div>	<div> <div>CORONADO</div> <div>Study intersections 1 - 6</div> </div>	



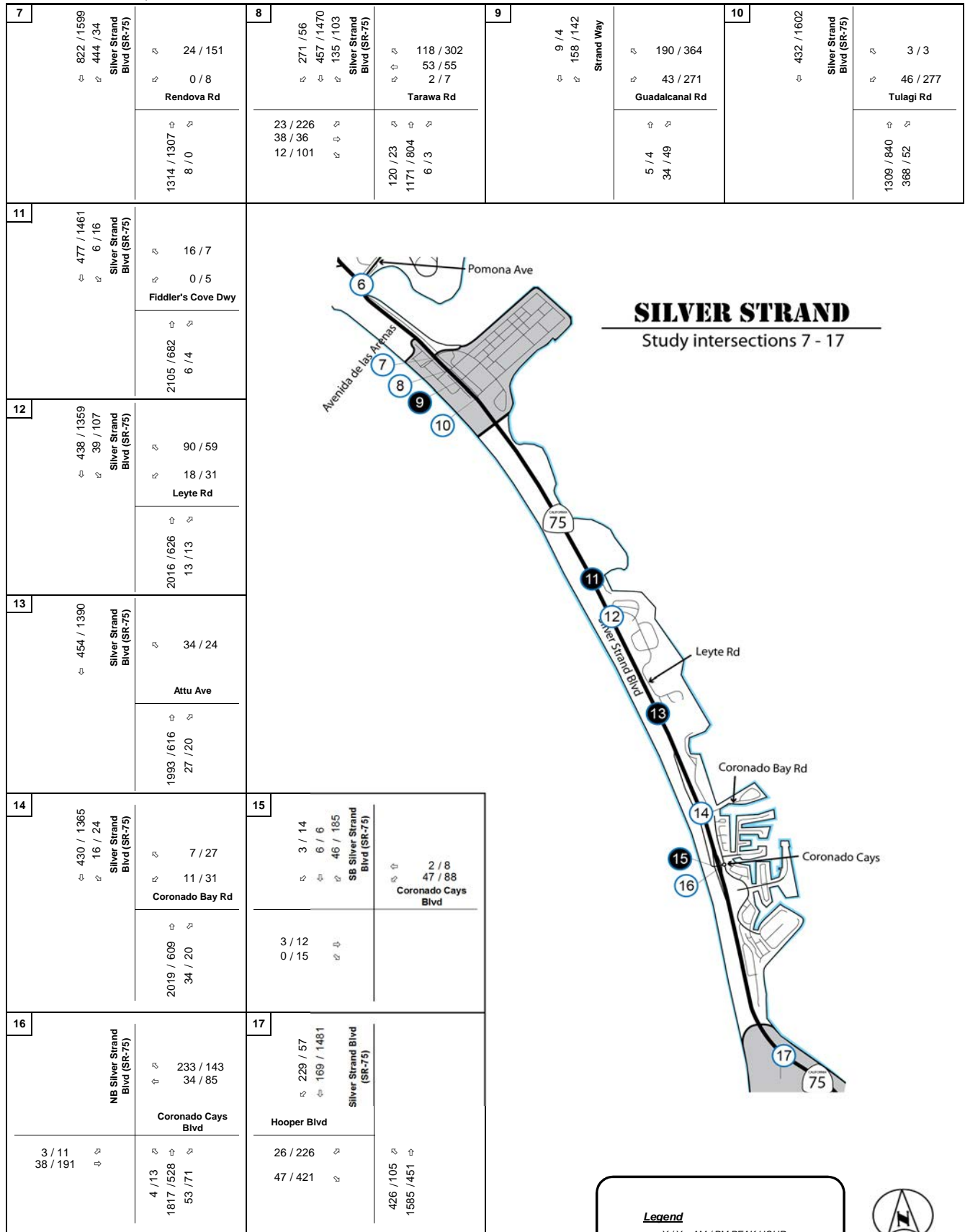
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

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<div>18</div> <div> <div>46 / 201</div> <div>169 / 1441</div> <div>4 / 19</div> <div>Silver Strand Blvd (SR-75)</div> <div>21 / 7</div> <div>8 / 4</div> <div>50 / 19</div> <div>Rainbow Dr</div> <div>409 / 91</div> <div>2 / 7</div> <div>40 / 70</div> <div>27 / 76</div> <div>1883 / 407</div> <div>11 / 58</div> </div>	<div>19</div> <div> <div>54 / 22</div> <div>43 / 27</div> <div>21 / 25</div> <div>7th St</div> <div>18 / 36</div> <div>1734 / 464</div> <div>Silver Strand Blvd (SR-75)</div> <div>8 / 59</div> <div>252 / 1391</div> <div>20 / 62</div> <div>42 / 20</div> <div>24 / 41</div> <div>2 / 5</div> </div>	<div>20</div> <div> <div>14 / 4</div> <div>Delaware St</div> <div>9 / 39</div> <div>1743 / 499</div> <div>407 / 516</div> <div>Silver Strand Blvd (SR-75)</div> <div>269 / 1422</div> </div>	<div>21</div> <div> <div>5 / 9</div> <div>48 / 105</div> <div>Silver Strand Blvd</div> <div>105 / 41</div> <div>130 / 314</div> <div>Palm Ave</div> <div>10 / 4</div> <div>241 / 216</div> <div>Dwy</div> </div>
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<div>26</div> <div> <div>26 / 27</div> <div>47 / 82</div> <div>93 / 179</div> <div>45 / 135</div> <div>1881 / 875</div> <div>25 / 60</div> <div>Palm Ave (SR-75)</div> <div>22 / 43</div> <div>700 / 1717</div> <div>40 / 130</div> <div>171 / 102</div> <div>38 / 93</div> <div>53 / 65</div> </div>	<div>27</div> <div> <div>16 / 15</div> <div>11 / 14</div> <div>57 / 66</div> <div>Florida St</div> <div>13 / 57</div> <div>2060 / 1293</div> <div>21 / 51</div> <div>Palm Ave (SR-75)</div> <div>3 / 21</div> <div>938 / 2008</div> <div>36 / 59</div> <div>19 / 22</div> <div>5 / 11</div> <div>32 / 36</div> </div>	<div>28</div> <div> <div>16 / 21</div> <div>37 / 46</div> <div>174 / 159</div> <div>13th St</div> <div>54 / 84</div> <div>1909 / 1369</div> <div>100 / 162</div> <div>Palm Ave (SR-75)</div> <div>4 / 28</div> <div>1011 / 1887</div> <div>66 / 206</div> <div>152 / 134</div> <div>20 / 42</div> <div>94 / 132</div> </div>	<div>29</div> <div> <div>22 / 11</div> <div>3 / 11</div> <div>40 / 25</div> <div>16th St</div> <div>13 / 17</div> <div>2043 / 1677</div> <div>45 / 177</div> <div>Palm Ave (SR-75)</div> <div>15 / 10</div> <div>1285 / 2018</div> <div>27 / 52</div> <div>17 / 41</div> <div>7 / 9</div> <div>51 / 84</div> </div>
<div>30</div> <div> <div>80 / 236</div> <div>96 / 248</div> <div>244 / 610</div> <div>19th St</div> <div>223 / 576</div> <div>1978 / 1685</div> <div>254 / 340</div> <div>Palm Ave (SR-75)</div> <div>95 / 196</div> <div>1298 / 1955</div> <div>31 / 28</div> <div>79 / 69</div> <div>75 / 184</div> <div>800 / 553</div> </div>	<div>31</div> <div> <div>1325 / 1727</div> <div>161 / 456</div> <div>I-5 SB Exit Ramp</div> <div>1130 / 880</div> <div>Palm Ave (SR-75)</div> <div>295 / 527</div> </div>	<div>32</div> <div> <div>I-5 NB Ramps</div> <div>543 / 260</div> <div>443 / 547</div> <div>Palm Ave (SR-75)</div> <div>456 / 976</div> <div>793 / 446</div> <div>2 / 3</div> <div>149 / 111</div> </div>	<div>33</div> <div> <div>14 / 37</div> <div>Silver Strand Blvd</div> <div>YMCA Dwy</div> <div>4 / 11</div> <div>5 / 9</div> <div>66 / 4</div> </div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

Mitigation

As mentioned, five study intersections would experience significant impacts that would require mitigation with the addition of Alternative 1 project trips with one CVN in port. The proposed mitigation measures that would improve intersection operations to be equal to or better than No-Action Alternative conditions are described below. **Table 5-3** shows the intersection delay and LOS with the proposed mitigation measures in place.

M1. Intersection #10, Silver Strand Boulevard (SR-75) & Tulagi Road

The significant impact at this intersection during the PM peak-hour can be mitigated by modifying the traffic signal timing by extending the green time on Silver Strand Boulevard (SR-75) by ten seconds to reflect a different traffic pattern that would be in place with the addition of the Proposed Action. The traffic signal is uncoordinated and the cycle length would be adjusted to include this additional ten seconds. No changes to the existing right-of-way and pavement width would be required.

M2. Intersection #18, Silver Strand Boulevard (SR-75) & Rainbow Drive

The significant impact at this intersection during the AM peak-hour can be mitigated by modifying the lane configuration on the eastbound Rainbow Drive approach. Changing the existing through-right lane into a left-through-right lane and extending the existing turn pocket to the intersection of Bonito Avenue increases capacity and queue area for this approach. The extension of the turn pocket would result in a loss of two 2-hour limit parking spaces. No changes to the existing right-of-way and pavement width would be required. This improvement is illustrated in **Figure 5-3**.

M3. Intersection #26, 9th Street & Palm Avenue (SR-75)

The significant impact at this intersection during the PM peak-hour can be mitigated by restriping the northbound and southbound approaches to have exclusive left-turn lanes and a shared through-right lane. The signal operations could then be changed from split phasing to protected left-turn phasing for these approaches. The intersection is currently split-phase for northbound and southbound movements and requires a significant amount of time for pedestrians to cross Palm Avenue twice: once with the southbound movements and once with the northbound movements. By changing the phasing, it allows the northbound and southbound through movements and pedestrian crossings to occur simultaneously, ultimately reducing the amount of time needed for 9th Street and providing more green time for Palm Avenue (SR-75). This improvement is illustrated in **Figure 5-4**.

M4. Intersection #28, 13th Street & Palm Avenue (SR-75)

The significant impact at this intersection during the PM peak-hour can be mitigated by removing the pedestrian crossing on the east leg of the intersection and shortening the corresponding northbound split time. The intersection is currently split-phase for northbound and southbound movements and requires a significant amount of time for pedestrians to cross Palm Avenue twice: once with the southbound movements and once with the northbound movements. By providing just a single crosswalk, it allows more green time to be assigned to the heavy movements on Palm Avenue (SR-75). This improvement is illustrated in **Figure 5-5**.

M5. Intersection #30, Saturn Boulevard/19th Street & Palm Avenue (SR-75)

The significant impact at this intersection during the PM peak-hour can be mitigated with the addition of a second westbound left-turn lane. There is currently a single westbound left-turn lane adjacent to an eight-foot wide raised median. To fit in a second left-turn lane within the existing curb width, the median would need to be reduced to four-feet wide and the eastbound through lane widths would need to be narrowed slightly. The bike lane would operate similar to its current layout. This improvement is illustrated in **Figure 5-6**. Although the improvement does not improve intersection operations to LOS D or better, it restores operations to an average delay better than the No-Action Alternative and therefore mitigates the significant project impact.

Table 5-3. Year 2024 with 1 CVN Alternative 1 Intersection Mitigation Summary

INTERSECTION		PROPOSED MITIGATION	BEFORE MITIGATION		AFTER MITIGATION	
			AM	PM	AM	PM
10	Silver Strand Blvd (SR-75) & Tulagi Rd	Change signal timings to reflect new traffic patterns	3.6 (A)	78.1 (E)	3.6 (A)	49.6 (D)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	Change through-right lane on Rainbow Dr to a left-through-right lane and extend storage pockets	141.6 (F)	47.2 (D)	53.7 (D)	28.9 (C)
26	9 th St & Palm Ave (SR-75)	Modify northbound/southbound approaches to have protected lefts instead of split phasing	49.8 (D)	58.8 (E)	43.0 (D)	49.5 (D)
28	13 th St & Palm Ave (SR-75)	Remove the northbound pedestrian crossing and shorten the northbound split time	40.2 (D)	59.4 (E)	39.6 (D)	53.6 (D)
30	Saturn Blvd/19 th St & Palm Ave (SR-75)	Add a second WB left-turn lane along Palm Ave (SR-75)	61.1 (E)	215.7 (F)	53.1 (D)	106.4 (F)

Note: Table reflects intersection Delay (LOS). Although all mitigations may not improve operations to LOS D or better, it restores average delay to better than what is experienced under the No-Action Alternative.









Alternative 3

Road Network

The only roadway network change associated with Alternative 3 is implementation of P947, the new ECP at SSTC-South and new signal at the intersection of Silver Strand Boulevard (SR-75) and Hooper Boulevard. All other roadways and intersections within the study area would remain the same with the addition of Alternative 3.

Traffic Volumes

Traffic associated with the completed construction of the Proposed Action Alternative 3 was added to the No-Action Alternative volumes. **Figure 5-7** shows the resulting Year 2024 Alternative 3 Conditions volumes with 1 CVN in port.

Intersection Analysis

All intersections would operate at LOS D or better during both peak periods, except at the following locations:

- | | |
|---|------------------------------------|
| ▪ #1 Glorietta Boulevard and Fourth Street (SR-75) | <i>AM peak (LOS E)</i> |
| ▪ #2 Fourth Street (SR-75) and Pomona Avenue | <i>PM peak (LOS F)</i> |
| ▪ #4 Orange Avenue (SR-75) and Fourth Street (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #10 Silver Strand Boulevard (SR-75) and Tulagi Road | <i>PM peak (LOS E)</i> |
| ▪ #18 Silver Strand Boulevard (SR-75) and Rainbow Drive | <i>AM peak (LOS E)</i> |
| ▪ #19 7 th Street and Silver Strand Boulevard (SR-75) | <i>AM & PM peaks (LOS F/E)</i> |
| ▪ #23 Palm Avenue and Rainbow Drive | <i>AM peak (LOS E)</i> |
| ▪ #26 9th Street and Palm Avenue (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #28 13th Street and Palm Avenue (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75) | <i>AM & PM peak (LOS E/F)</i> |

Of the intersections that operate at an unacceptable LOS E or F, five (shown in **bold**) would result in a significant impact that would need to be mitigated by the project. These are the same five locations that would have an impact for Alternative 1.

In general, the intersections in Coronado are similar to the No-Action Alternative, intersections at NAB Coronado have a decrease in delay, and intersections in Imperial Beach have an increase in delay with the addition of Alternative 3. This is primarily a result of a shift in destination from NAB Coronado to SSTC-South for some personnel that currently go to NAB Coronado.

Intersection Lane Vehicle Analysis

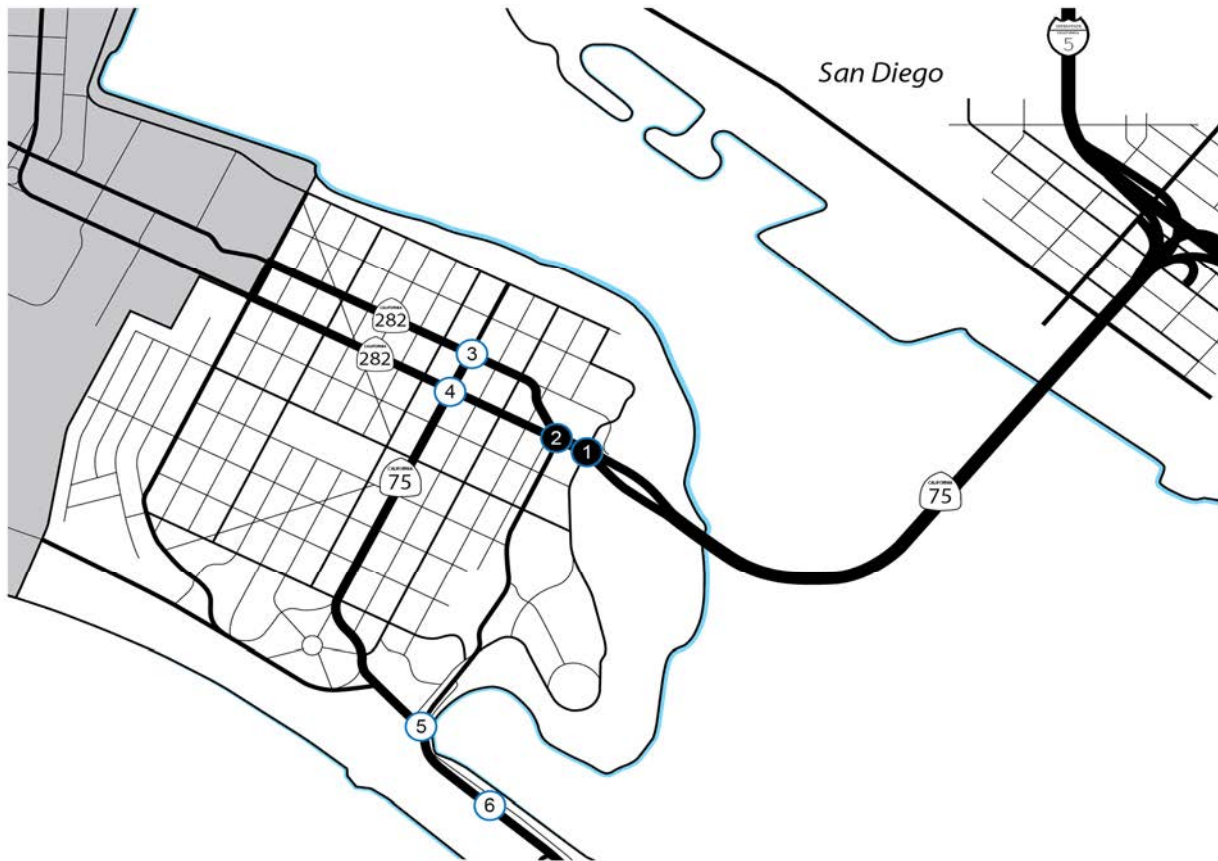
Both signalized intersections at the Palm Avenue and I-5 interchange would operate below or approaching capacity during both peak periods.

Mitigation

As mentioned, five study intersections would experience significant impacts that would require mitigation with the addition of Alternative 3 project trips. The proposed mitigation measures that would allow the intersections to operate at or better than the No Action Alternative conditions for Alternative 3 are the same that were previously described for Alternative 1. A summary of the mitigation and the operation analysis results with the mitigations in place are shown in **Table 5-4**.

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1 <div> <div>10 / 56</div> <div>Glorietta Blvd</div> <div> <div>532 / 240</div> <div>3278 / 1677</div> </div> <div>Fourth St (SR-75)</div> </div> <div> <div>1315 / 3565</div> <div>35 / 18</div> </div> <div> <div>477 / 903</div> </div>	2 <div> <div>3177 / 1714</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1176 / 3331</div> <div>203 / 131</div> </div> <div> <div>Pomona Ave</div> <div>231 / 190</div> </div>	3 <div> <div>6 / 15</div> <div>259 / 767</div> </div> <div> <div>Orange Ave (SR-75)</div> <div> <div>250 / 87</div> <div>1546 / 540</div> <div>1561 / 986</div> </div> <div>Third Street (SR-75)</div> </div> <div> <div>42 / 87</div> <div>94 / 244</div> </div>	4 <div> <div>1443 / 1102</div> <div>435 / 672</div> </div> <div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> </div> <div> <div>502 / 1711</div> <div>68 / 49</div> </div> <div> <div>127 / 338</div> <div>218 / 451</div> </div>
5 <div> <div>1166 / 1232</div> <div>Orange Ave (SR-75)</div> </div> <div> <div>7 / 13</div> <div>225 / 181</div> </div> <div> <div>Pomona Ave</div> <div> <div>1155 / 929</div> <div>624 / 704</div> </div> </div>	6 <div> <div>38 / 158</div> <div>1313 / 1465</div> <div>41 / 70</div> </div> <div> <div>Silver Strand Blvd (SR-75)</div> <div> <div>6 / 26</div> <div>0 / 11</div> <div>8 / 27</div> </div> <div>Avenidas De Las Arenas</div> </div> <div> <div>49 / 150</div> <div>3 / 11</div> <div>11 / 30</div> </div> <div> <div>21 / 24</div> <div>1376 / 1548</div> <div>27 / 52</div> </div>	<div> <div>CORONADO</div> <div>Study intersections 1 - 6</div> </div>	



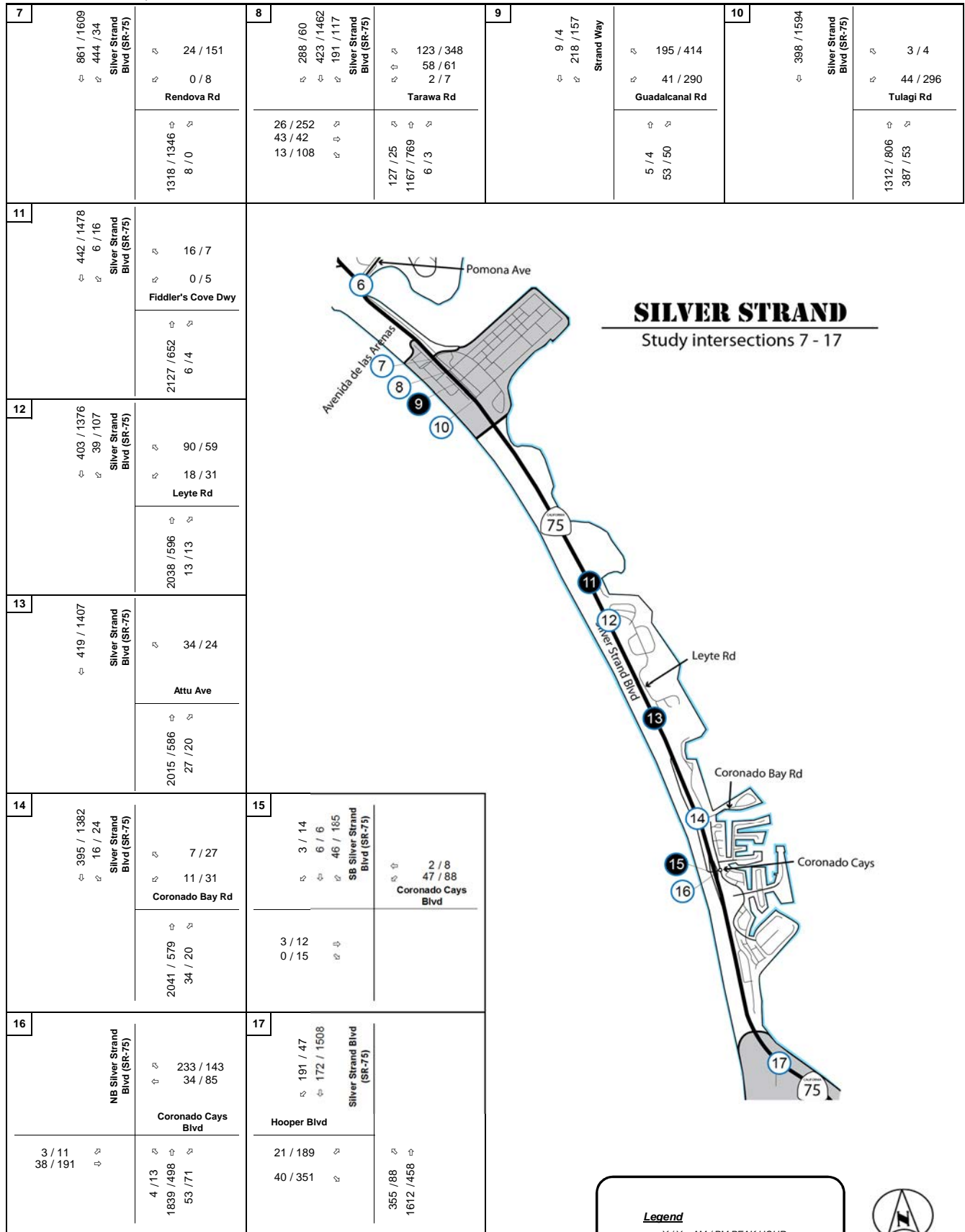
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

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<div>18</div> <div> <div>46 / 201</div> <div>164 / 1399</div> <div>4 / 19</div> <div>Silver Strand Blvd (SR-75)</div> <div>21 / 7</div> <div>8 / 4</div> <div>50 / 19</div> <div>Rainbow Dr</div> <div>408 / 90</div> <div>2 / 7</div> <div>40 / 70</div> <div>27 / 76</div> <div>1839 / 396</div> <div>11 / 58</div> </div>	<div>19</div> <div> <div>54 / 22</div> <div>43 / 27</div> <div>21 / 25</div> <div>7th St</div> <div>18 / 36</div> <div>1690 / 453</div> <div>Silver Strand Blvd (SR-75)</div> <div>8 / 59</div> <div>247 / 1348</div> <div>20 / 62</div> <div>41 / 19</div> <div>24 / 41</div> <div>2 / 5</div> </div>	<div>20</div> <div> <div>14 / 4</div> <div>Delaware St</div> <div>9 / 39</div> <div>1699 / 488</div> <div>407 / 516</div> <div>Silver Strand Blvd (SR-75)</div> <div>264 / 1379</div> </div>	<div>21</div> <div> <div>5 / 9</div> <div>48 / 105</div> <div>Silver Strand Blvd</div> <div>105 / 41</div> <div>130 / 313</div> <div>Palm Ave</div> <div>10 / 4</div> <div>239 / 215</div> <div>Dwy</div> </div>
<div>22</div> <div> <div>15 / 14</div> <div>11 / 34</div> <div>12 / 29</div> <div>3rd St</div> <div>25 / 25</div> <div>211 / 327</div> <div>27 / 86</div> <div>Palm Ave</div> <div>8 / 8</div> <div>278 / 297</div> <div>5 / 13</div> <div>12 / 15</div> <div>15 / 39</div> <div>127 / 69</div> </div>	<div>23</div> <div> <div>70 / 144</div> <div>18 / 53</div> <div>Rainbow Dr</div> <div>154 / 40</div> <div>335 / 458</div> <div>Palm Ave</div> <div>228 / 74</div> <div>428 / 425</div> </div>	<div>24</div> <div> <div>28 / 31</div> <div>28 / 45</div> <div>2 / 13</div> <div>7th St</div> <div>0 / 4</div> <div>336 / 460</div> <div>27 / 32</div> <div>Palm Ave</div> <div>17 / 29</div> <div>421 / 434</div> <div>16 / 30</div> <div>66 / 55</div> <div>39 / 26</div> <div>82 / 23</div> </div>	<div>25</div> <div> <div>506 / 482</div> <div>5 / 9</div> <div>Delaware St</div> <div>3 / 7</div> <div>6 / 3</div> <div>Palm Ave</div> </div>
<div>26</div> <div> <div>26 / 27</div> <div>47 / 82</div> <div>93 / 179</div> <div>45 / 135</div> <div>1838 / 865</div> <div>25 / 60</div> <div>Palm Ave (SR-75)</div> <div>22 / 43</div> <div>695 / 1675</div> <div>40 / 130</div> <div>170 / 101</div> <div>38 / 93</div> <div>53 / 65</div> </div>	<div>27</div> <div> <div>16 / 15</div> <div>11 / 14</div> <div>57 / 66</div> <div>Florida St</div> <div>13 / 57</div> <div>2017 / 1283</div> <div>21 / 51</div> <div>Palm Ave (SR-75)</div> <div>3 / 21</div> <div>933 / 1966</div> <div>36 / 59</div> <div>19 / 22</div> <div>5 / 11</div> <div>32 / 36</div> </div>	<div>28</div> <div> <div>16 / 21</div> <div>37 / 46</div> <div>174 / 159</div> <div>13th St</div> <div>54 / 84</div> <div>1865 / 1358</div> <div>100 / 162</div> <div>Palm Ave (SR-75)</div> <div>4 / 28</div> <div>1005 / 1844</div> <div>66 / 206</div> <div>151 / 133</div> <div>20 / 42</div> <div>94 / 132</div> </div>	<div>29</div> <div> <div>22 / 11</div> <div>3 / 11</div> <div>40 / 25</div> <div>16th St</div> <div>13 / 17</div> <div>1999 / 1666</div> <div>45 / 177</div> <div>Palm Ave (SR-75)</div> <div>15 / 10</div> <div>1279 / 1975</div> <div>27 / 52</div> <div>17 / 41</div> <div>7 / 9</div> <div>51 / 84</div> </div>
<div>30</div> <div> <div>80 / 236</div> <div>96 / 248</div> <div>244 / 610</div> <div>19th St</div> <div>223 / 576</div> <div>1935 / 1675</div> <div>254 / 340</div> <div>Palm Ave (SR-75)</div> <div>95 / 196</div> <div>1294 / 1912</div> <div>31 / 28</div> <div>78 / 68</div> <div>75 / 184</div> <div>800 / 553</div> </div>	<div>31</div> <div> <div>1282 / 1717</div> <div>161 / 456</div> <div>I-5 SB Exit Ramp</div> <div>1131 / 880</div> <div>Palm Ave (SR-75)</div> <div>295 / 527</div> </div>	<div>32</div> <div> <div>I-5 NB Ramps</div> <div>543 / 260</div> <div>443 / 547</div> <div>Palm Ave (SR-75)</div> <div>456 / 976</div> <div>793 / 446</div> <div>2 / 3</div> <div>149 / 111</div> </div>	<div>33</div> <div> <div>14 / 37</div> <div>Silver Strand Blvd</div> <div>YMCA Dwy</div> <div>4 / 11</div> <div>5 / 9</div> <div>66 / 4</div> </div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

Table 5-4. Year 2024 with 1 CVN Alternative 3 Intersection Mitigation Summary

INTERSECTION	PROPOSED MITIGATION	BEFORE MITIGATION		AFTER MITIGATION	
		AM	PM	AM	PM
10 Silver Strand Blvd (SR-75) & Tulagi Rd	Change signal timings to reflect new traffic patterns	3.5 (A)	76.6 (E)	3.5 (A)	48.5 (D)
18 Silver Strand Blvd (SR-75) & Rainbow Dr	Change through-right lane on Rainbow Dr to a left-through-right lane and extend storage pockets	132.5 (F)	41.8 (D)	51.7 (D)	28.0 (C)
26 9 th St & Palm Ave (SR-75)	Modify northbound/southbound approaches to have protected lefts instead of split phasing	47.0 (D)	56.3 (E)	41.8 (D)	48.6 (D)
28 13 th St & Palm Ave (SR-75)	Remove the northbound pedestrian crossing and shorten the northbound split time	39.6 (D)	56.7 (E)	39.2 (D)	52.4 (D)
30 Saturn Blvd/19 th St & Palm Ave (SR-75)	Add a second WB left-turn lane along Palm Ave (SR-75)	58.9 (E)	210.0 (F)	48.8 (D)	102.6 (F)

Note: Table reflects intersection Delay (LOS). Although all mitigations may not improve operations to LOS D or better, it restores average delay to better than what is experienced under the No-Action Alternative.

Plus Project without P947 Conditions

P947 is one of the multiple construction projects included in the Proposed Action and would construct a new ECP at SSTC-South located along Silver Strand Boulevard (SR-75). The implementation of P947 provides traffic relief from the local streets within Imperial Beach by shifting access to SSTC-South onto SR-75. This scenario was analyzed to determine traffic impacts if P947 is not constructed until the end of the ten-year development period, or not implemented at all. The results of the analyses are summarized below.

Alternatives 1 and 2

Road Network

It is assumed that all intersections and roadway segments in the study area would remain the same as Existing Conditions with the development of Proposed Action Alternative 1 without P947.

Traffic Volumes

Traffic associated with the completed construction of the Proposed Action Alternative 1 without P947 was added to the No-Action Alternative volumes. **Figure 5-8** shows the resulting volumes.

Intersection Analysis

All intersections would operate at LOS D or better during both peak periods, except at the following locations:

- | | |
|--|------------------------------------|
| ▪ #1 Glorietta Boulevard and Fourth Street (SR-75) | <i>AM peak (LOS E)</i> |
| ▪ #2 Fourth Street (SR-75) and Pomona Avenue | <i>PM peak (LOS F)</i> |
| ▪ #4 Orange Avenue (SR-75) and Fourth Street (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #10 Silver Strand Boulevard (SR-75) and Tulagi Road | <i>PM peak (LOS E)</i> |
| ▪ #18 Silver Strand Boulevard (SR-75) and Rainbow Drive | <i>AM peak (LOS E)</i> |
| ▪ #19 7th Street and Silver Strand Boulevard (SR-75) | <i>AM & PM peaks (LOS F/E)</i> |
| ▪ #21 Silver Strand Boulevard and Palm Avenue | <i>PM peak (LOS F)</i> |
| ▪ #22 3rd Street and Palm Avenue | <i>AM & PM peaks (LOS F/F)</i> |
| ▪ #23 Palm Avenue and Rainbow Drive | <i>AM & PM peaks (LOS F/F)</i> |
| ▪ #26 9th Street and Palm Avenue (SR-75) | <i>AM & PM peaks (LOS E/E)</i> |
| ▪ #28 13th Street and Palm Avenue (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75) | <i>AM & PM peak (LOS E/F)</i> |
| ▪ #31 I-5 SB Exit Ramp and Palm Avenue (SR-75) | <i>PM peak (LOS E)</i> |

Of the intersections that operate at an unacceptable LOS E or F, nine (shown in **bold**) would result in a significant impact that would need to be mitigated by the project.

The addition of Alternative 1 traffic without P947 would result in impacts at three locations on local streets in Imperial Beach that would not be impacts if P947 were in place.

Intersecting Lane Vehicle Analysis

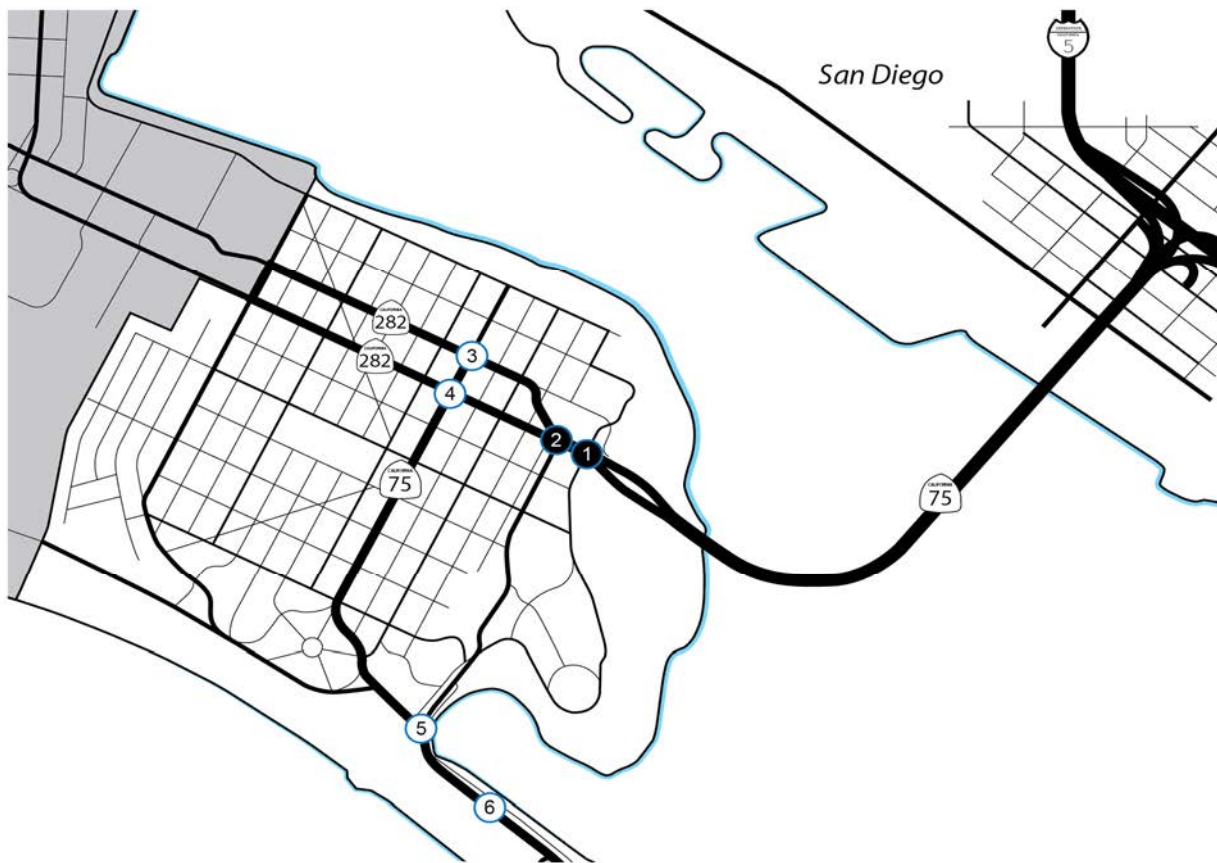
Both signalized intersections at the Palm Avenue and I-5 interchange would operate below or approaching capacity during both peak periods.

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1 <div> <div>10 / 56</div> <div>Glorietta Blvd</div> <div> <div>532 / 240</div> <div>3164 / 1649</div> <div>Fourth St (SR-75)</div> </div> </div> <div> <div>1303 / 3456</div> <div>35 / 18</div> </div> <div> <div>477 / 903</div> </div>	2 <div> <div>3063 / 1686</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1164 / 3222</div> <div>203 / 131</div> <div>Pomona Ave</div> </div> <div> <div>231 / 184</div> </div>	3 <div> <div>6 / 15</div> <div>259 / 767</div> <div>Orange Ave (SR-75)</div> </div> <div> <div>250 / 87</div> <div>1536 / 537</div> <div>1457 / 961</div> <div>Third Street (SR-75)</div> </div> <div> <div>43 / 86</div> <div>94 / 244</div> </div>	4 <div> <div>1339 / 1077</div> <div>435 / 672</div> <div>Orange Ave (SR-75)</div> </div> <div> <div>501 / 1701</div> <div>68 / 48</div> </div> <div> <div>128 / 337</div> <div>207 / 352</div> <div>Fourth St (SR-75)</div> </div>
5 <div> <div>1062 / 1206</div> <div>Orange Ave (SR-75)</div> </div> <div> <div>7 / 13</div> <div>225 / 181</div> <div>Pomona Ave</div> </div> <div> <div>1143 / 831</div> <div>624 / 698</div> </div>	6 <div> <div>38 / 158</div> <div>1209 / 1439</div> <div>41 / 70</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>6 / 26</div> <div>0 / 11</div> <div>8 / 27</div> <div>Avenidas De Las Arenas</div> </div> <div> <div>49 / 150</div> <div>3 / 11</div> <div>11 / 30</div> </div> <div> <div>21 / 24</div> <div>1364 / 1444</div> <div>27 / 52</div> </div>		

CORONADO

Study intersections 1 - 6



Legend

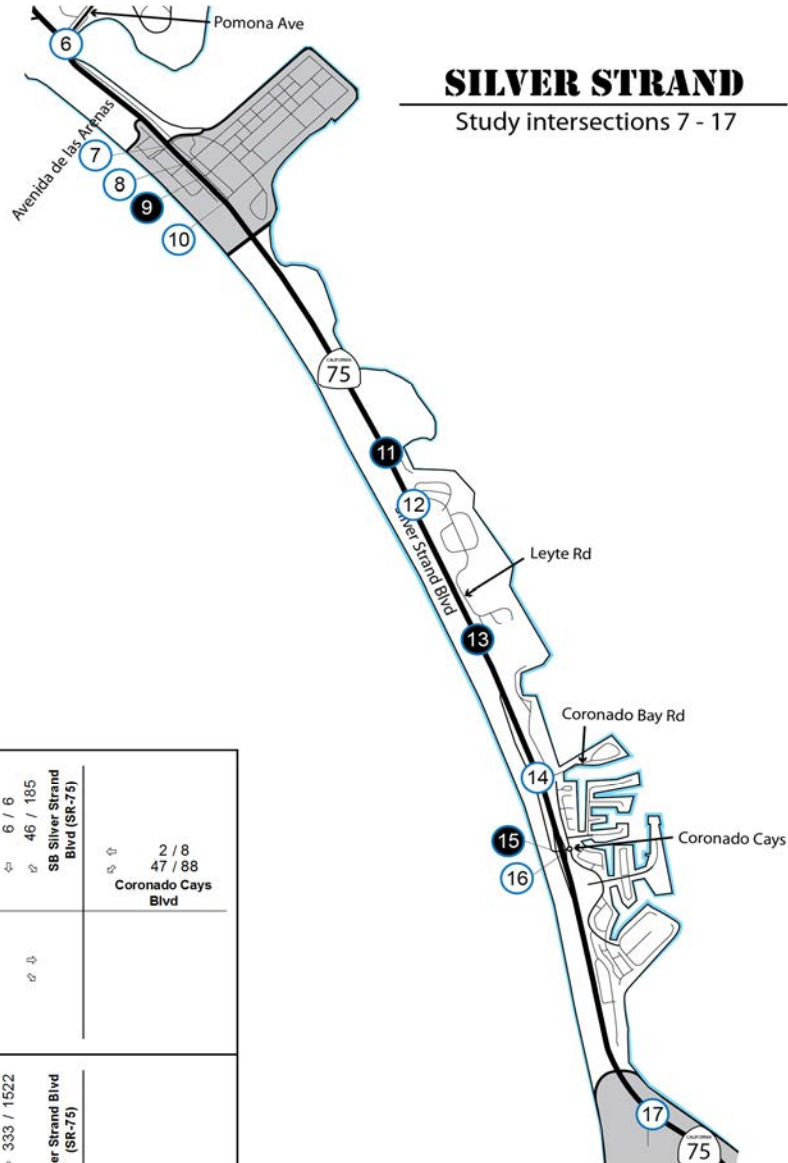
X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

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<div>7</div> <div> <div> <div>757 / 1583</div> <div>444 / 34</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>24 / 151</div> <div>0 / 8</div> <div>Rendova Rd</div> </div> <div> <div>1306 / 1242</div> <div>8 / 0</div> </div> </div>	<div>8</div> <div> <div> <div>271 / 56</div> <div>392 / 1454</div> <div>135 / 103</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>118 / 302</div> <div>53 / 55</div> <div>2 / 7</div> <div>Tarawa Rd</div> </div> <div> <div>23 / 226</div> <div>38 / 36</div> <div>12 / 101</div> </div> <div> <div>120 / 23</div> <div>1162 / 726</div> <div>6 / 3</div> </div> </div>	<div>9</div> <div> <div> <div>9 / 4</div> <div>158 / 142</div> <div>Strand Way</div> </div> <div> <div>190 / 364</div> <div>43 / 271</div> <div>Guadalcanal Rd</div> </div> <div> <div>5 / 4</div> <div>34 / 49</div> </div> </div>	<div>10</div> <div> <div> <div>367 / 1586</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>3 / 3</div> <div>46 / 277</div> <div>Tulagi Rd</div> </div> <div> <div>1300 / 762</div> <div>368 / 52</div> </div> </div>
<div>11</div> <div> <div> <div>412 / 1445</div> <div>6 / 16</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>16 / 7</div> <div>0 / 5</div> <div>Fiddler's Cove Dwy</div> </div> <div> <div>2097 / 618</div> <div>6 / 4</div> </div> </div>			
<div>12</div> <div> <div> <div>373 / 1343</div> <div>39 / 107</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>90 / 59</div> <div>18 / 31</div> <div>Leyte Rd</div> </div> <div> <div>2008 / 562</div> <div>13 / 13</div> </div> </div>			
<div>13</div> <div> <div> <div>389 / 1374</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>34 / 24</div> <div>Attu Ave</div> </div> <div> <div>1985 / 552</div> <div>27 / 20</div> </div> </div>			
<div>14</div> <div> <div> <div>365 / 1349</div> <div>16 / 24</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>7 / 27</div> <div>11 / 31</div> <div>Coronado Bay Rd</div> </div> <div> <div>2011 / 545</div> <div>34 / 20</div> </div> </div>	<div>15</div> <div> <div> <div>3 / 14</div> <div>6 / 6</div> <div>46 / 185</div> <div>SB Silver Strand Blvd (SR-75)</div> </div> <div> <div>2 / 8</div> <div>47 / 88</div> <div>Coronado Cays Blvd</div> </div> <div> <div>3 / 12</div> <div>0 / 15</div> </div> </div>		
<div>16</div> <div> <div> <div>NB Silver Strand Blvd (SR-75)</div> </div> <div> <div>233 / 143</div> <div>34 / 85</div> <div>Coronado Cays Blvd</div> </div> <div> <div>3 / 11</div> <div>38 / 191</div> </div> <div> <div>4 / 13</div> <div>1809 / 464</div> <div>53 / 71</div> </div> </div>	<div>17</div> <div> <div> <div>333 / 1522</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>Hooper Blvd</div> </div> <div> <div>1603 / 613</div> </div> </div>		



Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

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<div>18</div> <div> <div>209 / 236</div> <div>122 / 1027</div> <div>4 / 19</div> <div>Silver Strand Blvd (SR-75)</div> <div>21 / 7</div> <div>8 / 4</div> <div>50 / 19</div> <div>Rainbow Dr</div> <div>420 / 251</div> <div>2 / 7</div> <div>40 / 70</div> <div>27 / 76</div> <div>1464 / 303</div> <div>11 / 58</div> </div>	<div>19</div> <div> <div>54 / 22</div> <div>43 / 27</div> <div>21 / 25</div> <div>7th St</div> <div>18 / 36</div> <div>1321 / 362</div> <div>Silver Strand Blvd (SR-75)</div> <div>8 / 59</div> <div>206 / 983</div> <div>19 / 56</div> <div>35 / 18</div> <div>24 / 41</div> <div>2 / 5</div> </div>	<div>20</div> <div> <div>14 / 4</div> <div>Delaware St</div> <div>9 / 39</div> <div>1330 / 397</div> <div>885 / 634</div> <div>Silver Strand Blvd (SR-75)</div> <div>223 / 1014</div> </div>	<div>21</div> <div> <div>6 / 15</div> <div>120 / 746</div> <div>Silver Strand Blvd</div> <div>753 / 201</div> <div>129 / 308</div> <div>Palm Ave</div> <div>17 / 6</div> <div>234 / 214</div> <div>Dwy</div> </div>
<div>22</div> <div> <div>15 / 14</div> <div>11 / 34</div> <div>12 / 29</div> <div>3rd St</div> <div>25 / 25</div> <div>858 / 482</div> <div>27 / 86</div> <div>Palm Ave</div> <div>8 / 8</div> <div>345 / 937</div> <div>5 / 13</div> <div>12 / 15</div> <div>15 / 39</div> <div>127 / 69</div> </div>	<div>23</div> <div> <div>233 / 179</div> <div>18 / 53</div> <div>Rainbow Dr</div> <div>154 / 40</div> <div>820 / 578</div> <div>Palm Ave</div> <div>240 / 235</div> <div>482 / 904</div> </div>	<div>24</div> <div> <div>28 / 31</div> <div>27 / 39</div> <div>2 / 13</div> <div>7th St</div> <div>0 / 4</div> <div>814 / 578</div> <div>27 / 32</div> <div>Palm Ave</div> <div>17 / 29</div> <div>474 / 906</div> <div>17 / 36</div> <div>73 / 57</div> <div>33 / 25</div> <div>82 / 23</div> </div>	<div>25</div> <div> <div>559 / 954</div> <div>5 / 9</div> <div>Delaware St</div> <div>3 / 7</div> <div>6 / 3</div> <div>Palm Ave</div> </div>
<div>26</div> <div> <div>26 / 27</div> <div>47 / 82</div> <div>93 / 179</div> <div>45 / 135</div> <div>1947 / 892</div> <div>25 / 60</div> <div>Palm Ave (SR-75)</div> <div>22 / 43</div> <div>708 / 1782</div> <div>40 / 130</div> <div>171 / 102</div> <div>38 / 93</div> <div>53 / 65</div> </div>	<div>27</div> <div> <div>16 / 15</div> <div>11 / 14</div> <div>57 / 66</div> <div>Florida St</div> <div>13 / 57</div> <div>2126 / 1310</div> <div>21 / 51</div> <div>Palm Ave (SR-75)</div> <div>3 / 21</div> <div>946 / 2073</div> <div>36 / 59</div> <div>19 / 22</div> <div>5 / 11</div> <div>32 / 36</div> </div>	<div>28</div> <div> <div>16 / 21</div> <div>37 / 46</div> <div>174 / 159</div> <div>13th St</div> <div>54 / 84</div> <div>1974 / 1385</div> <div>100 / 162</div> <div>Palm Ave (SR-75)</div> <div>4 / 28</div> <div>1018 / 1951</div> <div>66 / 206</div> <div>152 / 134</div> <div>20 / 42</div> <div>94 / 132</div> </div>	<div>29</div> <div> <div>22 / 11</div> <div>3 / 11</div> <div>40 / 25</div> <div>16th St</div> <div>13 / 17</div> <div>2108 / 1693</div> <div>45 / 177</div> <div>Palm Ave (SR-75)</div> <div>15 / 10</div> <div>1292 / 2082</div> <div>27 / 52</div> <div>17 / 41</div> <div>7 / 9</div> <div>51 / 84</div> </div>
<div>30</div> <div> <div>80 / 236</div> <div>96 / 248</div> <div>244 / 610</div> <div>19th St</div> <div>223 / 576</div> <div>2044 / 1701</div> <div>254 / 340</div> <div>Palm Ave (SR-75)</div> <div>95 / 196</div> <div>1305 / 2020</div> <div>31 / 28</div> <div>79 / 69</div> <div>75 / 184</div> <div>800 / 553</div> </div>	<div>31</div> <div> <div>1390 / 1743</div> <div>161 / 456</div> <div>I-5 SB Exit Ramp</div> <div>1130 / 880</div> <div>Palm Ave (SR-75)</div> <div>295 / 527</div> <div>50 / 440</div> </div>	<div>32</div> <div> <div>I-5 NB Ramps</div> <div>543 / 260</div> <div>443 / 547</div> <div>Palm Ave (SR-75)</div> <div>456 / 976</div> <div>793 / 446</div> <div>2 / 3</div> <div>149 / 111</div> </div>	<div>33</div> <div> <div>87 / 684</div> <div>Silver Strand Blvd</div> <div>YMCA Dwy</div> <div>4 / 11</div> <div>5 / 9</div> <div>721 / 166</div> </div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

Mitigation

As mentioned, nine study intersections would experience significant impacts that would require mitigation with the addition of Alternative 1 project trips without P947. At the following four locations the mitigation measures identified for Alternative 1 with inclusion of P947 would still apply for this scenario:

- [M1] Intersection #10, Silver Strand Boulevard (SR-75) and Tulagi Road
- [M3] Intersection #26, 9th Street and Palm Avenue (SR-75)
- [M4] Intersection #28, 13th Street and Palm Avenue (SR-75)
- [M5] Intersection #30, Saturn Boulevard/19th Street and Palm Avenue (SR-75)

The proposed mitigation measures that would improve intersection operations to be equal to or better than No-Action Alternative conditions for the other five intersections are described below. **Table 5-5** summarizes all of the mitigation measures and shows the intersection delay and LOS with the proposed mitigation measures in place.

M6. Intersection #19, 7th Street and Silver Strand Boulevard (SR-75)

The significant impact at this intersection could be mitigated by striping the southbound approach to include a left-turn pocket and through-right lane. This would require removing some parking along 7th Street to make room for the additional lane, estimated to be two parking spaces. This improvement is illustrated in **Figure 5-9**.

M7. Intersection #21, Silver Strand Boulevard and Palm Avenue

The significant impact at this intersection would require widening of Silver Strand Boulevard from two lanes to four lanes and installation of a traffic signal at the intersection. Even with these improvements the intersection would still operate at LOS E during the PM peak hour. The amount of traffic anticipated by the Proposed Action cannot be accommodated by the existing street network in Imperial Beach along Silver Strand Boulevard and Palm Avenue between Silver Strand Boulevard and SR-75. This area is primarily residential with schools and small retail and is designed to accommodate pedestrians and bicyclists. The City of Imperial Beach recently completed improvements on Palm Avenue to slow down traffic to improve bicycle and pedestrian mobility. The amount of vehicles generated by the Proposed Action combined with security procedures necessary at the entry control point along Silver Strand Boulevard would congest the streets beyond their capacity and make the area unwelcoming for pedestrians and bicyclists. A signal warrant analysis for this intersection is provided in **Appendix J**.

M8. Intersection #22, 3rd Street and Palm Avenue

The significant impact at this intersection during the AM and PM peak-hours can be mitigated with the installation of a traffic signal. A signal warrant analysis for this intersection is provided in **Appendix J**.

M9. Intersection #23, Palm Avenue and Rainbow Drive

The significant impact at this intersection during the AM and PM peak-hours can be mitigated by restricting southbound left-turn movements. Vehicles that want to head eastbound on Palm Avenue from Rainbow Drive could utilize the intersection of Rainbow Drive and Silver Strand Boulevard (SR-75), approximately 700 feet north of this intersection to head eastbound. By removing the southbound left-turn movement, the number of conflict points at the intersection is reduced and the intersection operation is simplified.



Table 5-5. Year 2024 with 1 CVN Alternative 1 without P947 Intersection Mitigation Summary

	INTERSECTION	PROPOSED MITIGATION	BEFORE MITIGATION		AFTER MITIGATION	
			AM	PM	AM	PM
10	Silver Strand Blvd (SR-75) & Tulagi Rd	Change signal timings to reflect new traffic patterns	3.6 (A)	76.1 (E)	3.6 (A)	47.9 (D)
19	7 th St & Silver Strand Blvd (SR-75)	Stripe a southbound left-turn pocket	117.2 (F)	67.7 (E)	47.6 (D)	46.6 (D)
21	Silver Strand Blvd & Palm Ave	Widen Silver Strand Boulevard, install traffic signal	30.5 (D)	>1000 (F)	6.9 (A)	25.8 (C)
22	3 rd St & Palm Ave	Install a traffic signal	167.6 (F)	385.0 (F)	9.0 (A)	21.0 (C)
23	Palm Ave & Rainbow Dr	Restrict SB left-turn movement	392.4 (F)	669.1 (F)	12.1 (B)	14.8 (B)
26	9 th St & Silver Strand Blvd (SR-75)	Modify northbound/southbound approaches to have protected lefts instead of split phasing	55.5 (E)	63.8 (E)	45.1 (D)	50.4 (D)
28	13 th St & Palm Ave (SR-75)	Remove the northbound pedestrian crossing and shorten the northbound split time	41.2 (D)	64.0 (E)	40.4 (D)	55.0 (D)
30	Saturn Blvd/19 th St & Palm Ave (SR-75)	Add a second WB left-turn lane along Palm Ave (SR-75)	65.6 (E)	224.6 (F)	52.0 (D)	112.6 (F)
31	I-5 SB Exit Ramps & Palm Ave (SR-75)	Change signal timings	47.6 (D)	55.3 (E)	47.6 (D)	54.5 (D)

Note: Table reflects intersection Delay (LOS). Although all mitigations may not improve operations to LOS D or better, it restores average delay to better than what is experienced under the No-Action Alternative.

M10. Intersection #31, I-5 SB Exit Ramp and Palm Avenue (SR-75)

The significant impact at this intersection during the PM peak-hour can be mitigated by adjusting the signal timing at the intersection. The length of the eastbound, westbound, and southbound signal splits would need to be increased by 5 seconds (for a total cycle increase of 10 seconds).

Alternative 3

Road Network

It is assumed that all intersections and roadway segments in the study area would remain the same as Existing Conditions with the development of Proposed Action Alternative 3 without P947.

Traffic Volumes

Traffic associated with the completed construction of the Proposed Action Alternative 3 without P947 was added to the No-Action Alternative volumes. **Figure 5-10** shows the resulting volumes.

Intersection Analysis

All intersections would operate at LOS D or better during both peak periods, except at the following locations:

- | | |
|--|------------------------------------|
| ▪ #1 Glorietta Boulevard and Fourth Street (SR-75) | <i>AM peak (LOS E)</i> |
| ▪ #2 Fourth Street (SR-75) and Pomona Avenue | <i>PM peak (LOS F)</i> |
| ▪ #4 Orange Avenue (SR-75) and Fourth Street (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #10 Silver Strand Boulevard (SR-75) and Tulagi Road | <i>PM peak (LOS E)</i> |
| ▪ #18 Silver Strand Boulevard (SR-75) and Rainbow Drive | <i>AM peak (LOS E)</i> |
| ▪ #19 7th Street and Silver Strand Boulevard (SR-75) | <i>AM & PM peaks (LOS F/E)</i> |
| ▪ #21 Silver Strand Boulevard and Palm Avenue | <i>PM peak (LOS F)</i> |
| ▪ #22 3rd Street and Palm Avenue | <i>AM & PM peaks (LOS F/F)</i> |
| ▪ #23 Palm Avenue and Rainbow Drive | <i>AM & PM peaks (LOS F/F)</i> |
| ▪ #26 9th Street and Palm Avenue (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #28 13th Street and Palm Avenue (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75) | <i>AM & PM peak (LOS E/F)</i> |

Of the intersections that operate at an unacceptable LOS E or F, eight (shown in **bold**) would result in a significant impact that would need to be mitigated by the project.

The addition of Alternative 3 traffic without P947 would result in impacts at three locations on local streets in Imperial Beach that would not be impacts if P947 were in place.

Intersecting Lane Vehicle Analysis

Both signalized intersections at the Palm Avenue and I-5 interchange would operate below or approaching capacity during both peak periods.

Mitigation

As mentioned, eight study intersections would experience significant impacts that would require mitigation with the addition of Alternative 3 project trips without P947. At the following four locations the mitigation measures identified for Alternative 3 with inclusion of P947 would still apply for this scenario:

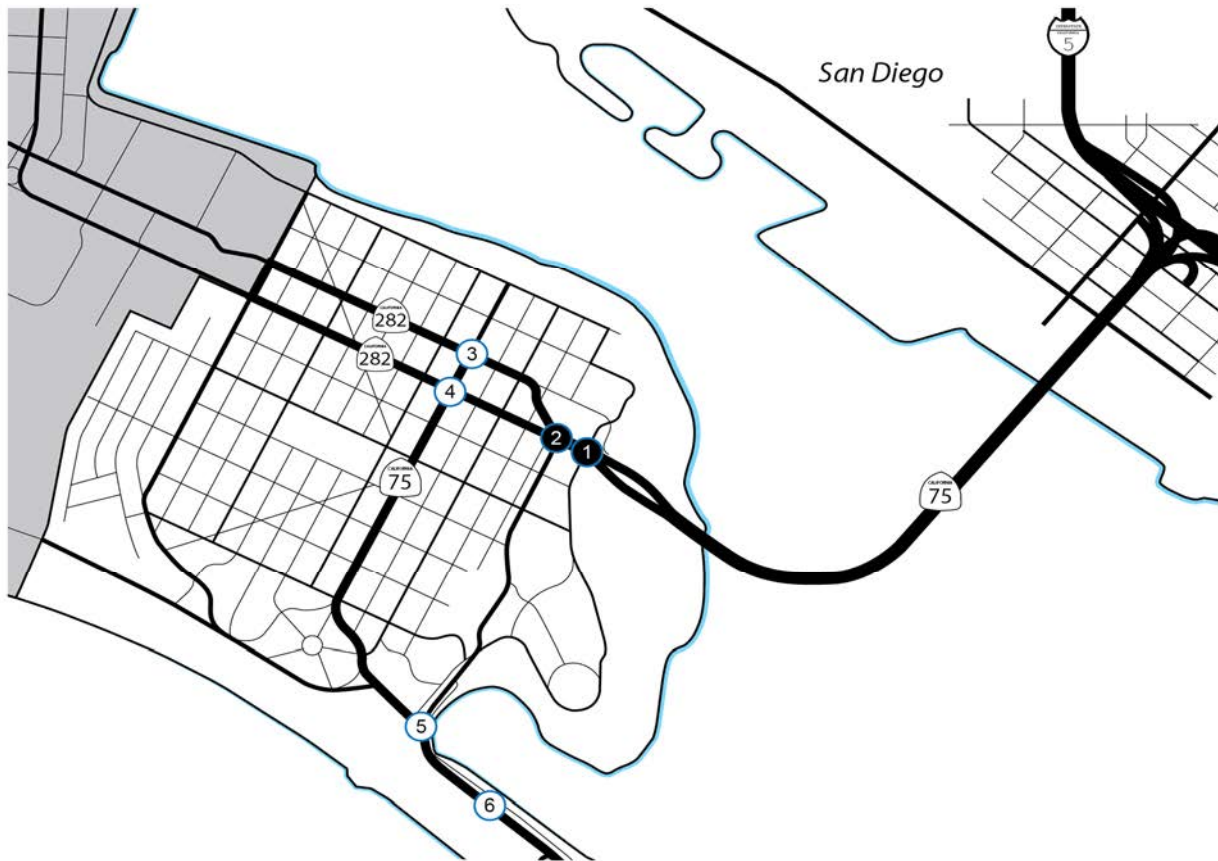
- [M1] Intersection #10, Silver Strand Boulevard (SR-75) and Tulagi Road
- [M3] Intersection #26, 9th Street and Palm Avenue (SR-75)
- [M4] Intersection #28, 13th Street and Palm Avenue (SR-75)
- [M5] Intersection #30, Saturn Boulevard/19th Street and Palm Avenue (SR-75)

NBC Coastal Campus

1 <div> <div>10 / 56</div> <div>Glorietta Blvd</div> <div> <div>532 / 240</div> <div>3223 / 1664</div> <div>Fourth St (SR-75)</div> </div> </div> <div> <div>1309 / 3511</div> <div>35 / 18</div> <div>477 / 903</div> </div>	2 <div> <div>3122 / 1701</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1170 / 3277</div> <div>203 / 131</div> <div>Pomona Ave</div> <div>231 / 190</div> </div>	3 <div> <div>6 / 15</div> <div>259 / 767</div> <div>Orange Ave (SR-75)</div> <div> <div>250 / 87</div> <div>1546 / 540</div> <div>1506 / 973</div> <div>Third Street (SR-75)</div> </div> </div> <div> <div>42 / 87</div> <div>94 / 244</div> </div>	4 <div> <div>1388 / 1089</div> <div>435 / 672</div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> </div> <div> <div>502 / 1711</div> <div>68 / 49</div> <div>127 / 338</div> <div>212 / 397</div> </div>
5 <div> <div>1112 / 1218</div> <div>Orange Ave (SR-75)</div> <div> <div>7 / 13</div> <div>225 / 181</div> <div>Pomona Ave</div> </div> </div> <div> <div>1149 / 875</div> <div>624 / 704</div> </div>	6 <div> <div>38 / 158</div> <div>1259 / 1451</div> <div>41 / 70</div> <div>Silver Strand Blvd (SR-75)</div> <div> <div>6 / 26</div> <div>0 / 11</div> <div>8 / 27</div> <div>Avenidas De Las Arenas</div> </div> </div> <div> <div>49 / 150</div> <div>3 / 11</div> <div>11 / 30</div> <div>21 / 24</div> <div>1370 / 1494</div> <div>27 / 52</div> </div>		

CORONADO

Study intersections 1 - 6



Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus

<div>18</div> <div> <div>182 / 230</div> <div>125 / 1053</div> <div>4 / 19</div> <div>Silver Strand Blvd (SR-75)</div> <div>21 / 7</div> <div>8 / 4</div> <div>50 / 19</div> <div>Rainbow Dr</div> <div>418 / 224</div> <div>2 / 7</div> <div>40 / 70</div> <div>27 / 76</div> <div>1490 / 310</div> <div>11 / 58</div> </div>	<div>19</div> <div> <div>54 / 22</div> <div>43 / 27</div> <div>21 / 25</div> <div>7th St</div> <div>18 / 36</div> <div>1346 / 368</div> <div>Silver Strand Blvd (SR-75)</div> <div>8 / 59</div> <div>209 / 1008</div> <div>19 / 57</div> <div>36 / 18</div> <div>24 / 41</div> <div>2 / 5</div> </div>	<div>20</div> <div> <div>14 / 4</div> <div>Delaware St</div> <div>9 / 39</div> <div>1355 / 403</div> <div>806 / 615</div> <div>Silver Strand Blvd (SR-75)</div> <div>226 / 1039</div> </div>	<div>21</div> <div> <div>6 / 14</div> <div>108 / 640</div> <div>Silver Strand Blvd</div> <div>646 / 175</div> <div>129 / 308</div> <div>Palm Ave</div> <div>15 / 5</div> <div>234 / 214</div> <div>Dwy</div> </div>
<div>22</div> <div> <div>15 / 14</div> <div>11 / 34</div> <div>12 / 29</div> <div>3rd St</div> <div>25 / 25</div> <div>751 / 456</div> <div>27 / 86</div> <div>Palm Ave</div> <div>8 / 8</div> <div>333 / 831</div> <div>5 / 13</div> <div>12 / 15</div> <div>15 / 39</div> <div>127 / 69</div> </div>	<div>23</div> <div> <div>206 / 173</div> <div>18 / 53</div> <div>Rainbow Dr</div> <div>154 / 40</div> <div>739 / 558</div> <div>Palm Ave</div> <div>238 / 208</div> <div>473 / 825</div> </div>	<div>24</div> <div> <div>28 / 31</div> <div>27 / 40</div> <div>2 / 13</div> <div>7th St</div> <div>0 / 4</div> <div>735 / 559</div> <div>27 / 32</div> <div>Palm Ave</div> <div>17 / 29</div> <div>466 / 828</div> <div>17 / 35</div> <div>71 / 56</div> <div>34 / 25</div> <div>82 / 23</div> </div>	<div>25</div> <div> <div>551 / 876</div> <div>5 / 9</div> <div>Delaware St</div> <div>3 / 7</div> <div>6 / 3</div> <div>Palm Ave</div> </div>
<div>26</div> <div> <div>26 / 27</div> <div>47 / 82</div> <div>93 / 179</div> <div>45 / 135</div> <div>1892 / 878</div> <div>25 / 60</div> <div>Palm Ave (SR-75)</div> <div>22 / 43</div> <div>701 / 1729</div> <div>40 / 130</div> <div>170 / 101</div> <div>38 / 93</div> <div>53 / 65</div> </div>	<div>27</div> <div> <div>16 / 15</div> <div>11 / 14</div> <div>57 / 66</div> <div>Florida St</div> <div>13 / 57</div> <div>2071 / 1296</div> <div>21 / 51</div> <div>Palm Ave (SR-75)</div> <div>3 / 21</div> <div>939 / 2020</div> <div>36 / 59</div> <div>19 / 22</div> <div>5 / 11</div> <div>32 / 36</div> </div>	<div>28</div> <div> <div>16 / 21</div> <div>37 / 46</div> <div>174 / 159</div> <div>13th St</div> <div>54 / 84</div> <div>1920 / 1372</div> <div>100 / 162</div> <div>Palm Ave (SR-75)</div> <div>4 / 28</div> <div>1011 / 1898</div> <div>66 / 206</div> <div>151 / 133</div> <div>20 / 42</div> <div>94 / 132</div> </div>	<div>29</div> <div> <div>22 / 11</div> <div>3 / 11</div> <div>40 / 25</div> <div>16th St</div> <div>13 / 17</div> <div>2054 / 1680</div> <div>45 / 177</div> <div>Palm Ave (SR-75)</div> <div>15 / 10</div> <div>1285 / 2029</div> <div>27 / 52</div> <div>17 / 41</div> <div>7 / 9</div> <div>51 / 84</div> </div>
<div>30</div> <div> <div>80 / 236</div> <div>96 / 248</div> <div>244 / 610</div> <div>19th St</div> <div>223 / 576</div> <div>1989 / 1689</div> <div>254 / 340</div> <div>Palm Ave (SR-75)</div> <div>95 / 196</div> <div>1300 / 1966</div> <div>31 / 28</div> <div>78 / 68</div> <div>75 / 184</div> <div>800 / 553</div> </div>	<div>31</div> <div> <div>1336 / 1730</div> <div>161 / 456</div> <div>I-5 SB Exit Ramp</div> <div>1131 / 880</div> <div>Palm Ave (SR-75)</div> <div>295 / 527</div> <div>41 / 367</div> </div>	<div>32</div> <div> <div>I-5 NB Ramps</div> <div>543 / 260</div> <div>443 / 547</div> <div>Palm Ave (SR-75)</div> <div>456 / 976</div> <div>793 / 446</div> <div>2 / 3</div> <div>149 / 111</div> </div>	<div>33</div> <div> <div>75 / 577</div> <div>Silver Strand Blvd</div> <div>YMCA Dwy</div> <div>4 / 11</div> <div>5 / 9</div> <div>612 / 139</div> </div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

The additional four intersections that would have impacts without P947 would require mitigations similar to those identified for Alternative 1 without P947:

- [M6] Intersection #19, 7th Street and Silver Strand Boulevard (SR-75)
- [M7] Intersection #21, Silver Strand Boulevard and Palm Avenue
- [M8] Intersection #22, 3rd Street and Palm Avenue
- [M9] Intersection #23, Palm Avenue and Rainbow Drive

Table 5-6 summarizes all of the mitigation measures and shows the intersection delay and LOS with the proposed mitigation measures in place.

Table 5-6. Year 2024 with 1 CVN Alternative 3 without P947 Intersection Mitigation Summary

INTERSECTION	PROPOSED MITIGATION	BEFORE MITIGATION		AFTER MITIGATION	
		AM	PM	AM	PM
10	Silver Strand Blvd (SR-75) & Tulagi Rd	3.6 (A)	74.8 (E)	3.6 (A)	47.0 (D)
19	7 th St & Silver Strand Blvd (SR-75)	116.4 (F)	67.3 (E)	48.4 (D)	47.7 (D)
21	Silver Strand Blvd & Palm Ave	24.7 (C)	854.1 (F)	6.6 (A)	19.0 (B)
22	3 rd St & Palm Ave	113.6 (F)	303.7 (F)	8.4 (A)	14.1 (B)
23	Palm Ave & Rainbow Dr	244.1 (F)	424.7 (F)	12.0 (B)	12.2 (B)
26	9 th St & Silver Strand Blvd (SR-75)	50.6 (D)	59.7 (E)	43.2 (D)	49.1 (D)
28	13 th St & Palm Ave (SR-75)	40.3 (D)	60.1 (E)	39.8 (D)	53.2 (D)
30	Saturn Blvd/19 th St & Palm Ave (SR-75)	61.9 (E)	217.1 (F)	50.0 (D)	107.4 (F)

Note: Table reflects intersection Delay (LOS). Although the mitigation does not improve operations to LOS D or better, it restores average delay to better than what is experienced under the No-Action Alternative.

Conditions with 2 Carrier Vessels Nuclear (CVN)

Table 5-7 displays the LOS analysis results for the study intersections under Year 2024 with 2 CVNs Conditions. **Table 5-8** displays the ILV analysis results for the Palm Avenue and I-5 interchange under the Year 2024 with 2 CVNs Conditions. **Appendix G** contains the LOS calculation worksheets and **Appendix H** contains the ILV calculation worksheets. The results of the analyses are summarized below.

No-Action Conditions

Traffic Volumes

Year 2024 1 CVN volumes were adjusted using forecast methodology contained in **Appendix C** to determine the Year 2024 volume when two and three CVNs are in port. **Figure 5-11** shows the Year 2024 No Action Alternative volumes with two CVNs in port. When there are three CVNs in port, staggered work hours are required, so three CVNs results in lower peak-hour volumes than two CVNs and are not included in the analysis. However, the volumes with three CVNs in port are provided in **Appendix E**.

Intersection Analysis

All intersections would operate at LOS D or better during both peak periods, except at the following locations:

- | | |
|--|------------------------------------|
| ▪ #1 Glorietta Boulevard and Fourth Street (SR-75) | <i>AM peak (LOS F)</i> |
| ▪ #2 Fourth Street (SR-75) and Pomona Avenue | <i>PM peak (LOS F)</i> |
| ▪ #4 Orange Avenue (SR-75) and Fourth Street (SR-75) | <i>PM Peak (LOS F)</i> |
| ▪ #8 Silver Strand Boulevard (SR-75) and Tarawa Road | <i>PM peak (LOS E)</i> |
| ▪ #9 Strand Way and Guadalcanal Road | <i>PM peak (LOS E)</i> |
| ▪ #10 Silver Strand Boulevard (SR-75) and Tulagi Road | <i>PM peak (LOS E)</i> |
| ▪ #18 Silver Strand Boulevard (SR-75) and Rainbow Drive | <i>AM peak (LOS F)</i> |
| ▪ #19 7 th Street and Silver Strand Boulevard (SR-75) | <i>AM & PM peaks (LOS F/E)</i> |
| ▪ #23 Palm Avenue and Rainbow Drive | <i>AM peak (LOS E)</i> |
| ▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75) | <i>PM peak (LOS F)</i> |

No additional intersections would operate at unacceptable operations with the second CVN.

Intersecting Lane Vehicle Analysis

Both signalized intersections at the Palm Avenue and I-5 interchange would operate below or approaching capacity during both peak periods.

Table 5-7. Year 2024 with 2 CVNs Intersection Analysis Summary

INTERSECTION	NO ACTION		PLUS PROJECT				PLUS PROJECT (W/O P947)			
			ALT. 1/2		ALT. 3		ALT. 1/2		ALT. 3	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1 Glorietta Blvd & Fourth St (SR-75)	62.2 (F)	20.0 (C)	60.6 (F)	19.9 (C)	62.5 (F)	20.0 (C)	58.2 (F)	19.7 (C)	60.4 (F)	19.9 (C)
2 Fourth St (SR-75) & Pomona Ave	27.7 (D)	550.7 (F)	27.4 (D)	465.9 (F)	27.5 (D)	513.2 (F)	27.1 (D)	436.9 (F)	27.3 (D)	487.1 (F)
3 Orange Ave (SR-75) & Third St (SR-75)	47.6 (D)	43.9 (D)	45.7 (D)	44.9 (D)	48.1 (D)	45.9 (D)	43.1 (D)	43.5 (D)	45.5 (D)	44.8 (D)
4 Orange Ave (SR-75) & Fourth St (SR-75)	38.3 (D)	106.1 (F)	38.1 (D)	106.2 (F)	38.3 (D)	107.2 (F)	37.8 (D)	106.8 (F)	38.0 (D)	107.6 (F)
5 Silver Strand Blvd/Orange Ave (SR-75) & Pomona Ave	16.2 (B)	15.8 (B)	16.2 (B)	15.7 (B)	16.1 (B)	15.9 (B)	16.3 (B)	15.4 (B)	16.2 (B)	15.6 (B)
6 Silver Strand Blvd (SR-75) & Avenida De Las Arenas	12.8 (B)	19.6 (B)	12.8 (B)	19.5 (B)	12.8 (B)	19.8 (B)	12.6 (B)	19.1 (B)	12.7 (B)	19.4 (B)
7 Silver Strand Blvd (SR-75) & Rendova Rd	18.4 (B)	12.4 (B)	18.2 (B)	12.3 (B)	18.2 (B)	12.5 (B)	18.4 (B)	12.1 (B)	18.3 (B)	12.3 (B)
8 Silver Strand Blvd (SR-75) & Tarawa Rd	50.7 (D)	72.4 (E)	42.7 (D)	43.6 (D)	43.2 (D)	50.5 (D)	41.8 (D)	43.1 (D)	42.6 (D)	49.6 (D)
9 Strand Way & Guadalcanal Rd	10.9 (B)	39.5 (E)	9.9 (A)	13.2 (B)	10.3 (B)	15.5 (C)	9.9 (A)	13.2 (B)	10.3 (B)	15.5 (C)
10 Silver Strand Blvd (SR-75) & Tulagi Rd	3.0 (A)	77.3 (E)	3.6 (A)	84.6 (F)	3.6 (A)	83.0 (F)	3.6 (A)	82.7 (F)	3.6 (A)	81.4 (F)
11 Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	28.3 (D)	22.0 (C)	27.1 (D)	29.3 (D)	27.6 (D)	28.3 (D)	26.9 (D)	26.3 (D)	27.4 (D)	25.8 (D)
12 Silver Strand Blvd (SR-75) & Leyte Rd	36.3 (D)	9.7 (A)	27.9 (C)	9.1 (A)	30.3 (C)	10.1 (B)	28.0 (C)	9.0 (A)	30.3 (C)	8.9 (A)
13 Silver Strand Blvd (SR-75) & Attu Ave	29.1 (D)	10.0 (B)	27.7 (D)	11.1 (B)	28.2 (D)	10.9 (B)	27.5 (D)	10.7 (B)	28.1 (D)	10.6 (B)
14 Silver Strand Blvd (SR-75) & Coronado Bay Rd	7.1 (A)	3.4 (A)	6.1 (A)	3.6 (A)	6.4 (A)	3.6 (A)	6.2 (A)	3.5 (A)	6.5 (A)	3.5 (A)
15 SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)
16 NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	28.5 (C)	10.5 (B)	24.6 (C)	10.1 (B)	25.9 (C)	10.1 (B)	24.2 (C)	10.2 (B)	25.5 (C)	10.2 (B)
17 Silver Strand Blvd (SR-75) & Hooper Blvd*	**		20.0 (C)	45.4 (D)	13.4 (B)	35.2 (C)	**		**	

Notes: P947 is a MILCON project that would construct a new ECP at SSTC-South along SR-75.

*Delay shown represents a signalized intersection and P947 improvements; the existing unsignalized intersection configuration would operate at LOS F. ** Intersection does not exist under this scenario

Table reflects intersection Delay (LOS). **Bold** indicates intersections operating at an unacceptable LOS E or F. **Bold and shaded** cells indicate locations where the project has an impact.

Table 5-7. Year 2024 with 2 CVNs Intersection Analysis Summary (cont.)

INTERSECTION		NO ACTION		PLUS PROJECT				PLUS PROJECT (W/O P947)			
				ALT. 1/2		ALT. 3		ALT. 1/2		ALT. 3	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
18	Silver Strand Blvd (SR-75) & Rainbow Dr	85.1 (F)	25.6 (C)	148.7 (F)	52.2 (D)	139.4 (F)	46.1 (D)	71.8 (E)	32.8 (C)	75.0 (E)	32.0 (C)
19	7th St & Silver Strand Blvd (SR-75)	114.0 (F)	67.0 (E)	113.3 (F)	69.8 (E)	112.2 (F)	68.9 (E)	116.0 (F)	67.2 (E)	115.3 (F)	67.1 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	8.0 (A)	10.7 (B)	7.5 (A)	12.8 (B)	7.5 (A)	12.1 (B)	13.5 (B)	11.6 (B)	12.4 (B)	11.4 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	13.1 (B)	20.3 (C)	13.3 (B)	20.7 (C)	13.2 (B)	20.6 (C)	30.5 (D)	>1000 (F)	24.7 (C)	854.1 (F)
22	3rd St & Palm Ave	11.1 (B)	20.3 (C)	11.2 (B)	20.8 (C)	11.2 (B)	20.7 (C)	167.6 (F)	385.0 (F)	113.6 (F)	303.7 (F)
23	Palm Ave & Rainbow Dr	35.5 (E)	26.5 (D)	36.3 (E)	26.7 (D)	36.0 (E)	26.6 (D)	392.4 (F)	669.1 (F)	244.1 (F)	424.7 (F)
24	7th St & Palm Ave	8.4 (A)	5.8 (A)	8.5 (A)	5.8 (A)	8.4 (A)	5.8 (A)	9.5 (A)	6.9 (A)	9.3 (A)	6.8 (A)
25	Delaware St & Palm Ave	12.0 (B)	12.7 (B)	12.0 (B)	12.7 (B)	12.0 (B)	12.7 (B)	12.6 (B)	22.4 (C)	12.5 (B)	20.2 (C)
26	9th St & Palm Ave (SR-75)	40.3 (D)	49.0 (D)	52.8 (D)	61.4 (E)	49.2 (D)	58.3 (E)	59.2 (E)	66.8 (E)	53.8 (D)	62.4 (E)
27	Florida St & Palm Ave (SR-75)	8.2 (A)	9.1 (A)	8.3 (A)	8.2 (A)	8.3 (A)	8.2 (A)	8.4 (A)	8.1 (A)	8.3 (A)	8.2 (A)
28	13th St & Palm Ave (SR-75)	37.3 (D)	48.1 (D)	40.7 (D)	61.7 (E)	40.0 (D)	58.8 (E)	41.8 (D)	66.9 (E)	40.8 (D)	62.5 (E)
29	16th St & Palm Ave (SR-75)	14.4 (B)	18.8 (B)	16.3 (B)	25.1 (C)	15.9 (B)	23.5 (C)	17.1 (B)	28.6 (C)	16.5 (B)	25.7 (C)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	51.6 (D)	179.4 (F)	63.6 (E)	220.4 (F)	60.9 (E)	214.4 (F)	68.6 (E)	229.4 (F)	64.4 (E)	221.8 (F)
31	I-5 SB Exit Ramp & Palm Avenue (SR-75)	36.3 (D)	46.8 (D)	47.3 (D)	54.7 (D)	45.5 (D)	53.6 (D)	52.1 (D)	56.4 (E)	48.1 (D)	55.0 (D)
32	I-5 NB Ramps & Palm Avenue (SR-75)	11.8 (B)	9.4 (A)	12.2 (B)	9.6 (A)	12.2 (B)	9.6 (A)	12.2 (B)	9.6 (A)	12.2 (B)	9.6 (A)
33	Silver Strand Blvd & YMCA Dwy	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)	9.4 (A)	17.8 (C)	9.3 (A)	15.3 (C)

Notes: P947 is a MILCON project that would construct a new ECP at SSTC-South along SR-75.

Table reflects intersection Delay (LOS). **Bold** indicates intersections operating at an unacceptable LOS E or F. **Bold and shaded** cells indicate locations where the project has an impact.

Table 5-8. Year 2024 with 2 CVNs ILV Analysis Summary

INTERSECTION		PEAK HOUR	YEAR 2024 NO ACTION		YEAR 2024 ALTERNATIVE 1/2		YEAR 2024 ALTERNATIVE 3	
			ILV TOTAL	CAPACITY	ILV TOTAL	CAPACITY	ILV TOTAL	CAPACITY
31	I-5 SB Exit Ramp & Palm Avenue (SR-75)	AM	1083	Below Capacity	1246	Approaching Capacity	1225	Approaching Capacity
		PM	1269	Approaching Capacity	1309	Approaching Capacity	1304	Approaching Capacity
32	I-5 NB Ramps & Palm Avenue (SR-75)	AM	1012	Below Capacity	1033	Below Capacity	1033	Below Capacity
		PM	765	Below Capacity	773	Below Capacity	773	Below Capacity

INTERSECTION		PEAK HOUR	YEAR 2024 ALTERNATIVE 1/2 WITHOUT P947		YEAR 2024 ALTERNATIVE 3 WITHOUT P947	
			ILV TOTAL	CAPACITY	ILV TOTAL	CAPACITY
31	I-5 SB Exit Ramp & Palm Avenue (SR-75)	AM	1278	Approaching Capacity	1252	Approaching Capacity
		PM	1317	Approaching Capacity	1310	Approaching Capacity
32	I-5 NB Ramps & Palm Avenue (SR-75)	AM	1033	Below Capacity	1033	Below Capacity
		PM	773	Below Capacity	773	Below Capacity

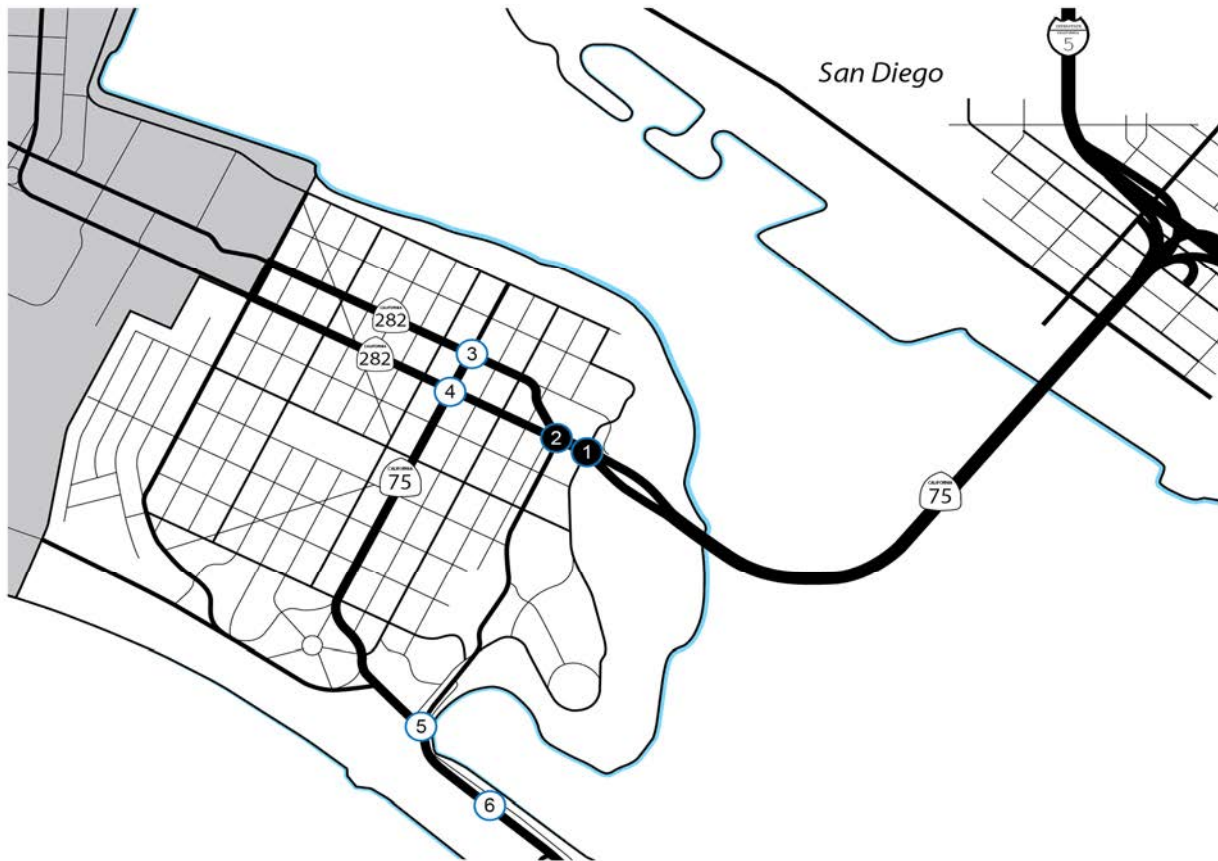
Notes: P947 is a MILCON project that would construct a new ECP at SSTC-South along SR-75.
 <1200 = Below Capacity; 1200 – 1500 = Approaching Capacity; >1500 = Above Capacity

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1 <div> <div>10 / 56</div> <div>Glorietta Blvd</div> <div> <div>554 / 245</div> <div>3804 / 1804</div> <div>Fourth St (SR-75)</div> </div> </div> <div> <div>1419 / 4068</div> <div>35 / 18</div> <div>478 / 910</div> </div>	2 <div> <div>3703 / 1841</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1280 / 3834</div> <div>203 / 131</div> <div>Pomona Ave</div> <div>233 / 201</div> </div>	3 <div> <div>13 / 17</div> <div>279 / 863</div> <div>Orange Ave (SR-75)</div> <div> <div>344 / 110</div> <div>1948 / 636</div> <div>1591 / 994</div> <div>Third Street (SR-75)</div> </div> </div> <div> <div>106 / 87</div> <div>103 / 253</div> </div>	4 <div> <div>1474 / 1117</div> <div>453 / 762</div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1 / 7</div> <div>585 / 2114</div> <div>65 / 107</div> <div>198 / 339</div> <div>221 / 461</div> </div>
5 <div> <div>1151 / 1261</div> <div>Orange Ave (SR-75)</div> <div> <div>7 / 13</div> <div>225 / 181</div> <div>Pomona Ave</div> </div> </div> <div> <div>1187 / 905</div> <div>626 / 715</div> </div>	6 <div> <div>38 / 158</div> <div>1298 / 1494</div> <div>41 / 70</div> <div>Silver Strand Blvd (SR-75)</div> <div> <div>6 / 26</div> <div>0 / 11</div> <div>8 / 27</div> <div>Avenidas De Las Arenas</div> </div> </div> <div> <div>49 / 150</div> <div>3 / 11</div> <div>11 / 30</div> <div>21 / 24</div> <div>1410 / 1535</div> <div>27 / 52</div> </div>		

CORONADO

Study intersections 1 - 6



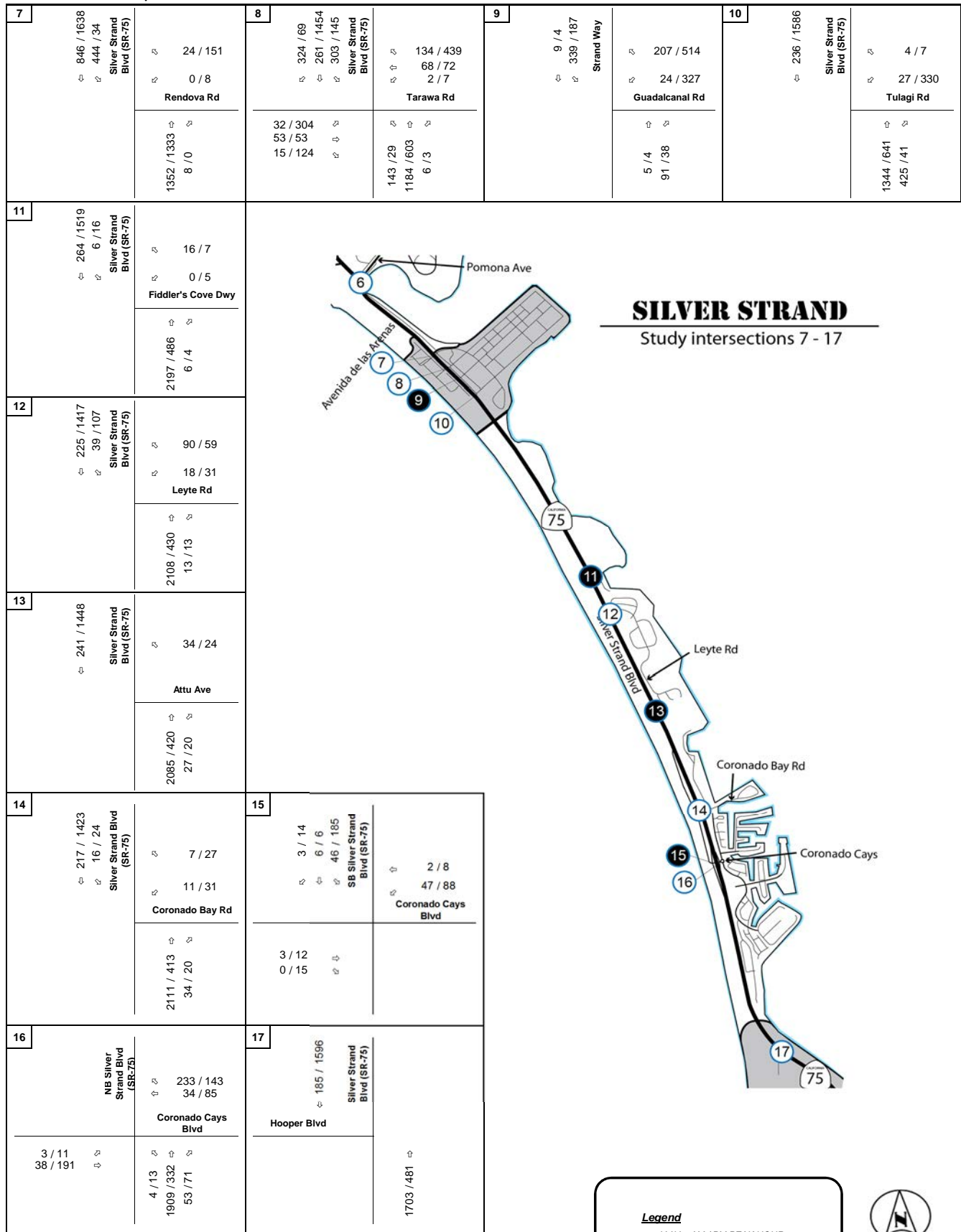
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



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18 <div>46 / 199 138 / 1139 4 / 19</div> <div>Silver Strand Blvd (SR-75)</div> <div>21 / 7 8 / 4 50 / 19</div> <div>Rainbow Dr</div> <div>406 / 90 2 / 7 40 / 70</div> <div>27 / 76 1579 / 332 11 / 58</div>	19 <div>54 / 22 43 / 27 21 / 25</div> <div>7th St</div> <div>18 / 36 1433 / 390</div> <div>Silver Strand Blvd (SR-75)</div> <div>8 / 59 222 / 1092 20 / 60</div> <div>39 / 19 24 / 41 2 / 5</div>	20 <div>14 / 4</div> <div>Delaware St</div> <div>9 / 39 1442 / 425 407 / 516</div> <div>Silver Strand Blvd (SR-75)</div> <div>239 / 1123</div>	21 <div>5 / 9 48 / 105</div> <div>Silver Strand Blvd</div> <div>105 / 41 129 / 308</div> <div>Palm Ave</div> <div>10 / 4 234 / 214</div> <div>Dwy</div>
22 <div>15 / 14 11 / 34 12 / 29</div> <div>3rd St</div> <div>25 / 25 210 / 322 27 / 86</div> <div>Palm Ave</div> <div>8 / 8 273 / 296 5 / 13</div> <div>12 / 15 15 / 39 127 / 69</div>	23 <div>70 / 142 18 / 53</div> <div>Rainbow Dr</div> <div>154 / 40 335 / 458</div> <div>Palm Ave</div> <div>226 / 74 428 / 425</div>	24 <div>28 / 31 28 / 43 2 / 13</div> <div>7th St</div> <div>0 / 4 336 / 460 27 / 32</div> <div>Palm Ave</div> <div>17 / 29 421 / 434 16 / 30</div> <div>66 / 55 37 / 26 82 / 23</div>	25 <div>506 / 482 5 / 9</div> <div>Delaware St</div> <div>3 / 7 6 / 3</div> <div>Palm Ave</div>
26 <div>26 / 27 47 / 82 93 / 179</div> <div>9th St</div> <div>45 / 135 1584 / 802 25 / 60</div> <div>Palm Ave (SR-75)</div> <div>22 / 43 670 / 1422 40 / 128</div> <div>168 / 101 38 / 93 53 / 65</div>	27 <div>16 / 15 11 / 14 57 / 66</div> <div>Florida St</div> <div>13 / 57 1763 / 1220 21 / 51</div> <div>Palm Ave (SR-75)</div> <div>3 / 21 908 / 1713 36 / 59</div> <div>19 / 22 5 / 11 32 / 36</div>	28 <div>16 / 21 37 / 46 174 / 159</div> <div>13th St</div> <div>54 / 84 1614 / 1297 100 / 162</div> <div>Palm Ave (SR-75)</div> <div>4 / 28 981 / 1595 66 / 204</div> <div>149 / 133 20 / 42 94 / 132</div>	29 <div>22 / 11 3 / 11 40 / 25</div> <div>16th St</div> <div>13 / 17 1748 / 1605 45 / 177</div> <div>Palm Ave (SR-75)</div> <div>15 / 10 1255 / 1726 27 / 52</div> <div>17 / 41 7 / 9 51 / 84</div>
30 <div>80 / 236 96 / 248 244 / 610</div> <div>19th St</div> <div>223 / 576 1687 / 1614 254 / 340</div> <div>Palm Ave (SR-75)</div> <div>95 / 196 1269 / 1666 31 / 26</div> <div>76 / 68 75 / 184 800 / 553</div>	31 <div>1047 / 1659 161 / 456</div> <div>I-5 SB Exit Ramp</div> <div>1118 / 878</div> <div>Palm Ave (SR-75)</div> <div>295 / 521</div>	32 <div>543 / 260 437 / 546</div> <div>Palm Ave (SR-75)</div> <div>456 / 970</div> <div>787 / 445 2 / 3 149 / 111</div>	33 <div>14 / 37</div> <div>Silver Strand Blvd</div> <div>YMCA Dwy</div> <div>4 / 11</div> <div>5 / 9 66 / 4</div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



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Plus Project Conditions

Alternatives 1 and 2

Alternative 1 would have the same external improvements and reallocation of personnel as Alternative 2. Therefore, the analysis for Alternative 1 would be identical to the findings for Alternative 2.

Road Network

The only roadway network change associated with Alternative 1 is implementation of P947, which would install a new ECP at SSTC-South and signalize the intersection of Silver Strand Boulevard (SR-75) and Hooper Boulevard. All other roadways and intersections within the study area would remain the same with the addition of Alternative 1.

Traffic Volumes

Traffic associated with the completed construction of the Proposed Action Alternative 1 was added to the No-Action Alternative volumes. **Figure 5-12** shows the Year 2024 Alternative 1 Conditions volumes with 2 CVNs in port.

Intersection Analysis

All intersections would operate at LOS D or better during both peak periods, except at the following locations:

- | | |
|--|------------------------------------|
| ▪ #1 Glorietta Boulevard and Fourth Street (SR-75) | <i>AM peak (LOS F)</i> |
| ▪ #2 Fourth Street (SR-75) and Pomona Avenue | <i>PM peak (LOS F)</i> |
| ▪ #4 Orange Avenue (SR-75) and Fourth Street (SR-75) | <i>PM peak (LOS F)</i> |
| ▪ #10 Silver Strand Boulevard (SR-75) and Tulagi Road | <i>PM peak (LOS F)</i> |
| ▪ #18 Silver Strand Boulevard (SR-75) and Rainbow Drive | <i>AM peak (LOS F)</i> |
| ▪ #19 7th Street and Silver Strand Boulevard (SR-75) | <i>AM & PM peaks (LOS F/E)</i> |
| ▪ #23 Palm Avenue and Rainbow Drive | <i>AM peak (LOS E)</i> |
| ▪ #26 9th Street and Palm Avenue (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #28 13th Street and Palm Avenue (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75) | <i>AM & PM peak (LOS E/F)</i> |

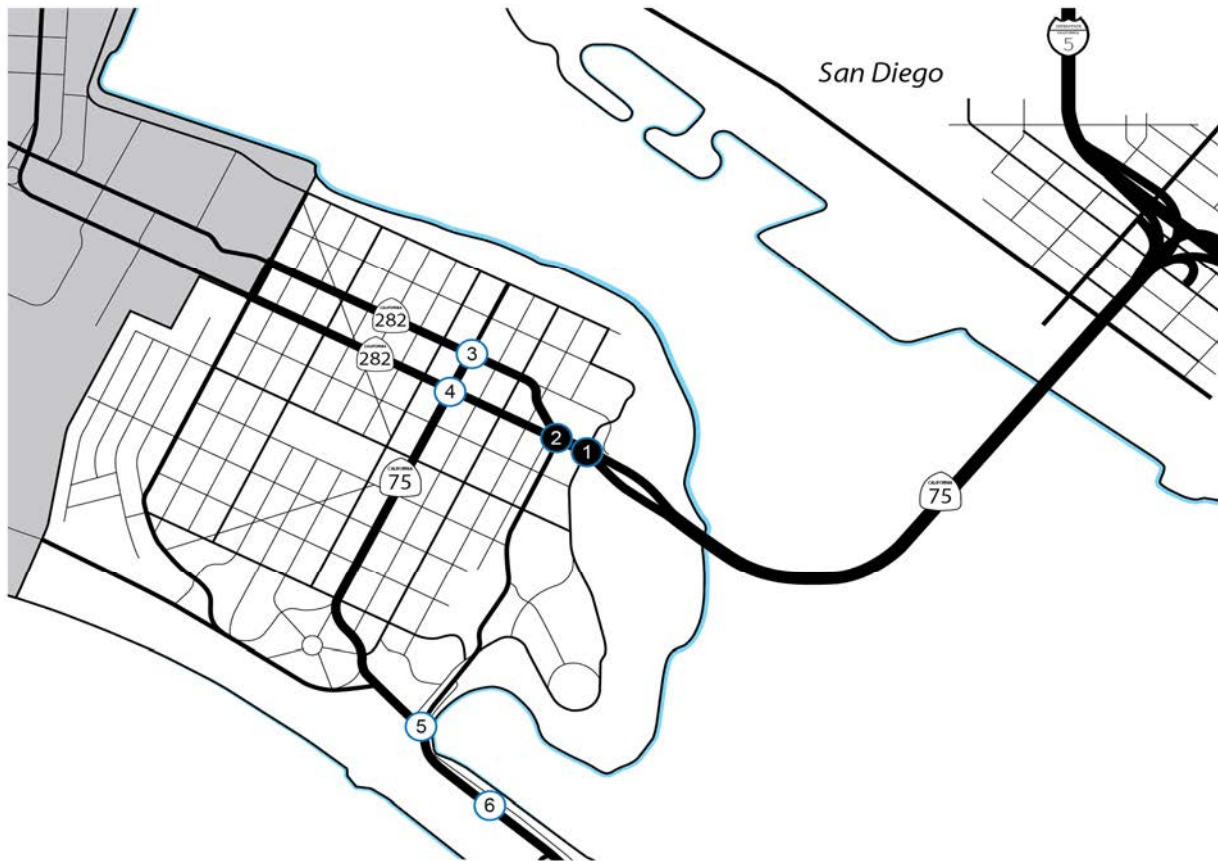
Of the intersections that operate at an unacceptable LOS E or F, six (shown in **bold**) would result in a significant impact that would need to be mitigated by the project. Five of these six locations would have impacts with one CVN in port. The intersection of 7th Street and Silver Strand Boulevard (SR-75) would be an additional impact for Alternative 1 when two CVNs are in port.

Intersection Lane Vehicle Analysis

Both signalized intersections at the Palm Avenue and I-5 interchange would be below or approaching capacity during both peak periods.

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1 <div> <div>10 / 56</div> <div>Glorietta Blvd</div> <div> <div>↔ 554 / 245</div> <div>↔ 3764 / 1794</div> </div> <div>Fourth St (SR-75)</div> </div> <div> <div>1417 / 4044</div> <div>35 / 18</div> <div>↔</div> </div> <div> <div>478 / 910</div> <div>↔</div> </div>	2 <div> <div>3663 / 1831</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1278 / 3810</div> <div>203 / 131</div> <div>↔</div> </div> <div> <div>Pomona Ave</div> <div>↔</div> </div> <div> <div>231 / 184</div> <div>↔</div> </div>	3 <div> <div>13 / 17</div> <div>↔</div> </div> <div> <div>279 / 863</div> <div>↔</div> </div> <div> <div>Orange Ave (SR-75)</div> <div>↔</div> </div> <div> <div>344 / 110</div> <div>1948 / 636</div> <div>1551 / 984</div> <div>Third Street (SR-75)</div> </div> <div> <div>108 / 102</div> <div>103 / 253</div> <div>↔</div> </div>	4 <div> <div>1434 / 1107</div> <div>↔</div> </div> <div> <div>453 / 762</div> <div>↔</div> </div> <div> <div>Orange Ave (SR-75)</div> <div>↔</div> </div> <div> <div>Fourth St (SR-75)</div> <div>↔</div> </div> <div> <div>1 / 7</div> <div>585 / 2114</div> <div>81 / 110</div> <div>↔</div> </div> <div> <div>200 / 354</div> <div>219 / 437</div> <div>↔</div> </div>
5 <div> <div>1134 / 1256</div> <div>↔</div> </div> <div> <div>Orange Ave (SR-75)</div> <div>↔</div> </div> <div> <div>7 / 13</div> <div>225 / 181</div> <div>Pomona Ave</div> </div> <div> <div>1187 / 905</div> <div>624 / 698</div> <div>↔</div> </div> <div> <div>Silver Strand Blvd (SR-75)</div> <div>↔</div> </div>	6 <div> <div>38 / 158</div> <div>↔</div> </div> <div> <div>1281 / 1489</div> <div>41 / 70</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>6 / 26</div> <div>0 / 11</div> <div>8 / 27</div> <div>Avenidas De Las Arenas</div> </div> <div> <div>49 / 150</div> <div>3 / 11</div> <div>11 / 30</div> <div>↔</div> </div> <div> <div>21 / 24</div> <div>1408 / 1518</div> <div>27 / 52</div> <div>↔</div> </div>	<div> <div>CORONADO</div> <div>Study intersections 1 - 6</div> </div>	



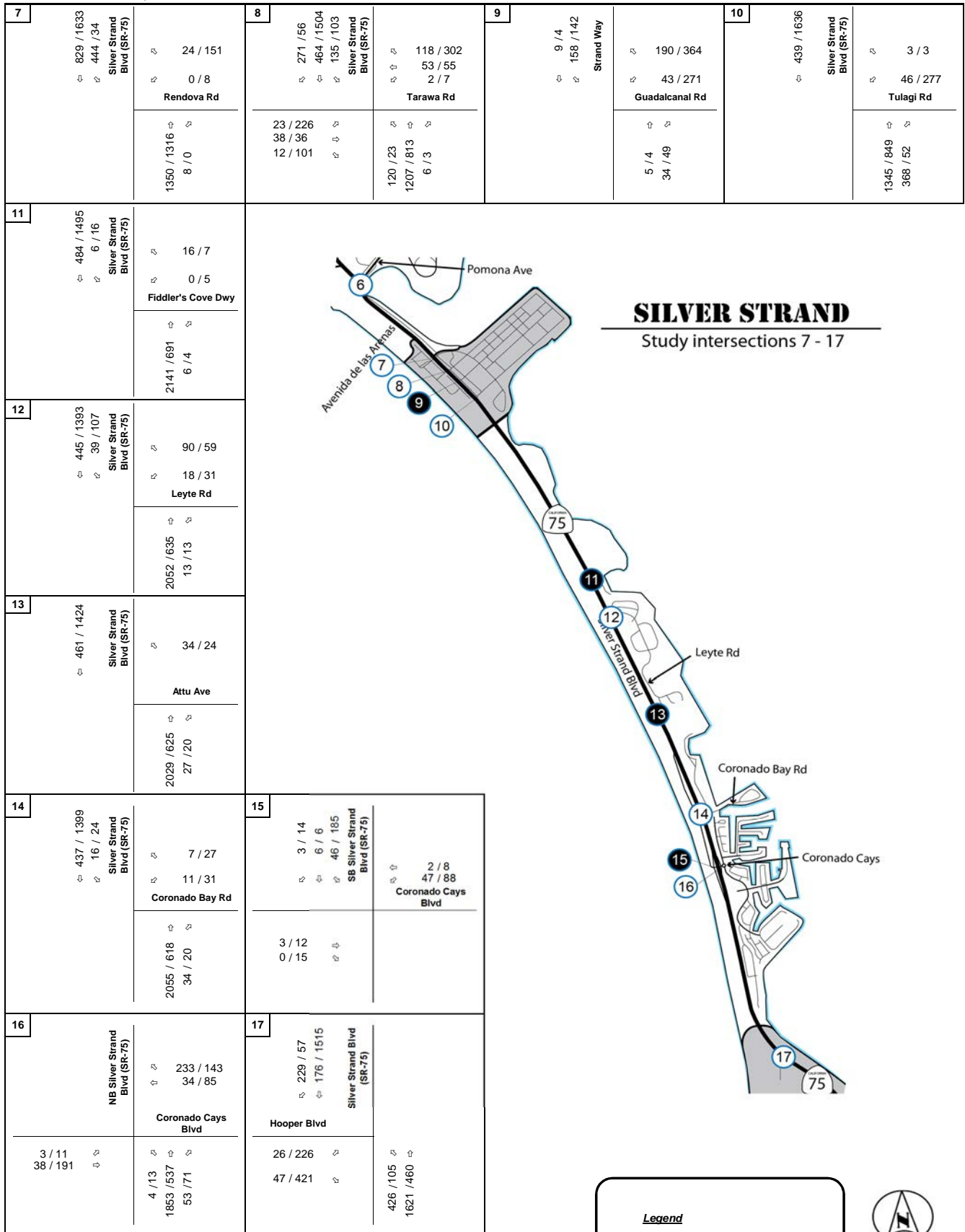
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



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<div>18</div> <div> <div>46 / 201</div> <div>176 / 1475</div> <div>4 / 19</div> <div>Silver Strand Blvd (SR-75)</div> <div>21 / 7</div> <div>8 / 4</div> <div>50 / 19</div> <div>Rainbow Dr</div> <div>409 / 91</div> <div>2 / 7</div> <div>40 / 70</div> <div>27 / 76</div> <div>1919 / 416</div> <div>11 / 58</div> </div>	<div>19</div> <div> <div>54 / 22</div> <div>43 / 27</div> <div>21 / 25</div> <div>7th St</div> <div>18 / 36</div> <div>1770 / 473</div> <div>Silver Strand Blvd (SR-75)</div> <div>8 / 59</div> <div>259 / 1425</div> <div>20 / 62</div> <div>42 / 20</div> <div>24 / 41</div> <div>2 / 5</div> </div>	<div>20</div> <div> <div>14 / 4</div> <div>Delaware St</div> <div>9 / 39</div> <div>1779 / 508</div> <div>407 / 516</div> <div>Silver Strand Blvd (SR-75)</div> <div>276 / 1456</div> </div>	<div>21</div> <div> <div>5 / 9</div> <div>48 / 105</div> <div>Silver Strand Blvd</div> <div>105 / 41</div> <div>130 / 314</div> <div>Palm Ave</div> <div>10 / 4</div> <div>241 / 216</div> <div>Dwy</div> </div>
<div>22</div> <div> <div>15 / 14</div> <div>11 / 34</div> <div>12 / 29</div> <div>3rd St</div> <div>25 / 25</div> <div>211 / 328</div> <div>27 / 86</div> <div>Palm Ave</div> <div>8 / 8</div> <div>280 / 298</div> <div>5 / 13</div> <div>12 / 15</div> <div>15 / 39</div> <div>127 / 69</div> </div>	<div>23</div> <div> <div>70 / 144</div> <div>18 / 53</div> <div>Rainbow Dr</div> <div>154 / 40</div> <div>335 / 458</div> <div>Palm Ave</div> <div>229 / 75</div> <div>428 / 425</div> </div>	<div>24</div> <div> <div>28 / 31</div> <div>28 / 45</div> <div>2 / 13</div> <div>7th St</div> <div>0 / 4</div> <div>336 / 460</div> <div>27 / 32</div> <div>Palm Ave</div> <div>17 / 29</div> <div>421 / 434</div> <div>16 / 30</div> <div>66 / 55</div> <div>40 / 27</div> <div>82 / 23</div> </div>	<div>25</div> <div> <div>506 / 482</div> <div>5 / 9</div> <div>Delaware St</div> <div>3 / 7</div> <div>6 / 3</div> <div>Palm Ave</div> </div>
<div>26</div> <div> <div>26 / 27</div> <div>47 / 82</div> <div>93 / 179</div> <div>45 / 135</div> <div>1917 / 884</div> <div>25 / 60</div> <div>Palm Ave (SR-75)</div> <div>22 / 43</div> <div>707 / 1751</div> <div>40 / 130</div> <div>171 / 102</div> <div>38 / 93</div> <div>53 / 65</div> </div>	<div>27</div> <div> <div>16 / 15</div> <div>11 / 14</div> <div>57 / 66</div> <div>Florida St</div> <div>13 / 57</div> <div>2096 / 1302</div> <div>21 / 51</div> <div>Palm Ave (SR-75)</div> <div>3 / 21</div> <div>945 / 2042</div> <div>36 / 59</div> <div>19 / 22</div> <div>5 / 11</div> <div>32 / 36</div> </div>	<div>28</div> <div> <div>16 / 21</div> <div>37 / 46</div> <div>174 / 159</div> <div>13th St</div> <div>54 / 84</div> <div>1945 / 1378</div> <div>100 / 162</div> <div>Palm Ave (SR-75)</div> <div>4 / 28</div> <div>1018 / 1921</div> <div>66 / 206</div> <div>152 / 134</div> <div>20 / 42</div> <div>94 / 132</div> </div>	<div>29</div> <div> <div>22 / 11</div> <div>3 / 11</div> <div>40 / 25</div> <div>16th St</div> <div>13 / 17</div> <div>2079 / 1686</div> <div>45 / 177</div> <div>Palm Ave (SR-75)</div> <div>15 / 10</div> <div>1292 / 2052</div> <div>27 / 52</div> <div>17 / 41</div> <div>7 / 9</div> <div>51 / 84</div> </div>
<div>30</div> <div> <div>80 / 236</div> <div>96 / 248</div> <div>244 / 610</div> <div>19th St</div> <div>223 / 576</div> <div>2014 / 1694</div> <div>254 / 340</div> <div>Palm Ave (SR-75)</div> <div>95 / 196</div> <div>1305 / 1989</div> <div>31 / 28</div> <div>79 / 69</div> <div>75 / 184</div> <div>800 / 553</div> </div>	<div>31</div> <div> <div>1325 / 1727</div> <div>161 / 456</div> <div>I-5 SB Exit Ramp</div> <div>1166 / 889</div> <div>Palm Ave (SR-75)</div> <div>295 / 527</div> </div>	<div>32</div> <div> <div>I-5 NB Ramps</div> <div>543 / 260</div> <div>443 / 547</div> <div>Palm Ave (SR-75)</div> <div>456 / 976</div> <div>829 / 455</div> <div>2 / 3</div> <div>149 / 111</div> </div>	<div>33</div> <div> <div>14 / 37</div> <div>Silver Strand Blvd</div> <div>YMCA Dwy</div> <div>4 / 11</div> <div>5 / 9</div> <div>66 / 4</div> </div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

Mitigation

As mentioned, six study intersections would experience significant impacts that would require mitigation with the addition of Alternative 1 project trips with two CVNs in port. The following mitigation measures presented with one CVN in port would allow the intersections to operate at or better than the No Action with two CVNs in port:

- [M1] Intersection #10, Silver Strand Boulevard (SR-75) and Tulagi Road
- [M2] Intersection #18, Silver Strand Boulevard (SR-75) and Rainbow Drive
- [M3] Intersection #26, 9th Street and Palm Avenue (SR-75)
- [M4] Intersection #28, 13th Street and Palm Avenue (SR-75)
- [M5] Intersection #30, Saturn Boulevard/19th Street and Palm Avenue (SR-75)

The mitigation measure previously presented for the intersection of 7th Street and Silver Strand Boulevard (SR-75) would also apply to this scenario:

- [M6] Intersection #19, 7th Street and Silver Strand Boulevard (SR-75)

Table 5-9 summarizes the mitigation measures and shows the intersection delay and LOS with the proposed mitigation measures in place.

Table 5-9. Year 2024 with 2 CVNs Alternative 1 Intersection Mitigation Summary

INTERSECTION	PROPOSED MITIGATION	BEFORE MITIGATION		AFTER MITIGATION	
		AM	PM	AM	PM
10 Silver Strand Blvd (SR-75) & Tulagi Rd	Change signal timings to reflect new traffic patterns	3.6 (A)	84.6 (F)	3.6 (A)	38.1 (D)
18 Silver Strand Blvd (SR-75) & Rainbow Dr	Change through-right lane on Rainbow Dr to a left-through-right lane and extend storage pockets	148.7 (F)	52.2 (D)	58.7 (E)	32.4 (C)
19 7 th St & Silver Strand Blvd (SR-75)	Stripe a southbound left-turn pocket	113.3 (F)	69.8 (E)	59.6 (E)	54.9 (D)
26 9 th St & Palm Ave (SR-75)	Modify northbound/southbound approaches to have protected lefts instead of split phasing	52.8 (D)	61.4 (E)	44.2 (D)	50.4 (D)
28 13 th St & Palm Ave (SR-75)	Remove the northbound pedestrian crossing and shorten the northbound split time	40.7 (D)	61.7 (E)	39.9 (D)	54.6 (D)
30 Saturn Blvd/19 th St & Palm Ave (SR-75)	Add a second WB left-turn lane along Palm Ave (SR-75)	63.6 (E)	220.4 (F)	50.9 (D)	109.6 (F)

Note: Table reflects intersection Delay (LOS). Although all mitigations may not improve operations to LOS D or better, it restores average delay to better than what is experienced under the No-Action Alternative.

Alternative 3

Road Network

The only roadway network change associated with Alternative 3 is implementation of P947, which would install a new ECP at SSTC-South and signalize the intersection of Silver Strand Boulevard (SR-75) and Hooper Boulevard. All other roadways and intersections within the study area would remain the same with the addition of Alternative 3.

Traffic Volumes

Traffic associated with the completed construction of the Proposed Action Alternative 3 was added to the No-Action Alternative volumes. **Figure 5-13** shows the Year 2024 Alternative 3 Conditions volumes with 2 CVNs in port.

Intersection Analysis

All intersections would operate at LOS D or better during both peak periods, except at the following locations:

- | | |
|--|------------------------------------|
| ▪ #1 Glorietta Boulevard and Fourth Street (SR-75) | <i>AM peak (LOS F)</i> |
| ▪ #2 Fourth Street (SR-75) and Pomona Avenue | <i>PM peak (LOS F)</i> |
| ▪ #4 Orange Avenue (SR-75) and Fourth Street (SR-75) | <i>PM peak (LOS F)</i> |
| ▪ #10 Silver Strand Boulevard (SR-75) and Tulagi Road | <i>PM peak (LOS F)</i> |
| ▪ #18 Silver Strand Boulevard (SR-75) and Rainbow Drive | <i>AM peak (LOS E)</i> |
| ▪ #19 7 th Street and Silver Strand Boulevard (SR-75) | <i>AM & PM peaks (LOS F/E)</i> |
| ▪ #23 Palm Avenue and Rainbow Drive | <i>AM peak (LOS E)</i> |
| ▪ #26 9th Street and Palm Avenue (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #28 13th Street and Palm Avenue (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75) | <i>AM & PM peak (LOS E/F)</i> |

Of the intersections that operate at an unacceptable LOS E or F, six (shown in **bold**) would result in a significant impact that would need to be mitigated by the project. Five of the six locations are the same intersections that would have impacts with one CVN in port. The intersection of Orange Avenue (SR-75) and Fourth Street (SR-75) was found to be an additional impact when two CVNs are in port.

Intersection Lane Vehicle Analysis

Both signalized intersections at the Palm Avenue and I-5 interchange would be below or approaching capacity during both peak periods.

Mitigation

As mentioned, six study intersections would experience significant impacts that would require mitigation with the addition of Alternative 3 project trips with two CVNs in port. The proposed mitigation measures that would allow the intersections to operate at or better than the No-Action are the same that were previously described for Alternative 3 with one CVN in port:

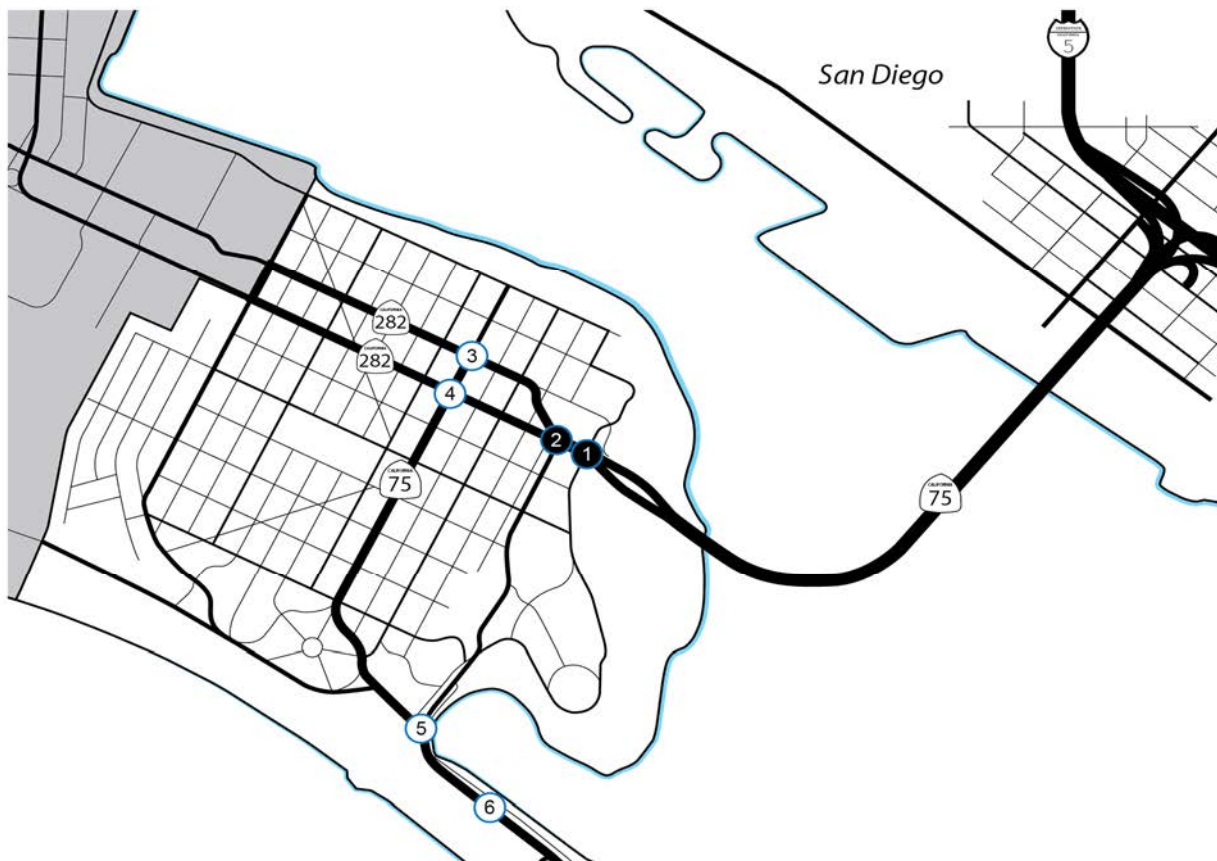
- [M1] Intersection #10, Silver Strand Boulevard (SR-75) and Tulagi Road
- [M2] Intersection #18, Silver Strand Boulevard (SR-75) and Rainbow Drive
- [M3] Intersection #26, 9th Street and Palm Avenue (SR-75)
- [M4] Intersection #28, 13th Street and Palm Avenue (SR-75)
- [M5] Intersection #30, Saturn Boulevard/19th Street and Palm Avenue (SR-75)

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1 <div> <div>10 / 56</div> <div>Glorietta Blvd</div> <div> <div>554 / 245</div> <div>3813 / 1806</div> <div>Fourth St (SR-75)</div> </div> </div> <div> <div>1421 / 4089</div> <div>35 / 18</div> <div>478 / 910</div> </div>	2 <div> <div>3712 / 1843</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1282 / 3855</div> <div>203 / 131</div> <div>Pomona Ave</div> <div>231 / 190</div> </div>	3 <div> <div>13 / 17</div> <div>279 / 863</div> <div>Orange Ave (SR-75)</div> <div> <div>344 / 110</div> <div>1958 / 639</div> <div>1590 / 993</div> <div>Third Street (SR-75)</div> </div> </div> <div> <div>107 / 103</div> <div>103 / 253</div> </div>	4 <div> <div>1473 / 1116</div> <div>453 / 762</div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1 / 7</div> <div>586 / 2124</div> <div>81 / 111</div> <div>199 / 355</div> <div>222 / 472</div> </div>
5 <div> <div>1173 / 1266</div> <div>Orange Ave (SR-75)</div> <div> <div>7 / 13</div> <div>225 / 181</div> <div>Pomona Ave</div> </div> </div> <div> <div>1191 / 938</div> <div>624 / 704</div> </div>	6 <div> <div>38 / 158</div> <div>1320 / 1499</div> <div>41 / 70</div> <div>Silver Strand Blvd (SR-75)</div> <div> <div>6 / 26</div> <div>0 / 11</div> <div>8 / 27</div> <div>Avenidas De Las Arenas</div> </div> </div> <div> <div>49 / 150</div> <div>3 / 11</div> <div>11 / 30</div> <div>21 / 24</div> <div>1412 / 1557</div> <div>27 / 52</div> </div>		

CORONADO

Study intersections 1 - 6



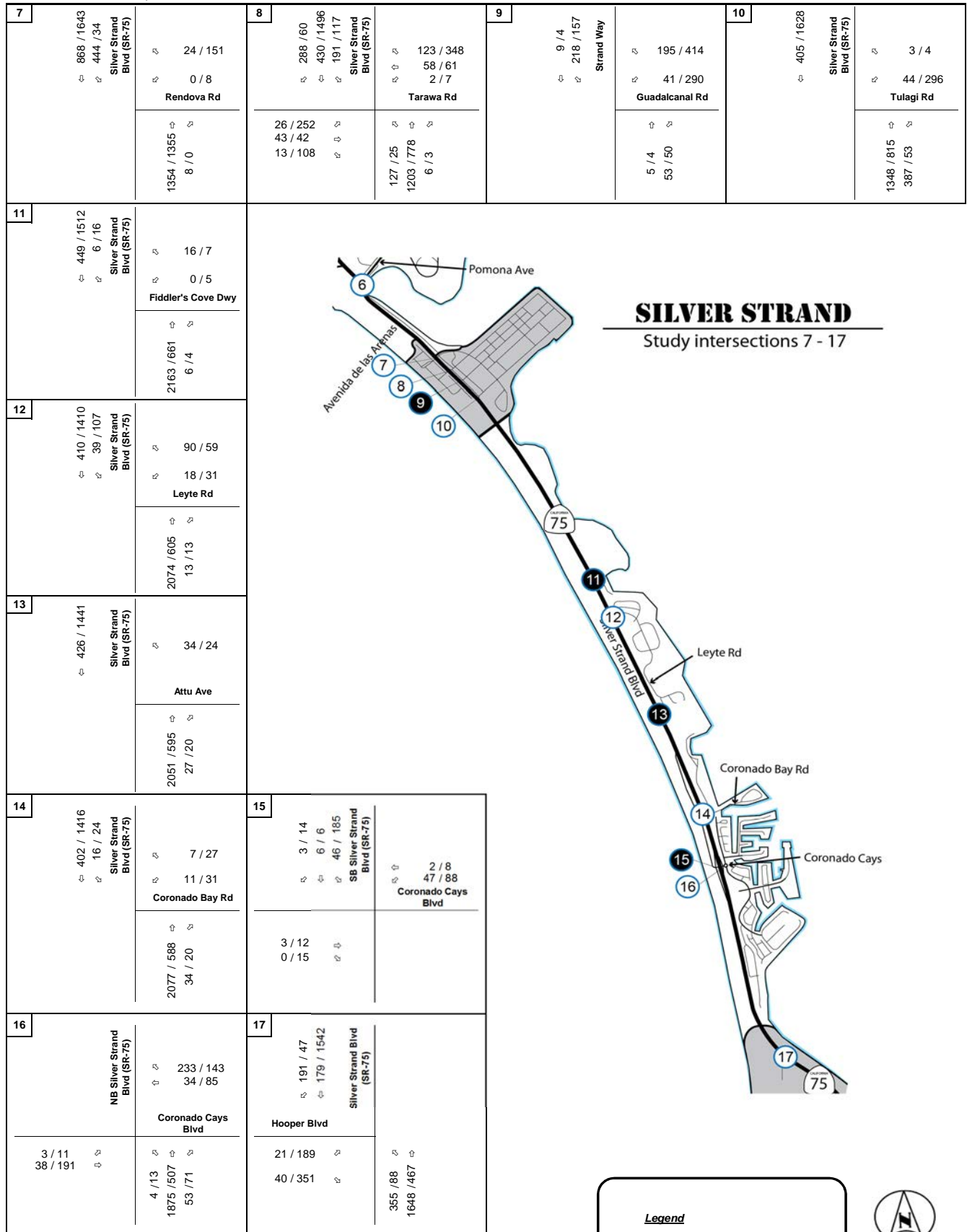
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus



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<div>18</div> <div> <div>46 / 201</div> <div>171 / 1433</div> <div>4 / 19</div> <div>Silver Strand Blvd (SR-75)</div> <div>21 / 7</div> <div>8 / 4</div> <div>50 / 19</div> <div>Rainbow Dr</div> <div>408 / 90</div> <div>2 / 7</div> <div>40 / 70</div> <div>27 / 76</div> <div>1875 / 405</div> <div>11 / 58</div> </div>	<div>19</div> <div> <div>54 / 22</div> <div>43 / 27</div> <div>21 / 25</div> <div>7th St</div> <div>18 / 36</div> <div>1726 / 462</div> <div>Silver Strand Blvd (SR-75)</div> <div>8 / 59</div> <div>254 / 1382</div> <div>20 / 62</div> <div>41 / 19</div> <div>24 / 41</div> <div>2 / 5</div> </div>	<div>20</div> <div> <div>14 / 4</div> <div>Delaware St</div> <div>9 / 39</div> <div>1735 / 497</div> <div>407 / 516</div> <div>Silver Strand Blvd (SR-75)</div> <div>271 / 1413</div> </div>	<div>21</div> <div> <div>5 / 9</div> <div>48 / 105</div> <div>Silver Strand Blvd</div> <div>105 / 41</div> <div>130 / 313</div> <div>Palm Ave</div> <div>10 / 4</div> <div>239 / 215</div> <div>Dwy</div> </div>
<div>22</div> <div> <div>15 / 14</div> <div>11 / 34</div> <div>12 / 29</div> <div>3rd St</div> <div>25 / 25</div> <div>211 / 327</div> <div>27 / 86</div> <div>Palm Ave</div> <div>8 / 8</div> <div>278 / 297</div> <div>5 / 13</div> <div>12 / 15</div> <div>15 / 39</div> <div>127 / 69</div> </div>	<div>23</div> <div> <div>70 / 144</div> <div>18 / 53</div> <div>Rainbow Dr</div> <div>154 / 40</div> <div>335 / 458</div> <div>Palm Ave</div> <div>228 / 74</div> <div>428 / 425</div> </div>	<div>24</div> <div> <div>28 / 31</div> <div>28 / 45</div> <div>2 / 13</div> <div>7th St</div> <div>0 / 4</div> <div>336 / 460</div> <div>27 / 32</div> <div>Palm Ave</div> <div>17 / 29</div> <div>421 / 434</div> <div>16 / 30</div> <div>66 / 55</div> <div>39 / 26</div> <div>82 / 23</div> </div>	<div>25</div> <div> <div>506 / 482</div> <div>5 / 9</div> <div>Delaware St</div> <div>3 / 7</div> <div>6 / 3</div> <div>Palm Ave</div> </div>
<div>26</div> <div> <div>26 / 27</div> <div>47 / 82</div> <div>93 / 179</div> <div>45 / 135</div> <div>1874 / 874</div> <div>25 / 60</div> <div>Palm Ave (SR-75)</div> <div>22 / 43</div> <div>702 / 1709</div> <div>40 / 130</div> <div>170 / 101</div> <div>38 / 93</div> <div>53 / 65</div> <div>9th St</div> </div>	<div>27</div> <div> <div>16 / 15</div> <div>11 / 14</div> <div>57 / 66</div> <div>Florida St</div> <div>13 / 57</div> <div>2053 / 1292</div> <div>21 / 51</div> <div>Palm Ave (SR-75)</div> <div>3 / 21</div> <div>940 / 2000</div> <div>36 / 59</div> <div>19 / 22</div> <div>5 / 11</div> <div>32 / 36</div> </div>	<div>28</div> <div> <div>16 / 21</div> <div>37 / 46</div> <div>174 / 159</div> <div>13th St</div> <div>54 / 84</div> <div>1901 / 1367</div> <div>100 / 162</div> <div>Palm Ave (SR-75)</div> <div>4 / 28</div> <div>1012 / 1878</div> <div>66 / 206</div> <div>151 / 133</div> <div>20 / 42</div> <div>94 / 132</div> </div>	<div>29</div> <div> <div>22 / 11</div> <div>3 / 11</div> <div>40 / 25</div> <div>16th St</div> <div>13 / 17</div> <div>2035 / 1675</div> <div>45 / 177</div> <div>Palm Ave (SR-75)</div> <div>15 / 10</div> <div>1286 / 2009</div> <div>27 / 52</div> <div>17 / 41</div> <div>7 / 9</div> <div>51 / 84</div> </div>
<div>30</div> <div> <div>80 / 236</div> <div>96 / 248</div> <div>244 / 610</div> <div>19th St</div> <div>223 / 576</div> <div>1971 / 1684</div> <div>254 / 340</div> <div>Palm Ave (SR-75)</div> <div>95 / 196</div> <div>1301 / 1946</div> <div>31 / 28</div> <div>78 / 68</div> <div>75 / 184</div> <div>800 / 553</div> <div>Saturn Blvd</div> </div>	<div>31</div> <div> <div>1282 / 1717</div> <div>161 / 456</div> <div>I-5 SB Exit Ramp</div> <div>1167 / 889</div> <div>Palm Ave (SR-75)</div> <div>295 / 527</div> </div>	<div>32</div> <div> <div>I-5 NB Ramps</div> <div>543 / 260</div> <div>443 / 547</div> <div>Palm Ave (SR-75)</div> <div>456 / 976</div> <div>829 / 455</div> <div>2 / 3</div> <div>149 / 111</div> </div>	<div>33</div> <div> <div>14 / 37</div> <div>Silver Strand Blvd</div> <div>YMCA Dwy</div> <div>4 / 11</div> <div>5 / 9</div> <div>66 / 4</div> </div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

The intersection of Orange Avenue (SR-75) and Fourth Street (SR-75) is considered an impact because it worsens an existing LOS F condition by more than 1 second. The increase in delay for the Alternative 3 scenario when two CVNs are in port is 1.1 seconds. There was no reasonable mitigation found for this location. It would be considered a significant and unavoidable impact.

Table 5-1 summarizes the mitigation measures and shows the intersection delay and LOS with the proposed mitigation measures in place.

Table 5-10. Year 2024 with 2 CVNs Alternative 3 Intersection Mitigation Summary

INTERSECTION	PROPOSED MITIGATION	BEFORE MITIGATION		AFTER MITIGATION	
		AM	PM	AM	PM
4	Orange Ave (SR-75) & Fourth St (SR-75)	38.3 (D)	107.2 (F)	38.3 (D)	107.2 (F)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	3.6 (A)	83.0 (F)	3.6 (A)	37.5 (D)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	139.4 (F)	46.1 (D)	54.2 (D)	28.8 (C)
26	9 th St & Palm Ave (SR-75)	49.2 (D)	58.3 (E)	42.7 (D)	49.3 (D)
28	13 th St & Palm Ave (SR-75)	40.0 (D)	58.8 (E)	39.4 (D)	53.2 (D)
30	Saturn Blvd/19 th St & Palm Ave (SR-75)	60.9 (E)	214.4 (F)	49.6 (D)	105.7(F)

Note: Table reflects intersection Delay (LOS). Although all mitigations may not improve operations to LOS D or better, it restores average delay to better than what is experienced under the No-Action Alternative.

Plus Project without P947 Conditions

As previously mentioned, the implementation of P947 provides traffic relief from the local streets within Imperial Beach by shifting access to SSTC-South onto SR-75. This scenario was analyzed to determine traffic impacts if P947 is not constructed until the end of the ten-year development period, or not implemented at all.

Alternatives 1 and 2

Road Network

It is assumed that all intersections and roadway segments in the study area would remain the same as Existing Conditions with the development of Proposed Action Alternative 1 without P947.

Traffic Volumes

Traffic associated with the completed construction of the Proposed Action Alternative 1 without P947 was added to the No-Action Alternative volumes. **Figure 5-14** shows the resulting volumes.

Intersection Analysis

All intersections would operate at LOS D or better during both peak periods, except at the following locations:

- | | |
|--|------------------------------------|
| ▪ #1 Glorietta Boulevard and Fourth Street (SR-75) | <i>AM peak (LOS F)</i> |
| ▪ #2 Fourth Street (SR-75) and Pomona Avenue | <i>PM peak (LOS F)</i> |
| ▪ #4 Orange Avenue (SR-75) and Fourth Street (SR-75) | <i>PM peak (LOS F)</i> |
| ▪ #10 Silver Strand Boulevard (SR-75) and Tulagi Road | <i>PM peak (LOS F)</i> |
| ▪ #18 Silver Strand Boulevard (SR-75) and Rainbow Drive | <i>AM peak (LOS E)</i> |
| ▪ #19 7th Street and Silver Strand Boulevard (SR-75) | <i>AM & PM peaks (LOS F/E)</i> |
| ▪ #21 Silver Strand Boulevard and Palm Avenue | <i>PM peak (LOS F)</i> |
| ▪ #22 3rd Street and Palm Avenue | <i>AM & PM peaks (LOS F/F)</i> |
| ▪ #23 Palm Avenue and Rainbow Drive | <i>AM & PM peaks (LOS F/F)</i> |
| ▪ #26 9th Street and Palm Avenue (SR-75) | <i>AM & PM peaks (LOS E/E)</i> |
| ▪ #28 13th Street and Palm Avenue (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75) | <i>AM & PM peak (LOS E/F)</i> |
| ▪ #31 I-5 SB Exit Ramp and Palm Avenue (SR-75) | <i>PM peak (LOS E)</i> |

Of the intersections that operate at an unacceptable LOS E or F, nine (shown in **bold**) would result in a significant impact that would need to be mitigated by the project. All nine of the impacts were also impacts with one CVN in port.

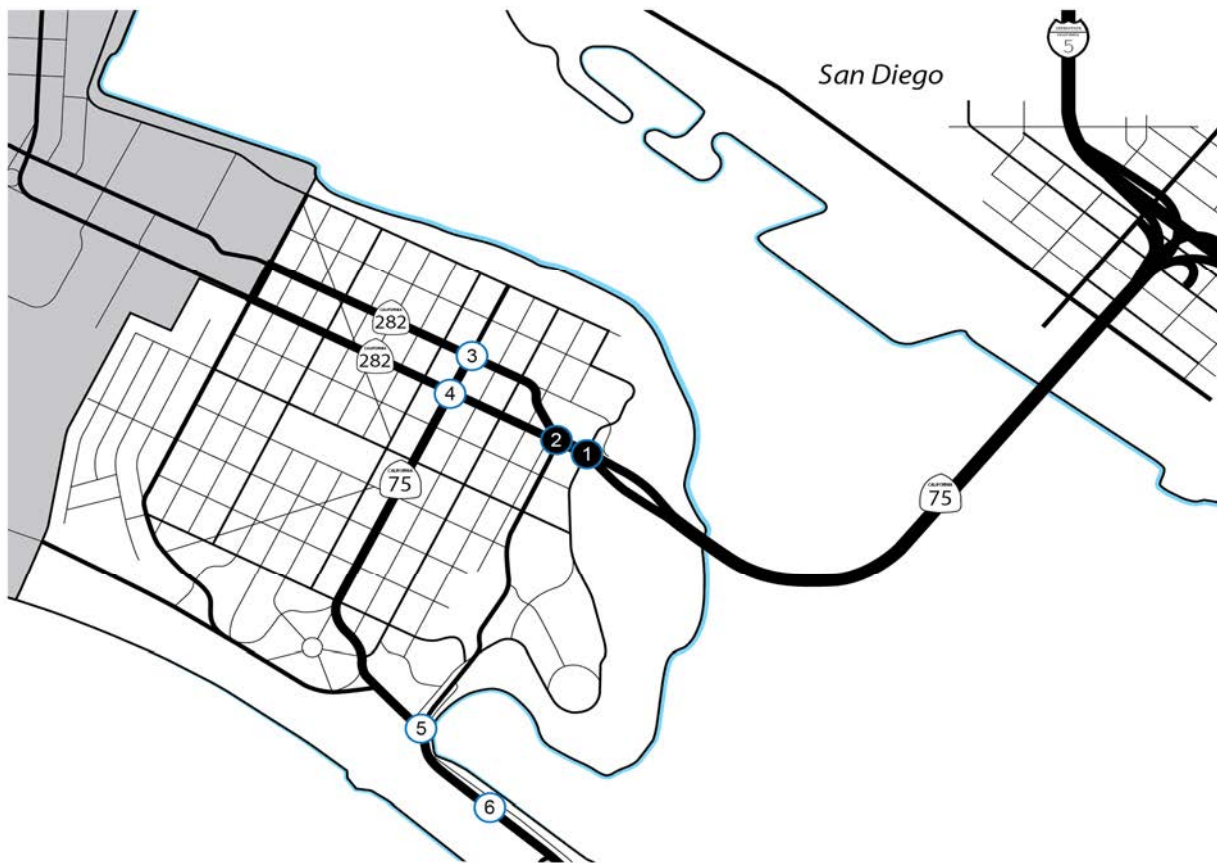
The addition of Alternative 1 traffic without P947 would result in three additional impacts on local streets in Imperial Beach that would not be impacts if P947 were in place.

Intersecting Lane Vehicle Analysis

Both signalized intersections at the Palm Avenue and I-5 interchange would operate below or approaching capacity during both peak periods.

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1 <div> <div>10 / 56</div> <div>Glorietta Blvd</div> <div> <div>554 / 245</div> <div>3699 / 1778</div> </div> <div>Fourth St (SR-75)</div> </div> <div> <div>1409 / 3980</div> <div>35 / 18</div> </div> <div> <div>478 / 910</div> </div>	2 <div> <div>3598 / 1815</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1270 / 3746</div> <div>203 / 131</div> </div> <div>Pomona Ave</div> <div> <div>231 / 184</div> </div>	3 <div> <div>13 / 17</div> <div>279 / 863</div> </div> <div>Orange Ave (SR-75)</div> <div> <div>344 / 110</div> <div>1948 / 636</div> <div>1486 / 968</div> </div> <div>Third Street (SR-75)</div> <div> <div>108 / 102</div> <div>103 / 253</div> </div>	4 <div> <div>1369 / 1091</div> <div>453 / 762</div> </div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> <div> <div>1 / 7</div> <div>585 / 2114</div> <div>81 / 110</div> </div> <div> <div>200 / 354</div> <div>211 / 373</div> </div>
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Legend

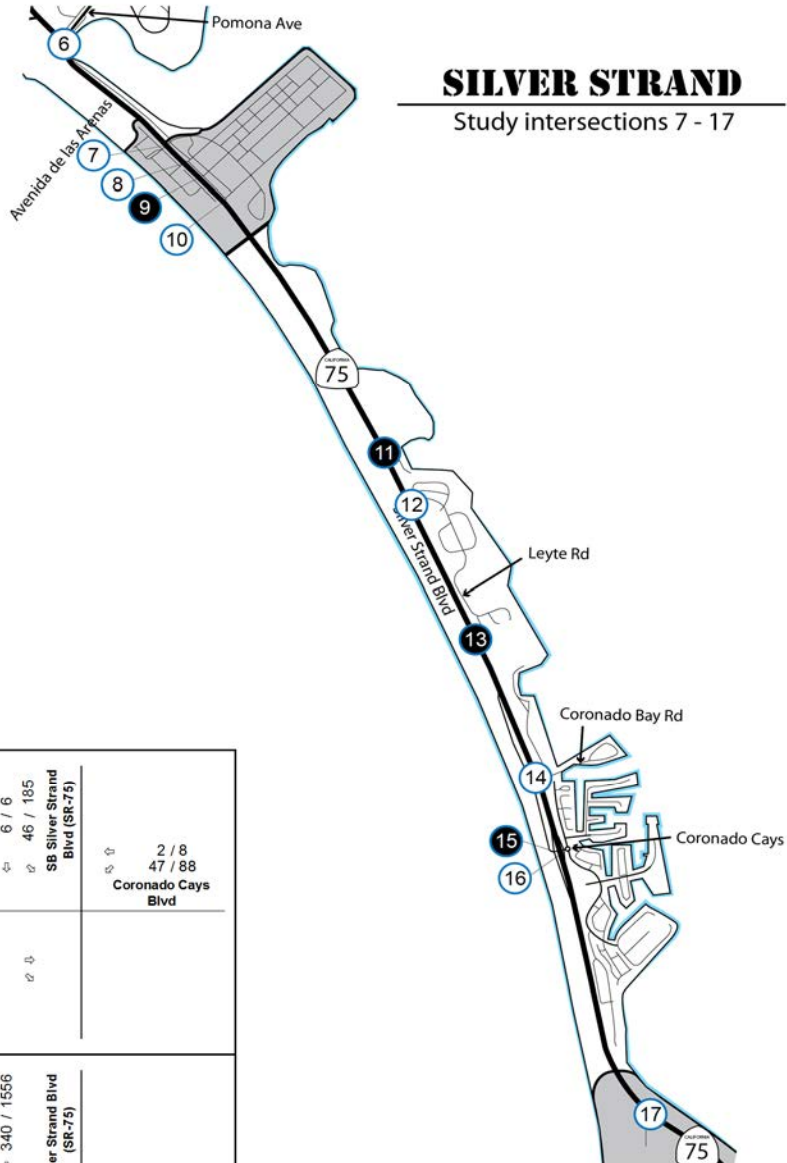
X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

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<div>7</div> <div> <div> 764 / 1617 444 / 34 Silver Strand Blvd (SR-75) </div> <div> 24 / 151 0 / 8 Rendova Rd </div> <div> 1342 / 1251 8 / 0 </div> </div>	<div>8</div> <div> <div> 271 / 56 399 / 1488 135 / 103 Silver Strand Blvd (SR-75) </div> <div> 118 / 302 53 / 55 2 / 7 Tarawa Rd </div> <div> 23 / 226 38 / 36 12 / 101 </div> <div> 120 / 23 1198 / 735 6 / 3 </div> </div>	<div>9</div> <div> <div> 9 / 4 158 / 142 Strand Way </div> <div> 190 / 364 43 / 271 Guadalcanal Rd </div> <div> 5 / 4 34 / 49 </div> </div>	<div>10</div> <div> <div> 374 / 1620 Silver Strand Blvd (SR-75) </div> <div> 3 / 3 46 / 277 Tulagi Rd </div> <div> 1336 / 771 368 / 52 </div> </div>
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<div>12</div> <div> <div> 380 / 1377 39 / 107 Silver Strand Blvd (SR-75) </div> <div> 90 / 59 18 / 31 Leyte Rd </div> <div> 2044 / 571 13 / 13 </div> </div>			
<div>13</div> <div> <div> 396 / 1408 Silver Strand Blvd (SR-75) </div> <div> 34 / 24 Attu Ave </div> <div> 2021 / 561 27 / 20 </div> </div>			
<div>14</div> <div> <div> 372 / 1383 16 / 24 Silver Strand Blvd (SR-75) </div> <div> 7 / 27 11 / 31 Coronado Bay Rd </div> <div> 2047 / 554 34 / 20 </div> </div>	<div>15</div> <div> <div> 3 / 14 6 / 6 46 / 185 SB Silver Strand Blvd (SR-75) </div> <div> 2 / 8 47 / 88 Coronado Cays Blvd </div> <div> 3 / 12 0 / 15 </div> </div>		
<div>16</div> <div> <div> NB Silver Strand Blvd (SR-75) </div> <div> 233 / 143 34 / 85 Coronado Cays Blvd </div> <div> 3 / 11 38 / 191 </div> <div> 4 / 13 1845 / 473 53 / 71 </div> </div>	<div>17</div> <div> <div> 340 / 1556 Silver Strand Blvd (SR-75) </div> <div> Hooper Blvd </div> <div> 1639 / 622 </div> </div>		



Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



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<div>30</div> <div> <div>80 / 236</div> <div>96 / 248</div> <div>244 / 610</div> <div>19th St</div> <div>223 / 576</div> <div>2080 / 1710</div> <div>254 / 340</div> <div>Palm Ave (SR-75)</div> <div>95 / 196</div> <div>1312 / 2054</div> <div>31 / 28</div> <div>79 / 69</div> <div>75 / 184</div> <div>800 / 553</div> <div>Saturn Blvd</div> </div>	<div>31</div> <div> <div>1390 / 1743</div> <div>161 / 456</div> <div>I-5 SB Exit Ramp</div> <div>1166 / 889</div> <div>Palm Ave (SR-75)</div> <div>295 / 527</div> <div>50 / 440</div> </div>	<div>32</div> <div> <div>I-5 NB Ramps</div> <div>543 / 260</div> <div>443 / 547</div> <div>Palm Ave (SR-75)</div> <div>456 / 976</div> <div>829 / 455</div> <div>2 / 3</div> <div>149 / 111</div> </div>	<div>33</div> <div> <div>87 / 684</div> <div>Silver Strand Blvd</div> <div>YMCA Dwy</div> <div>4 / 11</div> <div>5 / 9</div> <div>721 / 166</div> </div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

Mitigation

As mentioned, nine study intersections would experience significant impacts that would require mitigation with the addition of Alternative 1 project trips without P947. The following mitigation measures identified for Alternative 1 with inclusion of P947 would still apply for this scenario:

- [M1] Intersection #10, Silver Strand Boulevard (SR-75) and Tulagi Road
- [M3] Intersection #26, 9th Street and Palm Avenue (SR-75)
- [M4] Intersection #28, 13th Street and Palm Avenue (SR-75)
- [M5] Intersection #30, Saturn Boulevard/19th Street and Palm Avenue (SR-75)

The other five intersections that would have impacts without P947 when two CVNs are in port would require mitigations similar to when one CVN is in port:

- [M6] Intersection #19, 7th Street and Silver Strand Boulevard (SR-75)
- [M7] Intersection #21, Silver Strand Boulevard and Palm Avenue
- [M8] Intersection #22, 3rd Street and Palm Avenue
- [M9] Intersection #23, Palm Avenue and Rainbow Drive
- [M10] Intersection #31, I-5 Southbound Exit Ramp and Palm Avenue (SR-75)

Table 5-11 summarizes all of the mitigation measures and shows the intersection delay and LOS with the proposed mitigation measures in place.

Table 5-11. Year 2024 with 2 CVNs Alternative 1 without P947 Intersection Mitigation Summary

INTERSECTION	PROPOSED MITIGATION	BEFORE MITIGATION		AFTER MITIGATION	
		AM	PM	AM	PM
10 Silver Strand Blvd (SR-75) & Tulagi Rd	Change signal timings to reflect new traffic patterns	3.6 (A)	82.7 (F)	3.6 (A)	52.7 (D)
19 7 th St & Silver Strand Blvd (SR-75)	Stripe a southbound left-turn pocket	116.0 (F)	67.2 (E)	48.6 (D)	47.7 (D)
21 Silver Strand Blvd & Palm Ave	Widen Silver Strand Boulevard, install traffic signal	30.5 (D)	>1000 (F)	6.9 (A)	25.8 (C)
22 3 rd St & Palm Ave	Install a traffic signal	167.6 (F)	385.0 (F)	9.0 (A)	21.0 (C)
23 Palm Ave & Rainbow Dr	Restrict SB left-turn movement	392.4 (F)	669.1 (F)	12.1 (B)	14.8 (B)
26 9 th St & Silver Strand Blvd (SR-75)	Modify northbound/southbound approaches to have protected lefts instead of split phasing	59.2 (E)	66.8 (E)	46.3 (D)	51.3 (D)
28 13 th St & Palm Ave (SR-75)	Remove the northbound pedestrian crossing and shorten the northbound split time	41.8 (D)	66.9 (E)	40.7 (D)	54.6 (D)
30 Saturn Blvd/19 th St & Palm Ave (SR-75)	Add a second WB left-turn lane along Palm Ave (SR-75)	68.6 (E)	229.4 (F)	54.2 (D)	116.0 (F)
31 I-5 SB Exit Ramps & Palm Ave (SR-75)	Change signal timings	52.1 (D)	56.4 (E)	52.1 (D)	54.1 (D)

Note: Table reflects intersection Delay (LOS). Although all mitigations may not improve operations to LOS D or better, it restores average delay to better than what is experienced under the No-Action Alternative.

Alternative 3

Road Network

It is assumed that all intersections and roadway segments in the study area would remain the same as Existing Conditions with the development of Proposed Action Alternative 3 without P947.

Traffic Volumes

Traffic associated with the completed construction of the Proposed Action Alternative 3 without P947 was added to the No-Action Alternative volumes. **Figure 5-15** shows the resulting volumes.

Intersection Analysis

All intersections would operate at LOS D or better during both peak periods, except at the following locations:

- | | |
|--|------------------------------------|
| ▪ #1 Glorietta Boulevard and Fourth Street (SR-75) | <i>AM peak (LOS F)</i> |
| ▪ #2 Fourth Street (SR-75) and Pomona Avenue | <i>PM peak (LOS F)</i> |
| ▪ #4 Orange Avenue (SR-75) and Fourth Street (SR-75) | <i>PM peak (LOS F)</i> |
| ▪ #10 Silver Strand Boulevard (SR-75) and Tulagi Road | <i>PM peak (LOS F)</i> |
| ▪ #18 Silver Strand Boulevard (SR-75) and Rainbow Drive | <i>AM peak (LOS E)</i> |
| ▪ #19 7th Street and Silver Strand Boulevard (SR-75) | <i>AM & PM peaks (LOS F/E)</i> |
| ▪ #21 Silver Strand Boulevard and Palm Avenue | <i>PM peak (LOS F)</i> |
| ▪ #22 3rd Street and Palm Avenue | <i>AM & PM peaks (LOS F/F)</i> |
| ▪ #23 Palm Avenue and Rainbow Drive | <i>AM & PM peaks (LOS F/F)</i> |
| ▪ #26 9th Street and Palm Avenue (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #28 13th Street and Palm Avenue (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75) | <i>AM & PM peak (LOS E/F)</i> |

Of the intersections that operate at an unacceptable LOS E or F, nine (shown in **bold**) would result in a significant impact that would need to be mitigated by the project. All nine of the impacts were also impacts with one CVN in port.

The addition of Alternative 3 traffic without P947 would result in three additional impacts on local streets in Imperial Beach that would not be impacts if P947 were in place.

Intersecting Lane Vehicle Analysis

Both signalized intersections at the Palm Avenue and I-5 interchange would operate below or approaching capacity during both peak periods.

Mitigation

As mentioned, nine study intersections would experience significant impacts that would require mitigation with the addition of Alternative 3 project trips without P947. The following mitigation measures identified for Alternative 3 with inclusion of P947 would still apply for this scenario:

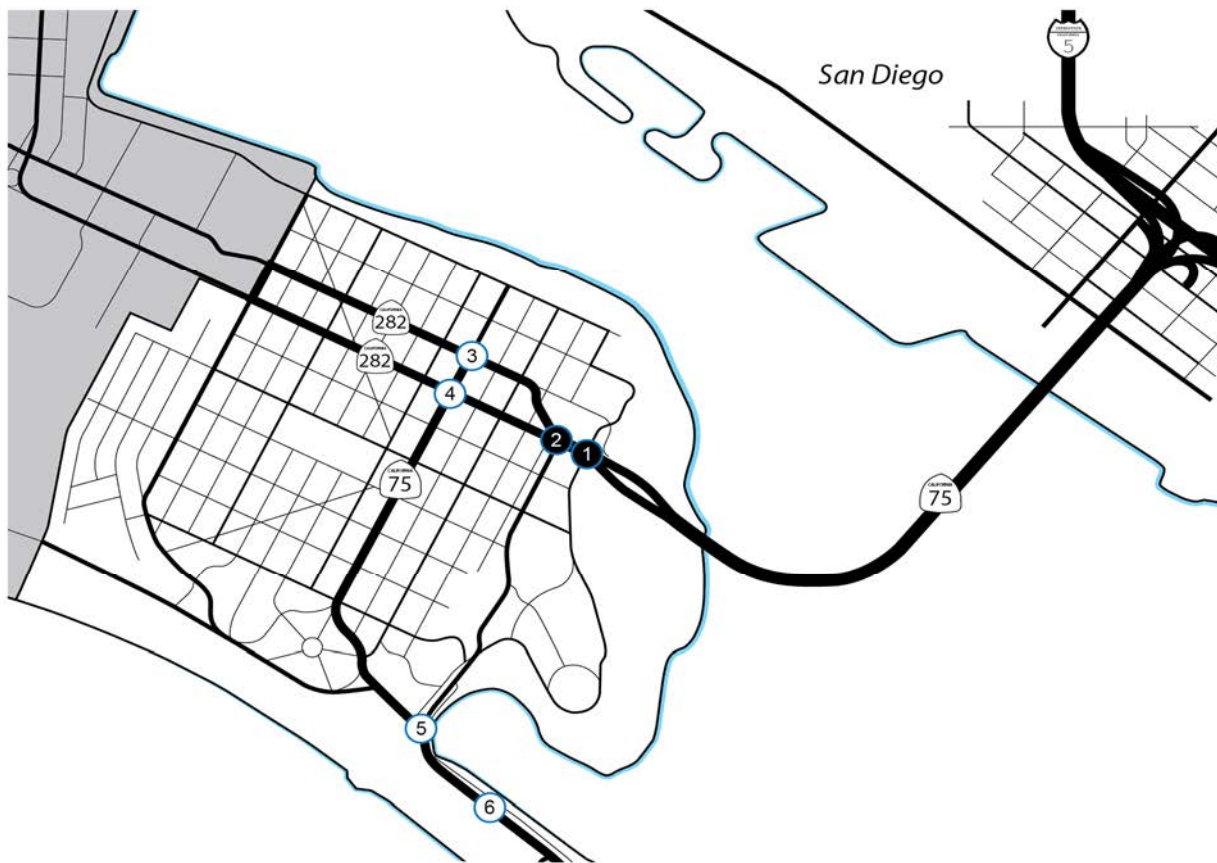
- [M1] Intersection #10, Silver Strand Boulevard (SR-75) and Tulagi Road
- [M3] Intersection #26, 9th Street and Palm Avenue (SR-75)
- [M4] Intersection #28, 13th Street and Palm Avenue (SR-75)
- [M5] Intersection #30, Saturn Boulevard/19th Street and Palm Avenue (SR-75)

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1 <div> <div>10 / 56</div> <div>Glorietta Blvd</div> <div> <div>554 / 245</div> <div>3758 / 1793</div> <div>Fourth St (SR-75)</div> </div> </div> <div> <div>1415 / 4035</div> <div>35 / 18</div> <div>478 / 910</div> </div>	2 <div> <div>3657 / 1830</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1276 / 3801</div> <div>203 / 131</div> <div>Pomona Ave</div> <div>231 / 190</div> </div>	3 <div> <div>13 / 17</div> <div>279 / 863</div> <div>Orange Ave (SR-75)</div> <div> <div>344 / 110</div> <div>1958 / 639</div> <div>1535 / 980</div> <div>Third Street (SR-75)</div> </div> </div> <div> <div>107 / 103</div> <div>103 / 253</div> </div>	4 <div> <div>1418 / 1103</div> <div>453 / 762</div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1 / 7</div> <div>586 / 2124</div> <div>81 / 111</div> <div>199 / 355</div> <div>216 / 418</div> </div>
5 <div> <div>1119 / 1252</div> <div>Orange Ave (SR-75)</div> <div> <div>7 / 13</div> <div>225 / 181</div> <div>Pomona Ave</div> </div> </div> <div> <div>1185 / 884</div> <div>624 / 704</div> </div>	6 <div> <div>38 / 158</div> <div>1266 / 1485</div> <div>41 / 70</div> <div>Silver Strand Blvd (SR-75)</div> <div> <div>6 / 26</div> <div>0 / 11</div> <div>8 / 27</div> <div>Avenidas De Las Arenas</div> </div> </div> <div> <div>49 / 150</div> <div>3 / 11</div> <div>11 / 30</div> <div>21 / 24</div> <div>1406 / 1503</div> <div>27 / 52</div> </div>		

CORONADO

Study intersections 1 - 6



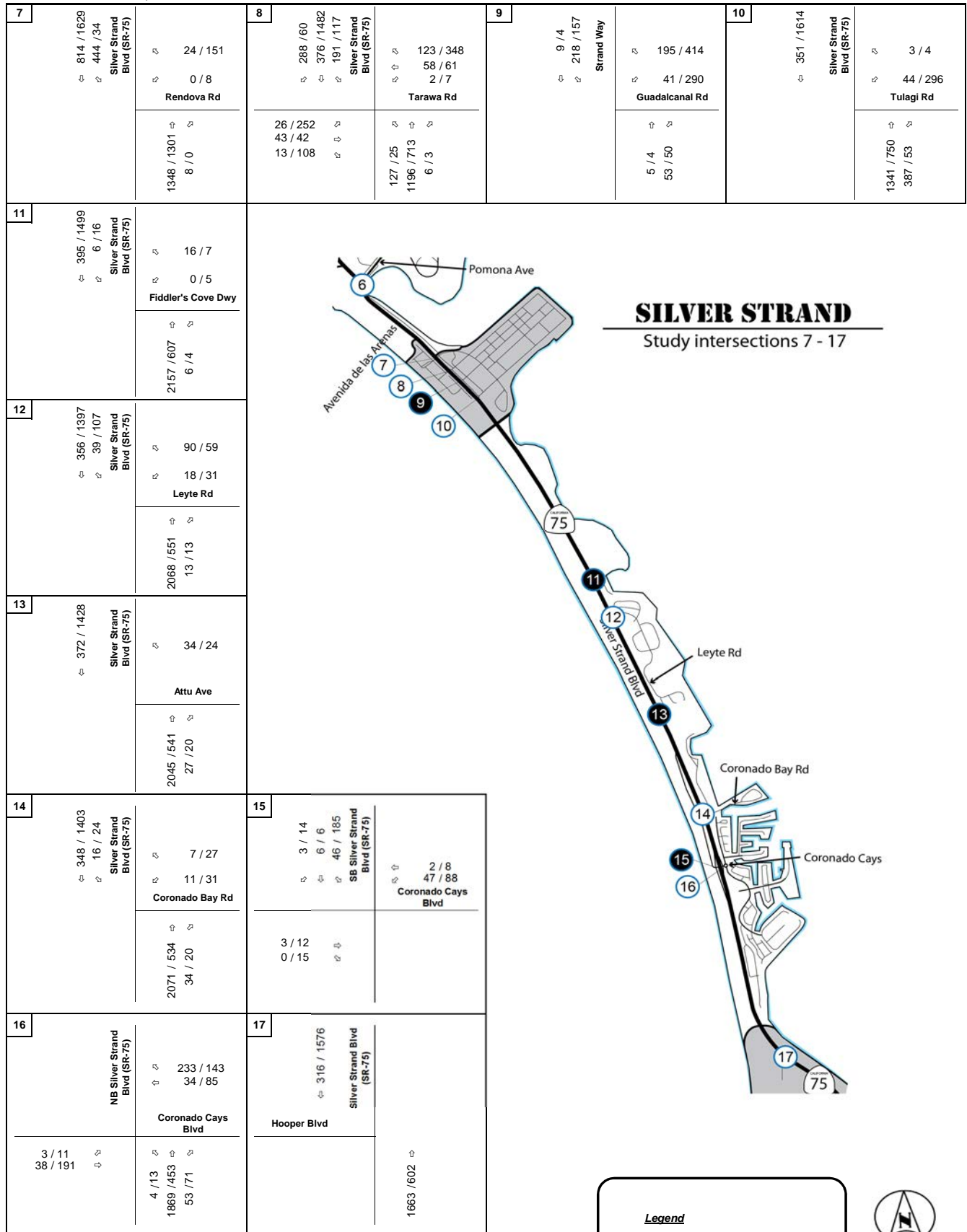
Legend

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TURNING VOLUMES



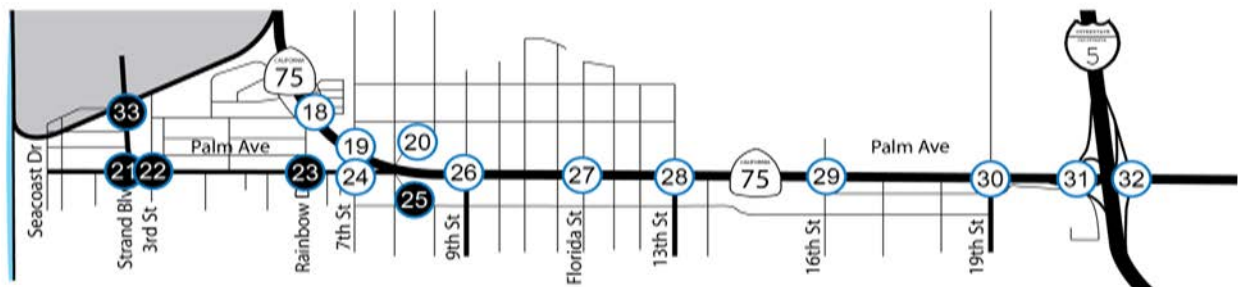
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<div>18</div> <div> <div>182 / 230</div> <div>132 / 1087</div> <div>4 / 19</div> <div>Silver Strand Blvd (SR-75)</div> <div>21 / 7</div> <div>8 / 4</div> <div>50 / 19</div> <div>Rainbow Dr</div> <div>418 / 224</div> <div>2 / 7</div> <div>40 / 70</div> <div>27 / 76</div> <div>1526 / 319</div> <div>11 / 58</div> </div>	<div>19</div> <div> <div>54 / 22</div> <div>43 / 27</div> <div>21 / 25</div> <div>7th St</div> <div>18 / 36</div> <div>1382 / 377</div> <div>Silver Strand Blvd (SR-75)</div> <div>8 / 59</div> <div>216 / 1042</div> <div>19 / 57</div> <div>36 / 18</div> <div>24 / 41</div> <div>2 / 5</div> </div>	<div>20</div> <div> <div>14 / 4</div> <div>Delaware St</div> <div>9 / 39</div> <div>1391 / 412</div> <div>806 / 615</div> <div>Silver Strand Blvd (SR-75)</div> <div>233 / 1073</div> </div>	<div>21</div> <div> <div>6 / 14</div> <div>108 / 640</div> <div>Silver Strand Blvd</div> <div>646 / 175</div> <div>129 / 308</div> <div>Palm Ave</div> <div>15 / 5</div> <div>234 / 214</div> <div>Dwy</div> </div>
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<div>26</div> <div> <div>26 / 27</div> <div>47 / 82</div> <div>93 / 179</div> <div>45 / 135</div> <div>1928 / 887</div> <div>25 / 60</div> <div>Palm Ave (SR-75)</div> <div>22 / 43</div> <div>708 / 1763</div> <div>40 / 130</div> <div>170 / 101</div> <div>38 / 93</div> <div>53 / 65</div> </div>	<div>27</div> <div> <div>16 / 15</div> <div>11 / 14</div> <div>57 / 66</div> <div>Florida St</div> <div>13 / 57</div> <div>2107 / 1305</div> <div>21 / 51</div> <div>Palm Ave (SR-75)</div> <div>3 / 21</div> <div>946 / 2054</div> <div>36 / 59</div> <div>19 / 22</div> <div>5 / 11</div> <div>32 / 36</div> </div>	<div>28</div> <div> <div>16 / 21</div> <div>37 / 46</div> <div>174 / 159</div> <div>13th St</div> <div>54 / 84</div> <div>1956 / 1381</div> <div>100 / 162</div> <div>Palm Ave (SR-75)</div> <div>4 / 28</div> <div>1018 / 1932</div> <div>66 / 206</div> <div>151 / 133</div> <div>20 / 42</div> <div>94 / 132</div> </div>	<div>29</div> <div> <div>22 / 11</div> <div>3 / 11</div> <div>40 / 25</div> <div>16th St</div> <div>13 / 17</div> <div>2090 / 1689</div> <div>45 / 177</div> <div>Palm Ave (SR-75)</div> <div>15 / 10</div> <div>1292 / 2063</div> <div>27 / 52</div> <div>17 / 41</div> <div>7 / 9</div> <div>51 / 84</div> </div>
<div>30</div> <div> <div>80 / 236</div> <div>96 / 248</div> <div>244 / 610</div> <div>19th St</div> <div>223 / 576</div> <div>2025 / 1698</div> <div>254 / 340</div> <div>Palm Ave (SR-75)</div> <div>95 / 196</div> <div>1307 / 2000</div> <div>31 / 28</div> <div>78 / 68</div> <div>75 / 184</div> <div>800 / 553</div> </div>	<div>31</div> <div> <div>1336 / 1730</div> <div>161 / 456</div> <div>I-5 SB Exit Ramp</div> <div>1167 / 889</div> <div>Palm Ave (SR-75)</div> <div>295 / 527</div> <div>41 / 367</div> </div>	<div>32</div> <div> <div>I-5 NB Ramps</div> <div>543 / 260</div> <div>443 / 547</div> <div>Palm Ave (SR-75)</div> <div>456 / 976</div> <div>829 / 455</div> <div>2 / 3</div> <div>149 / 111</div> </div>	<div>33</div> <div> <div>75 / 577</div> <div>Silver Strand Blvd</div> <div>YMCA Dwy</div> <div>4 / 11</div> <div>5 / 9</div> <div>612 / 139</div> </div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

Four of the other five intersections that would have impacts without P947 when two CVNs are in port would require mitigations similar to when one CVN is in port:

- [M6] Intersection #19, 7th Street and Silver Strand Boulevard (SR-75)
- [M7] Intersection #21, Silver Strand Boulevard and Palm Avenue
- [M8] Intersection #22, 3rd Street and Palm Avenue
- [M9] Intersection #23, Palm Avenue and Rainbow Drive

As previously discussed, no reasonable mitigation was found for the impact at the intersection of Orange Avenue (SR-75) and Fourth Street (SR-75). It would be considered a significant and unavoidable impact.

Table 5-12 summarizes all of the mitigation measures and shows the intersection delay and LOS with the proposed mitigation measures in place.

Table 5-12. Year 2024 with 2 CVNs Alternative 3 without P947 Intersection Mitigation Summary

INTERSECTION		PROPOSED MITIGATION	BEFORE MITIGATION		AFTER MITIGATION	
			AM	PM	AM	PM
4	Orange Ave (SR-75) & Fourth St (SR-75)	None [significant and unavoidable]	38.0 (D)	107.6 (F)	38.0 (D)	107.6 (F)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	Change signal timings to reflect new traffic patterns	3.6 (A)	81.4 (F)	3.6 (A)	51.8 (D)
19	7 th St & Silver Strand Blvd (SR-75)	Stripe a southbound left-turn pocket	115.3 (F)	67.1 (E)	48.9 (D)	48.0 (D)
21	Silver Strand Blvd & Palm Ave	Widen Silver Strand Boulevard, install traffic signal	24.7 (C)	854.1 (F)	6.6 (A)	20.0 (B)
22	3 rd St & Palm Ave	Install a traffic signal	113.6 (F)	303.7 (F)	8.4 (A)	15.1 (B)
23	Palm Ave & Rainbow Dr	Restrict SB left-turn movement	244.1 (F)	424.7 (F)	12.0 (B)	14.6 (B)
26	9 th St & Silver Strand Blvd (SR-75)	Modify northbound/southbound approaches to have protected lefts instead of split phasing	53.8 (D)	62.4 (E)	44.4 (D)	49.9 (D)
28	13 th St & Palm Ave (SR-75)	Remove the northbound pedestrian crossing and shorten the northbound split time	40.8 (D)	62.5 (E)	40.1 (D)	53.5 (D)
30	Saturn Blvd/19 th St & Palm Ave (SR-75)	Add a second WB left-turn lane along Palm Ave (SR-75)	64.4 (E)	221.8 (F)	50.8 (D)	110.7 (F)

Note: Table reflects intersection Delay (LOS). Although all mitigations may not improve operations to LOS D or better, it restores average delay to better than what is experienced under the No-Action Alternative.

6.0 YEAR 2040 CONDITIONS

Year 2040 is the future year that represents a horizon year condition, approximately 30 years from existing conditions. The Year 2040 roadway network is assumed to be the same as in the Existing Condition and is consistent with adjacent City-adopted community plans. A Year 2040 No-Action Alternative was established to set baseline conditions and then Year 2040 with the project alternatives were compared to determine the Proposed Action's impact on the study area. Similar to the Year 2024 conditions, scenarios with one and two CVNs in port are included in the analysis. Scenarios with three CVNs in port were not analyzed since required staggering of work hours would result in peak hour traffic volumes that are less than the two CVN scenarios. Further, Alternatives 1 and 2 are identical from a traffic generation standpoint and therefore have identical results.

Conditions with 1 Carrier Vessel Nuclear (CVN)

Table 6-1 displays the LOS analysis results for the study intersections under Year 2040 with 1 CVN Conditions. **Table 6-2** displays the ILV analysis results for the Palm Avenue and I-5 interchange under the Year 2040 with 1 CVN Conditions. **Appendix G** contains the LOS calculation worksheets and **Appendix H** contains the ILV calculation worksheets. The results of the analyses are summarized below.

No-Action Conditions

Road Network

Under the Year 2040 scenario, it is assumed that all intersections and roadway segments in the study area would remain the same as Existing Conditions.

Traffic Volumes

To generate Year 2040 volumes, a comparison of 2008 and 2040 SANDAG Series 12 Traffic Forecast Models was performed and resulting growth factors were applied to the existing intersection volumes as described in Chapter 2. **Figure 6-1** shows the Year 2040 No-Action Alternative Conditions volumes with one CVN in port.

Intersection Analysis

All intersections would operate at LOS D or better during both peak periods, except the following:

- | | |
|--|------------------------------------|
| ▪ #1 Glorietta Boulevard and Fourth Street (SR-75) | <i>AM peak (LOS E)</i> |
| ▪ #2 Fourth Street (SR-75) and Pomona Avenue | <i>PM peak (LOS F)</i> |
| ▪ #4 Orange Avenue (SR-75) and Fourth Street (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #8 Silver Strand Boulevard (SR-75) and Tarawa Road | <i>AM & PM peaks (LOS E/F)</i> |
| ▪ #9 Strand Way and Guadalcanal Road | <i>PM peak (LOS F)</i> |
| ▪ #10 Silver Strand Boulevard (SR-75) and Tulagi Road | <i>PM peak (LOS F)</i> |
| ▪ #11 Silver Strand Boulevard (SR-75) and Fiddler's Cove Dwy | <i>AM peak (LOS E)</i> |
| ▪ #12 Silver Strand Boulevard (SR-75) and Leyte Rd | <i>AM peak (LOS E)</i> |
| ▪ #13 Silver Strand Boulevard (SR-75) and Attu Ave | <i>AM peak (LOS E)</i> |
| ▪ #16 Silver Strand Boulevard (SR-75) and Coronado Cays Blvd | <i>AM peak (LOS E)</i> |
| ▪ #18 Silver Strand Boulevard (SR-75) and Rainbow Dr | <i>AM peak (LOS F)</i> |
| ▪ #19 7 th Street and Silver Strand Boulevard (SR-75) | <i>AM & PM peaks (LOS F/F)</i> |
| ▪ #23 Palm Avenue and Rainbow Drive | <i>AM peak (LOS E)</i> |
| ▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75) | <i>AM & PM peak (LOS E/F)</i> |
| ▪ #31 I-5 SB Exit Ramp and Palm Avenue (SR-75) | <i>PM peak (LOS E)</i> |

Intersecting Lane Vehicle Analysis

Both signalized intersections at the Palm Avenue and I-5 interchange would be below or approaching capacity during both peak periods.

Table 6-1. Year 2040 with 1 CVN Intersection Analysis Summary

INTERSECTION		NO ACTION		PLUS PROJECT				PLUS PROJECT (W/O P947)			
				ALT. 1/2		ALT. 3		ALT. 1/2		ALT. 3	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	44.7 (E)	18.8 (C)	43.7 (E)	18.7 (C)	45.0 (E)	18.8 (C)	42.1 (E)	18.5 (C)	43.6 (E)	18.7 (C)
2	Fourth St (SR-75) & Pomona Ave	24.9 (C)	325.8 (F)	24.6 (C)	265.1 (F)	24.7 (C)	298.9 (F)	24.4 (C)	244.4 (F)	24.6 (C)	280.1 (F)
3	Orange Ave (SR-75) & Third St (SR-75)	28.1 (C)	40.3 (B)	30.8 (C)	40.8 (D)	31.3 (D)	41.8 (D)	30.1 (C)	39.6 (D)	30.7 (C)	40.7 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	37.4 (D)	60.4 (E)	37.2 (D)	60.3 (E)	37.4 (C)	61.1 (E)	36.9 (D)	60.3 (E)	37.1 (D)	61.1 (E)
5	Silver Strand Blvd/Orange Ave (SR-75) & Pomona Ave	32.2 (C)	19.0 (B)	32.2 (C)	18.8 (B)	31.9 (C)	19.2 (B)	29.5 (C)	18.4 (B)	32.2 (C)	18.7 (B)
6	Silver Strand Blvd (SR-75) & Avenida De Las Arenas	14.5 (B)	23.5 (C)	14.4 (B)	23.3 (C)	14.6 (B)	23.9 (C)	14.2 (B)	22.5 (C)	14.4 (B)	23.1 (C)
7	Silver Strand Blvd (SR-75) & Rendova Rd	24.0 (C)	13.6 (B)	24.0 (C)	13.5 (B)	23.9 (C)	13.8 (B)	23.9 (C)	13.0 (B)	23.8 (C)	13.4 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	59.1 (E)	103.9 (F)	46.4 (D)	63.5 (E)	49.4 (D)	79.0 (E)	45.4 (D)	61.6 (E)	48.5 (D)	77.1 (E)
9	Strand Way & Guadalcanal Rd	11.5 (B)	174.4 (F)	10.3 (B)	19.3 (C)	10.8 (B)	39.5 (E)	10.3 (B)	19.3 (C)	10.8 (B)	39.5 (E)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	3.2 (A)	107.6 (F)	3.8 (A)	114.4 (F)	3.8 (A)	112.8 (F)	3.8 (A)	112.9 (F)	3.8 (A)	111.4 (F)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	35.3 (E)	25.0 (C)	33.6 (D)	34.1 (D)	34.2 (D)	32.8 (D)	33.3 (D)	30.3 (D)	34.1 (D)	29.8 (D)
12	Silver Strand Blvd (SR-75) & Leyte Rd	68.5 (E)	10.4 (B)	54.3 (D)	11.0 (B)	58.3 (E)	10.9 (B)	54.5 (D)	10.7 (B)	58.6 (E)	10.7 (B)
13	Silver Strand Blvd (SR-75) & Attu Ave	37.7 (E)	10.3 (B)	35.5 (E)	11.3 (B)	36.4 (E)	11.2 (B)	35.2 (E)	11.0 (B)	36.1 (E)	10.9 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	11.3 (B)	4.2 (A)	9.3 (A)	4.4 (A)	9.8 (A)	4.4 (A)	9.4 (A)	3.8 (A)	9.9 (A)	4.3 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.9 (A)	7.9 (A)	7.9 (A)	7.9 (A)	7.9 (A)	7.9 (A)	7.9 (A)	7.9 (A)	7.9 (A)	7.9 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	60.5 (E)	10.3 (B)	51.6 (D)	10.3 (B)	55.0 (D)	10.3 (A)	50.3 (D)	10.2 (B)	54.1 (D)	10.2 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd*	**		17.8 (B)	50.9 (D)	14.4 (B)	42.4 (D)	**		**	

Notes: P947 is a MILCON project that would construct a new ECP at SSTC-South along SR-75.

*Delay shown represents a signalized intersection and P947 improvements; the existing unsignalized intersection configuration would operate at LOS F. ** Intersection does not exist under this scenario
Table reflects intersection Delay (LOS). **Bold** indicates intersections operating at an unacceptable LOS E or F. **Bold and shaded** cells indicate locations where the project has an impact.

Table 6-1. Year 2040 with 1 CVN Intersection Analysis Summary (cont.)

INTERSECTION		NO ACTION		PLUS PROJECT				PLUS PROJECT (W/O P947)			
				ALT. 1/2		ALT. 3		ALT. 1/2		ALT. 3	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
18	Silver Strand Blvd (SR-75) & Rainbow Dr	125.4 (F)	32.4 (C)	196.7 (F)	80.4 (F)	187.0 (F)	72.8 (E)	108.4 (F)	44.5 (D)	113.8 (F)	43.2 (D)
19	7th St & Silver Strand Blvd (SR-75)	149.1 (F)	81.9 (F)	154.8 (F)	85.8 (F)	151.4 (F)	84.1 (F)	151.9 (F)	82.5 (F)	150.9 (F)	82.4 (F)
20	Silver Strand Blvd (SR-75) & Delaware St	8.2 (A)	11.0 (B)	7.9 (A)	14.9 (B)	7.8 (A)	14.1 (B)	13.6 (B)	11.9 (B)	12.5 (B)	11.7 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	13.3 (B)	21.0 (C)	13.4 (B)	21.3 (C)	13.4 (B)	21.3 (C)	31.3 (D)	>1000 (F)	25.2 (D)	879.9 (F)
22	3rd St & Palm Ave	11.3 (B)	21.2 (C)	11.4 (B)	21.8 (C)	11.4 (B)	21.6 (C)	170.6 (F)	390.5 (F)	116.4 (F)	308.8 (F)
23	Palm Ave & Rainbow Dr	37.8 (E)	28.1 (D)	38.7 (E)	28.3 (D)	38.4 (E)	28.2 (D)	436.0 (F)	722.4 (F)	274.3 (F)	463.5 (F)
24	7th St & Palm Ave	8.5 (A)	5.8 (A)	8.5 (A)	5.8 (A)	8.5 (A)	5.8 (A)	9.7 (A)	6.9 (A)	9.3 (A)	6.9 (A)
25	Delaware St & Palm Ave	12.1 (B)	12.8 (B)	12.1 (B)	12.8 (B)	12.1 (B)	12.8 (B)	12.7 (B)	22.7 (C)	12.6 (B)	20.4 (C)
26	9th St & Palm Ave (SR-75)	47.6 (D)	52.7 (D)	86.5 (F)	73.3 (E)	79.8 (E)	69.1 (E)	97.1 (F)	80.6 (F)	88.2 (F)	74.6 (E)
27	Florida St & Palm Ave (SR-75)	8.8 (A)	9.2 (A)	9.0 (A)	8.7 (A)	9.0 (A)	8.6 (A)	9.1 (A)	8.7 (A)	9.0 (A)	8.7 (A)
28	13th St & Palm Ave (SR-75)	39.1 (D)	53.9 (D)	43.9 (D)	76.3 (E)	42.8 (D)	71.9 (E)	45.9 (D)	82.9 (F)	44.2 (D)	77.3 (E)
29	16th St & Palm Ave (SR-75)	15.3 (B)	21.5 (C)	19.6 (B)	35.7 (D)	18.7 (B)	32.4 (C)	21.8 (C)	41.2 (D)	20.0 (B)	36.6 (D)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	76.0 (E)	212.7 (F)	99.8 (F)	254.5 (F)	95.8 (F)	248.6 (F)	106.2 (F)	263.7 (F)	100.7 (F)	256.1 (F)
31	I-5 SB Exit Ramp & Palm Avenue (SR-75)	48.6 (D)	75.7 (E)	68.1 (E)	85.7 (F)	64.5 (E)	84.4 (F)	75.5 (E)	87.9 (F)	69.4 (E)	86.1 (F)
32	I-5 NB Ramps & Palm Avenue (SR-75)	12.9 (B)	10.3 (B)	13.4 (B)	10.4 (B)	13.4 (B)	10.4 (B)	13.4 (B)	10.4 (B)	13.4 (B)	10.4 (B)
33	Silver Strand Blvd & YMCA Dwy	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)	9.4 (A)	17.8 (C)	9.3 (A)	15.3 (C)

Notes: P947 is a MILCON project that would construct a new ECP at SSTC-South along SR-75.

** Intersection does not exist under this scenario

Table reflects intersection Delay (LOS). **Bold** indicates intersections operating at an unacceptable LOS E or F. **Bold and shaded** cells indicate locations where the project has an impact.

Table 6-2. Year 2040 with 1 CVN ILV Analysis Summary

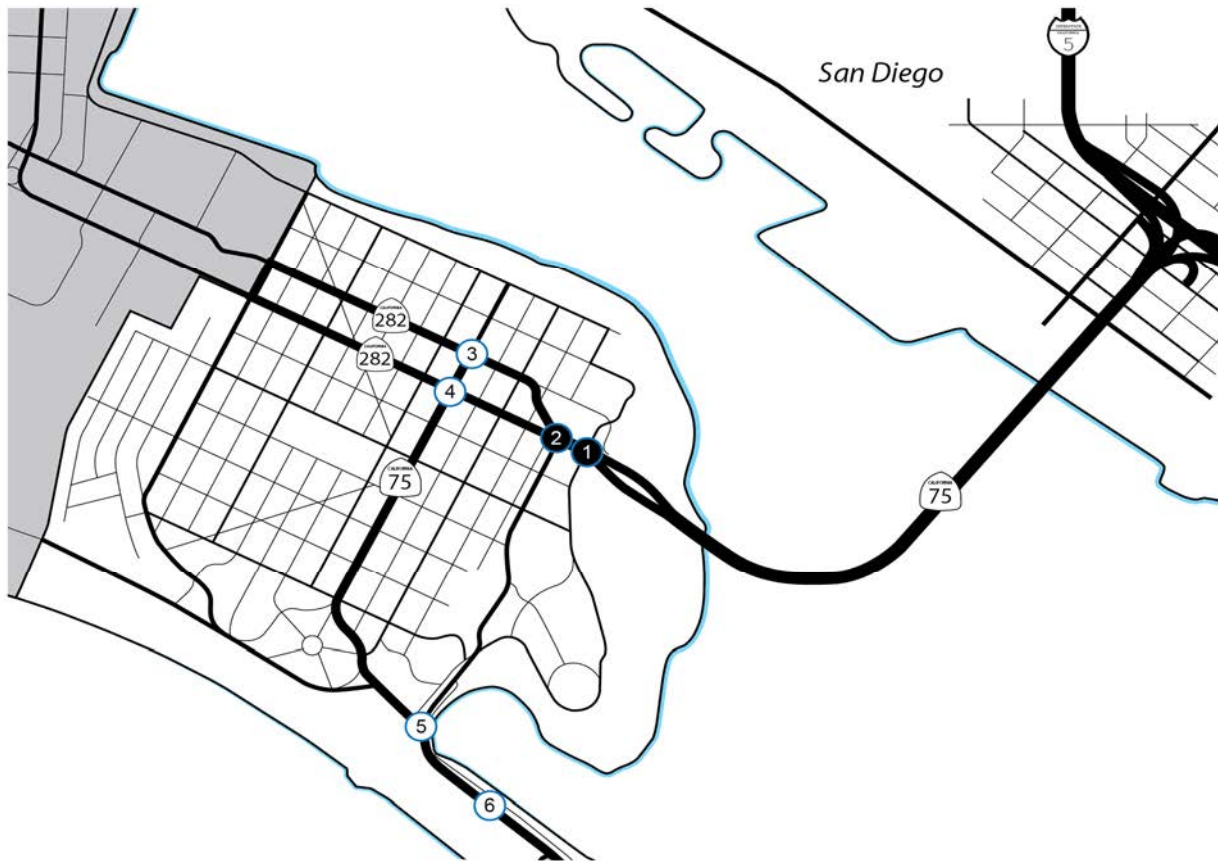
INTERSECTION		PEAK HOUR	YEAR 2040 NO ACTION		YEAR 2040 ALTERNATIVE 1/2		YEAR 2040 ALTERNATIVE 3	
			ILV TOTAL	CAPACITY	ILV TOTAL	CAPACITY	ILV TOTAL	CAPACITY
31	I-5 SB Exit Ramp & Palm Avenue (SR-75)	AM	1177	Below Capacity	1340	Approaching Capacity	1319	Approaching Capacity
		PM	1397	Approaching Capacity	1437	Approaching Capacity	1432	Approaching Capacity
32	I-5 NB Ramps & Palm Avenue (SR-75)	AM	1099	Below Capacity	1120	Below Capacity	1120	Below Capacity
		PM	840	Below Capacity	848	Below Capacity	848	Below Capacity

INTERSECTION		PEAK HOUR	YEAR 2040 ALTERNATIVE 1/2 WITHOUT P947		YEAR 2040 ALTERNATIVE 3 WITHOUT P947	
			ILV TOTAL	CAPACITY	ILV TOTAL	CAPACITY
31	I-5 SB Exit Ramp & Palm Avenue (SR-75)	AM	1372	Approaching Capacity	1346	Approaching Capacity
		PM	1443	Approaching Capacity	1438	Approaching Capacity
32	I-5 NB Ramps & Palm Avenue (SR-75)	AM	1120	Below Capacity	1120	Below Capacity
		PM	848	Below Capacity	848	Below Capacity

Notes: P947 is a MILCON project that would construct a new ECP at SSTC-South along SR-75.
 <1200 = Below Capacity; 1200 – 1500 = Approaching Capacity; >1500 = Above Capacity

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<div>1</div> <div> <div> <div>10 / 56</div> <div>↔</div> <div>Glorietta Blvd</div> </div> <div> <div>535 / 241</div> <div>↔</div> <div>3287 / 1684</div> </div> <div> <div>Fourth St (SR-75)</div> </div> </div> <div> <div>1313 / 3552</div> <div>↔</div> <div>35 / 18</div> </div> <div> <div>479 / 908</div> </div>	<div>2</div> <div> <div> <div>3186 / 1722</div> <div>↔</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1174 / 3315</div> <div>↔</div> <div>204 / 132</div> </div> <div> <div>Pomona Ave</div> </div> <div> <div>234 / 202</div> </div> </div>	<div>3</div> <div> <div> <div>6 / 15</div> <div>↔</div> <div>260 / 771</div> </div> <div> <div>Orange Ave (SR-75)</div> </div> <div> <div>251 / 87</div> <div>↔</div> <div>1545 / 540</div> <div>↔</div> <div>1562 / 987</div> </div> <div> <div>Third Street (SR-75)</div> </div> <div> <div>41 / 71</div> <div>↔</div> <div>94 / 245</div> </div> </div>	<div>4</div> <div> <div> <div>1444 / 1103</div> <div>↔</div> <div>437 / 676</div> </div> <div> <div>Orange Ave (SR-75)</div> </div> <div> <div>Fourth St (SR-75)</div> </div> <div> <div>503 / 1710</div> <div>↔</div> <div>52 / 45</div> </div> <div> <div>127 / 324</div> <div>↔</div> <div>217 / 440</div> </div> </div>
<div>5</div> <div> <div> <div>1286 / 1379</div> <div>↔</div> <div>Orange Ave (SR-75)</div> </div> <div> <div>8 / 14</div> <div>↔</div> <div>253 / 203</div> </div> <div> <div>Pomona Ave</div> </div> <div> <div>1294 / 1007</div> <div>↔</div> <div>704 / 804</div> </div> </div> <div> <div>Silver Strand Blvd (SR-75)</div> </div>	<div>6</div> <div> <div> <div>43 / 178</div> <div>↔</div> <div>1451 / 1641</div> <div>↔</div> <div>46 / 79</div> </div> <div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>7 / 29</div> <div>↔</div> <div>0 / 12</div> <div>↔</div> <div>9 / 30</div> </div> <div> <div>Avenidas De Las Arenas</div> </div> <div> <div>55 / 168</div> <div>↔</div> <div>3 / 12</div> <div>↔</div> <div>12 / 34</div> </div> <div> <div>23 / 27</div> <div>↔</div> <div>1544 / 1715</div> <div>↔</div> <div>30 / 58</div> </div> </div>	<div> <div>CORONADO</div> <div>Study intersections 1 - 6</div> </div>	



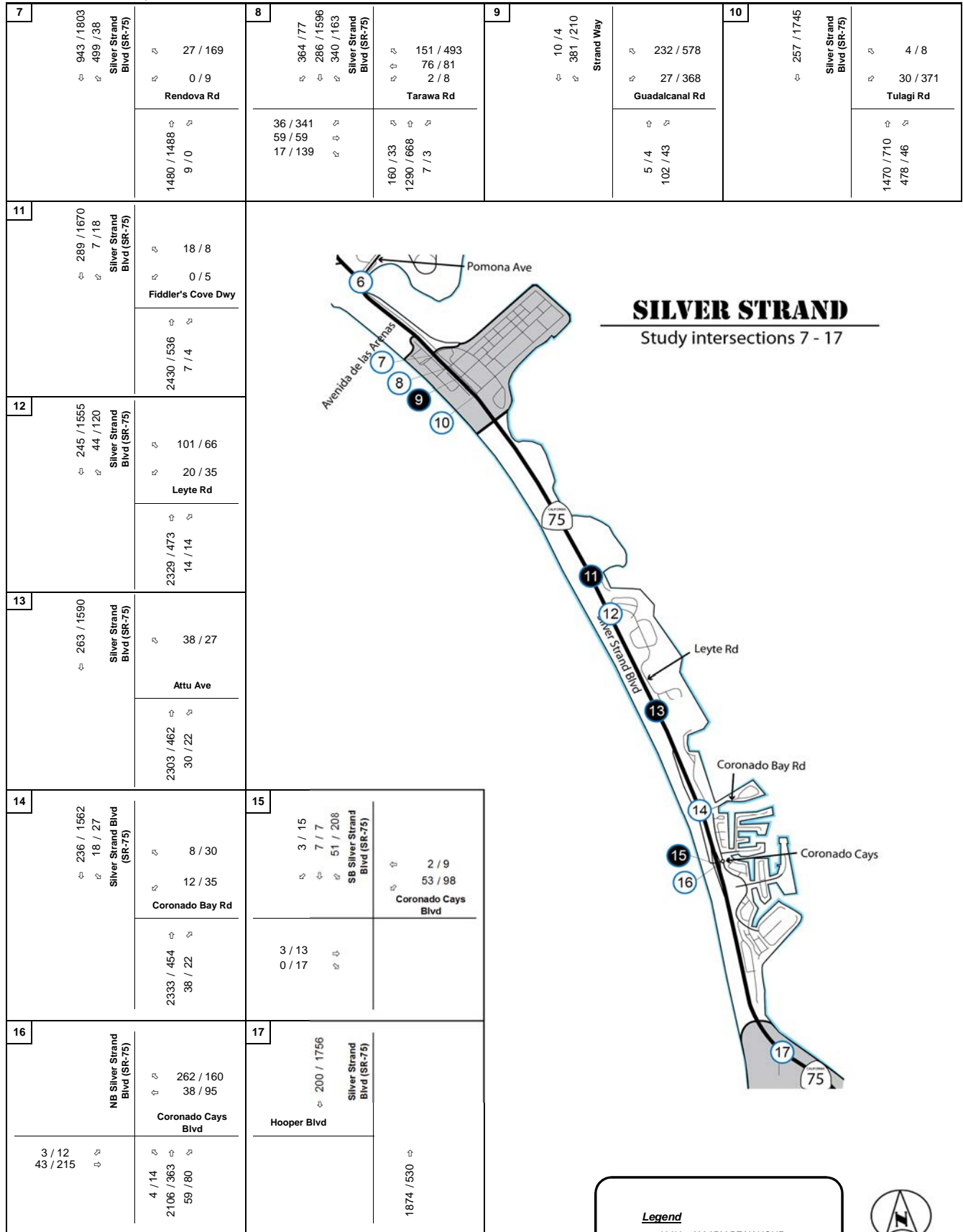
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

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<div>18</div> <div> <div>51 / 224</div> <div>147 / 1242</div> <div>4 / 19</div> <div>Silver Strand Blvd (SR-75)</div> <div>21 / 7</div> <div>8 / 4</div> <div>50 / 19</div> <div>Rainbow Dr</div> <div>456 / 101</div> <div>2 / 7</div> <div>45 / 79</div> <div>30 / 85</div> <div>1735 / 363</div> <div>11 / 58</div> </div>	<div>19</div> <div> <div>60 / 24</div> <div>48 / 30</div> <div>23 / 28</div> <div>7th St</div> <div>20 / 40</div> <div>1570 / 406</div> <div>Silver Strand Blvd (SR-75)</div> <div>9 / 66</div> <div>215 / 1190</div> <div>20 / 67</div> <div>44 / 19</div> <div>27 / 46</div> <div>2 / 5</div> </div>	<div>20</div> <div> <div>15 / 4</div> <div>Delaware St</div> <div>10 / 44</div> <div>1580 / 449</div> <div>457 / 580</div> <div>Silver Strand Blvd (SR-75)</div> <div>232 / 1224</div> </div>	<div>21</div> <div> <div>5 / 9</div> <div>49 / 107</div> <div>Silver Strand Blvd</div> <div>107 / 42</div> <div>131 / 313</div> <div>Palm Ave</div> <div>10 / 4</div> <div>238 / 218</div> <div>Dwy</div> </div>
<div>22</div> <div> <div>15 / 14</div> <div>11 / 34</div> <div>12 / 29</div> <div>3rd St</div> <div>25 / 25</div> <div>214 / 327</div> <div>27 / 87</div> <div>Palm Ave</div> <div>8 / 8</div> <div>278 / 301</div> <div>5 / 13</div> <div>12 / 15</div> <div>15 / 40</div> <div>129 / 70</div> </div>	<div>23</div> <div> <div>71 / 144</div> <div>18 / 54</div> <div>Rainbow Dr</div> <div>156 / 41</div> <div>340 / 466</div> <div>Palm Ave</div> <div>230 / 75</div> <div>435 / 432</div> </div>	<div>24</div> <div> <div>28 / 31</div> <div>28 / 43</div> <div>2 / 13</div> <div>7th St</div> <div>0 / 4</div> <div>341 / 468</div> <div>27 / 32</div> <div>Palm Ave</div> <div>17 / 29</div> <div>428 / 441</div> <div>16 / 30</div> <div>67 / 56</div> <div>37 / 26</div> <div>83 / 23</div> </div>	<div>25</div> <div> <div>514 / 490</div> <div>5 / 9</div> <div>Delaware St</div> <div>3 / 7</div> <div>6 / 3</div> <div>Palm Ave</div> </div>
<div>26</div> <div> <div>28 / 29</div> <div>52 / 90</div> <div>102 / 197</div> <div>50 / 149</div> <div>1710 / 876</div> <div>27 / 66</div> <div>Palm Ave (SR-75)</div> <div>24 / 47</div> <div>732 / 1534</div> <div>40 / 141</div> <div>185 / 111</div> <div>42 / 102</div> <div>58 / 71</div> </div>	<div>27</div> <div> <div>17 / 16</div> <div>12 / 15</div> <div>63 / 72</div> <div>Florida St</div> <div>14 / 63</div> <div>1908 / 1338</div> <div>23 / 56</div> <div>Palm Ave (SR-75)</div> <div>3 / 23</div> <div>995 / 1856</div> <div>40 / 65</div> <div>21 / 24</div> <div>5 / 12</div> <div>35 / 40</div> </div>	<div>28</div> <div> <div>17 / 23</div> <div>41 / 51</div> <div>192 / 176</div> <div>13th St</div> <div>59 / 93</div> <div>1744 / 1424</div> <div>110 / 179</div> <div>Palm Ave (SR-75)</div> <div>4 / 30</div> <div>1076 / 1725</div> <div>72 / 225</div> <div>165 / 147</div> <div>22 / 46</div> <div>104 / 146</div> </div>	<div>29</div> <div> <div>24 / 12</div> <div>3 / 12</div> <div>44 / 27</div> <div>16th St</div> <div>14 / 18</div> <div>1892 / 1764</div> <div>50 / 195</div> <div>Palm Ave (SR-75)</div> <div>16 / 11</div> <div>1379 / 1870</div> <div>29 / 57</div> <div>18 / 45</div> <div>8 / 10</div> <div>56 / 93</div> </div>
<div>30</div> <div> <div>88 / 261</div> <div>106 / 274</div> <div>269 / 674</div> <div>19th St</div> <div>246 / 636</div> <div>1824 / 1774</div> <div>280 / 376</div> <div>Palm Ave (SR-75)</div> <div>105 / 216</div> <div>1395 / 1804</div> <div>34 / 28</div> <div>84 / 75</div> <div>83 / 203</div> <div>884 / 611</div> </div>	<div>31</div> <div> <div>1157 / 1833</div> <div>178 / 504</div> <div>I-5 SB Exit Ramp</div> <div>1196 / 960</div> <div>Palm Ave (SR-75)</div> <div>326 / 575</div> </div>	<div>32</div> <div> <div>I-5 NB Ramps</div> <div>600 / 287</div> <div>483 / 603</div> <div>Palm Ave (SR-75)</div> <div>504 / 1072</div> <div>830 / 482</div> <div>2 / 3</div> <div>165 / 123</div> </div>	<div>33</div> <div> <div>14 / 38</div> <div>Silver Strand Blvd</div> <div>YMCA Dwy</div> <div>4 / 11</div> <div>5 / 9</div> <div>67 / 4</div> </div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



Plus Project Conditions

Alternatives 1 and 2

Alternative 1 would have the same external improvements and reallocation of personnel as Alternative 2. Therefore, the analysis for Alternative 2 would be identical to the findings for Alternative 1.

Road Network

The only roadway network change associated with Alternative 1 is implementation of P947, which would install a new entry control point at SSTC-South and signalize the intersection of Silver Strand Boulevard (SR-75) and Hooper Boulevard. All other roadways and intersections within the study area would remain the same with the addition of Alternative 1.

Traffic Volumes

Traffic associated with the completed construction of the Proposed Action Alternative 1 was added to the No-Action Alternative volumes. **Figure 6-2** shows the resulting Year 2040 Alternative 1 Conditions volumes with 1 CVN in port.

Intersection Analysis

All intersections would operate at LOS D or better during both peak periods, except at the following locations:

- | | |
|--|------------------------------------|
| ▪ #1 Glorietta Boulevard and Fourth Street (SR-75) | <i>AM peak (LOS E)</i> |
| ▪ #2 Fourth Street (SR-75) and Pomona Avenue | <i>PM peak (LOS F)</i> |
| ▪ #4 Orange Avenue (SR-75) and Fourth Street (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #8 Silver Strand Boulevard (SR-75) and Tarawa Road | <i>PM peak (LOS E)</i> |
| ▪ #10 Silver Strand Boulevard (SR-75) and Tulagi Road | <i>PM peak (LOS F)</i> |
| ▪ #13 Silver Strand Boulevard (SR-75) and Attu Ave | <i>AM peak (LOS E)</i> |
| ▪ #18 Silver Strand Boulevard (SR-75) and Rainbow Dr | <i>AM & PM peaks (LOS F/F)</i> |
| ▪ #19 7th Street and Silver Strand Boulevard (SR-75) | <i>AM & PM peaks (LOS F/F)</i> |
| ▪ #23 Palm Avenue and Rainbow Drive | <i>AM peak (LOS E)</i> |
| ▪ #26 9th Street and Palm Avenue (SR-75) | <i>AM & PM peaks (LOS F/E)</i> |
| ▪ #28 13th Street and Palm Avenue (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75) | <i>AM & PM peak (LOS F/F)</i> |
| ▪ #31 I-5 SB Exit Ramp and Palm Avenue (SR-75) | <i>AM & PM peak (LOS E/F)</i> |

Of the intersections that operate at an unacceptable LOS E or F, seven (shown in **bold**) would result in a significant impact that would need to be mitigated by the project.

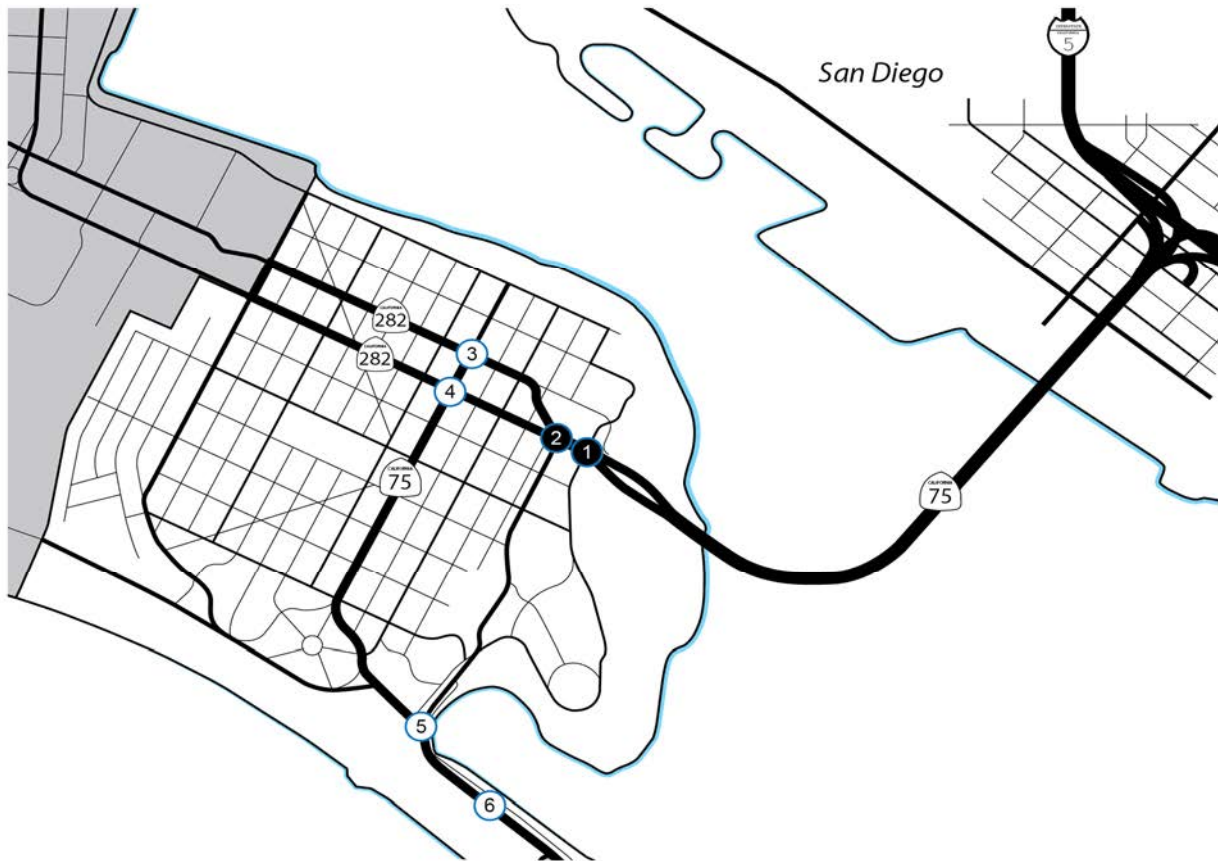
In general, the addition of Alternative 1 improved intersection operations in Coronado, at NAB Coronado, and along Silver Strand Boulevard (SR-75) but worsened operations along Palm Avenue (SR-75). This is a result of the shift in personnel from NAB Coronado to SSTC-South.

Intersection Lane Vehicle Analysis

Both signalized intersections at the Palm Avenue and I-5 interchange would be below or approaching capacity during both peak periods.

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1 <div> <div> 10 / 56 ↔ </div> <div> Glorietta Blvd ↕ </div> </div> <div> 535 / 241 ↕ 3247 / 1674 Fourth St (SR-75) </div> <div> 1311 / 3528 ↕ 35 / 18 ↕ </div> <div> 479 / 908 ↕ </div>	2 <div> <div> 3146 / 1712 ↕ </div> <div> Fourth St (SR-75) </div> </div> <div> 1172 / 3291 ↕ 204 / 132 ↕ </div> <div> Pomona Ave ↕ </div> <div> 232 / 185 ↕ </div>	3 <div> <div> 6 / 15 ↕ 260 / 771 ↕ </div> <div> Orange Ave (SR-75) ↕ </div> </div> <div> 251 / 87 ↕ 1545 / 540 ↕ 1522 / 977 ↕ Third Street (SR-75) </div> <div> 43 / 86 ↕ 94 / 245 ↕ </div>	4 <div> <div> 1404 / 1093 ↕ 437 / 676 ↕ </div> <div> Orange Ave (SR-75) ↕ </div> </div> <div> 503 / 1710 ↕ 68 / 48 ↕ </div> <div> Fourth St (SR-75) ↕ </div> <div> 129 / 339 ↕ 215 / 416 ↕ </div>
5 <div> <div> 1269 / 1374 ↕ </div> <div> Orange Ave (SR-75) ↕ </div> </div> <div> 8 / 14 ↕ 253 / 203 ↕ Pomona Ave </div> <div> 1294 / 1007 ↕ 702 / 787 ↕ </div>	6 <div> <div> 43 / 178 ↕ 1434 / 1636 ↕ 46 / 79 ↕ </div> <div> Silver Strand Blvd (SR-75) ↕ </div> </div> <div> 7 / 29 ↕ 0 / 12 ↕ 9 / 30 ↕ Avenidas De Las Arenas </div> <div> 55 / 168 ↕ 3 / 12 ↕ 12 / 34 ↕ </div> <div> 23 / 27 ↕ 1542 / 1698 ↕ 30 / 58 ↕ </div>	<div> <h1>CORONADO</h1> <h2>Study intersections 1 - 6</h2> </div>	



Legend

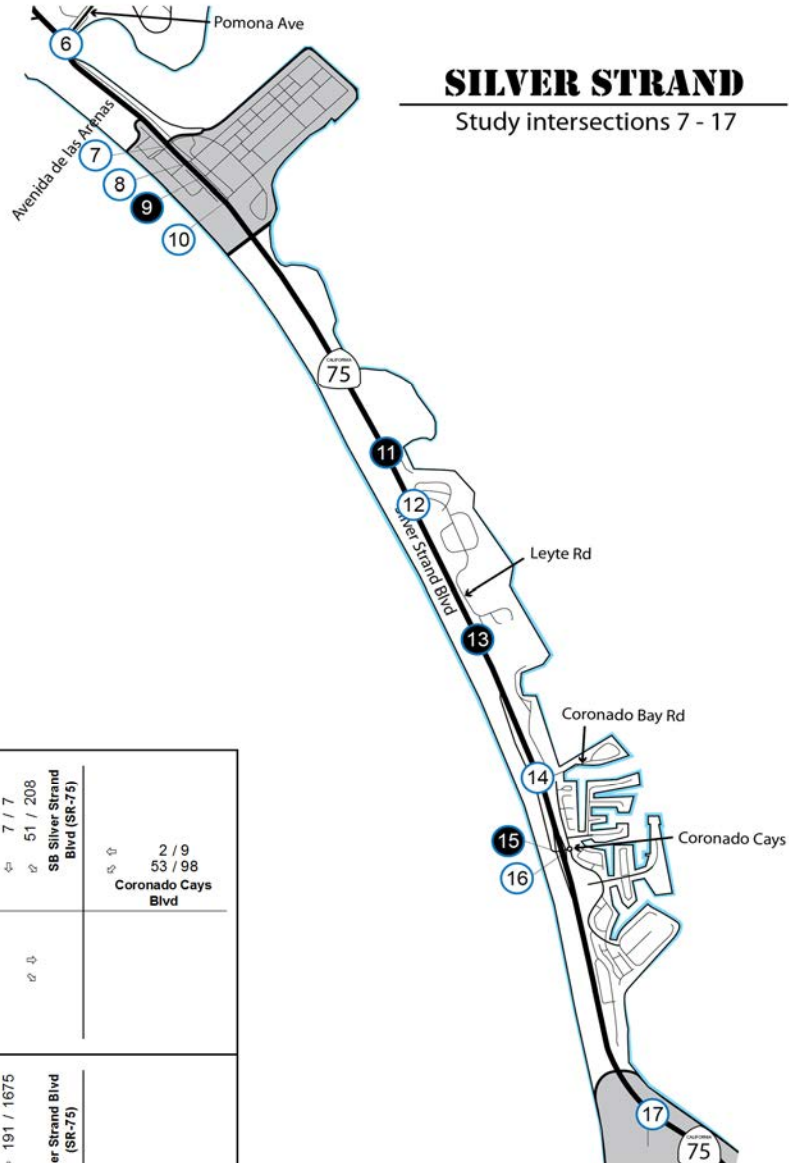
X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

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<div>7</div> <div> <div> <div>926 / 1798</div> <div>499 / 38</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>27 / 169</div> <div>0 / 9</div> <div>Rendova Rd</div> </div> <div> <div>1478 / 1471</div> <div>9 / 0</div> </div> </div>	<div>8</div> <div> <div> <div>311 / 64</div> <div>489 / 1646</div> <div>172 / 121</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>135 / 356</div> <div>61 / 64</div> <div>2 / 8</div> <div>Tarawa Rd</div> </div> <div> <div>27 / 263</div> <div>44 / 42</div> <div>14 / 116</div> </div> <div> <div>137 / 27</div> <div>1313 / 878</div> <div>7 / 3</div> </div> </div>	<div>9</div> <div> <div> <div>10 / 4</div> <div>200 / 165</div> <div>Strand Way</div> </div> <div> <div>215 / 428</div> <div>46 / 312</div> <div>Guadalcanal Rd</div> </div> <div> <div>5 / 4</div> <div>45 / 54</div> </div> </div>	<div>10</div> <div> <div> <div>460 / 1795</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>3 / 4</div> <div>49 / 318</div> <div>Tulagi Rd</div> </div> <div> <div>1471 / 918</div> <div>421 / 57</div> </div> </div>
<div>11</div> <div> <div> <div>509 / 1646</div> <div>7 / 18</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>18 / 8</div> <div>0 / 5</div> <div>Fiddler's Cove Dwy</div> </div> <div> <div>2374 / 741</div> <div>7 / 4</div> </div> </div>			
<div>12</div> <div> <div> <div>465 / 1531</div> <div>44 / 120</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>101 / 66</div> <div>20 / 35</div> <div>Leyte Rd</div> </div> <div> <div>2273 / 678</div> <div>14 / 14</div> </div> </div>			
<div>13</div> <div> <div> <div>483 / 1566</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>38 / 27</div> <div>Attu Ave</div> </div> <div> <div>2247 / 667</div> <div>30 / 22</div> </div> </div>			
<div>14</div> <div> <div> <div>456 / 1538</div> <div>18 / 27</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>8 / 30</div> <div>12 / 35</div> <div>Coronado Bay Rd</div> </div> <div> <div>2277 / 659</div> <div>38 / 22</div> </div> </div>	<div>15</div> <div> <div> <div>3 / 15</div> <div>7 / 7</div> <div>51 / 208</div> <div>SB Silver Strand Blvd (SR-75)</div> </div> <div> <div>2 / 9</div> <div>53 / 98</div> <div>Coronado Cays Blvd</div> </div> <div> <div>3 / 13</div> <div>0 / 17</div> </div> </div>		
<div>16</div> <div> <div> <div>NB Silver Strand Blvd (SR-75)</div> </div> <div> <div>262 / 160</div> <div>38 / 95</div> <div>Coronado Cays Blvd</div> </div> <div> <div>3 / 12</div> <div>43 / 215</div> </div> <div> <div>4 / 14</div> <div>2050 / 568</div> <div>59 / 80</div> </div> </div>	<div>17</div> <div> <div> <div>229 / 57</div> <div>191 / 1675</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>26 / 226</div> <div>47 / 421</div> <div>Hooper Blvd</div> </div> <div> <div>426 / 105</div> <div>1792 / 509</div> </div> </div>		



Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

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<div>18</div> <div> <div>51 / 226</div> <div>185 / 1578</div> <div>4 / 19</div> <div>Silver Strand Blvd (SR-75)</div> <div>21 / 7</div> <div>8 / 4</div> <div>50 / 19</div> <div>Rainbow Dr</div> <div>459 / 102</div> <div>2 / 7</div> <div>45 / 79</div> <div>30 / 85</div> <div>2075 / 447</div> <div>11 / 58</div> </div>	<div>19</div> <div> <div>60 / 24</div> <div>48 / 30</div> <div>23 / 28</div> <div>7th St</div> <div>20 / 40</div> <div>1907 / 489</div> <div>Silver Strand Blvd (SR-75)</div> <div>9 / 66</div> <div>252 / 1523</div> <div>20 / 69</div> <div>47 / 20</div> <div>27 / 46</div> <div>2 / 5</div> </div>	<div>20</div> <div> <div>15 / 4</div> <div>Delaware St</div> <div>10 / 44</div> <div>1917 / 532</div> <div>457 / 580</div> <div>Silver Strand Blvd (SR-75)</div> <div>269 / 1557</div> </div>	<div>21</div> <div> <div>5 / 9</div> <div>49 / 107</div> <div>Silver Strand Blvd</div> <div>107 / 42</div> <div>132 / 319</div> <div>Palm Ave</div> <div>10 / 4</div> <div>245 / 220</div> <div>Dwy</div> </div>
<div>22</div> <div> <div>15 / 14</div> <div>11 / 34</div> <div>12 / 29</div> <div>3rd St</div> <div>25 / 25</div> <div>215 / 333</div> <div>27 / 87</div> <div>Palm Ave</div> <div>8 / 8</div> <div>285 / 303</div> <div>5 / 13</div> <div>12 / 15</div> <div>15 / 40</div> <div>129 / 70</div> </div>	<div>23</div> <div> <div>71 / 146</div> <div>18 / 54</div> <div>Rainbow Dr</div> <div>156 / 41</div> <div>340 / 466</div> <div>Palm Ave</div> <div>233 / 76</div> <div>435 / 432</div> </div>	<div>24</div> <div> <div>28 / 31</div> <div>28 / 45</div> <div>2 / 13</div> <div>7th St</div> <div>0 / 4</div> <div>341 / 468</div> <div>27 / 32</div> <div>Palm Ave</div> <div>17 / 29</div> <div>428 / 441</div> <div>16 / 30</div> <div>67 / 56</div> <div>40 / 27</div> <div>83 / 23</div> </div>	<div>25</div> <div> <div>514 / 490</div> <div>5 / 9</div> <div>Delaware St</div> <div>3 / 7</div> <div>6 / 3</div> <div>Palm Ave</div> </div>
<div>26</div> <div> <div>28 / 29</div> <div>52 / 90</div> <div>102 / 197</div> <div>50 / 149</div> <div>2043 / 958</div> <div>27 / 66</div> <div>Palm Ave (SR-75)</div> <div>24 / 47</div> <div>769 / 1863</div> <div>40 / 143</div> <div>188 / 112</div> <div>42 / 102</div> <div>58 / 71</div> <div>9th St</div> </div>	<div>27</div> <div> <div>17 / 16</div> <div>12 / 15</div> <div>63 / 72</div> <div>Florida St</div> <div>14 / 63</div> <div>2241 / 1420</div> <div>23 / 56</div> <div>Palm Ave (SR-75)</div> <div>3 / 23</div> <div>1032 / 2185</div> <div>40 / 65</div> <div>21 / 24</div> <div>5 / 12</div> <div>35 / 40</div> </div>	<div>28</div> <div> <div>17 / 23</div> <div>41 / 51</div> <div>192 / 176</div> <div>13th St</div> <div>59 / 93</div> <div>2075 / 1505</div> <div>110 / 179</div> <div>Palm Ave (SR-75)</div> <div>4 / 30</div> <div>1113 / 2051</div> <div>72 / 227</div> <div>168 / 148</div> <div>22 / 46</div> <div>104 / 146</div> </div>	<div>29</div> <div> <div>24 / 12</div> <div>3 / 12</div> <div>44 / 27</div> <div>16th St</div> <div>14 / 18</div> <div>2223 / 1845</div> <div>50 / 195</div> <div>Palm Ave (SR-75)</div> <div>16 / 11</div> <div>1416 / 2196</div> <div>29 / 57</div> <div>18 / 45</div> <div>8 / 10</div> <div>56 / 93</div> </div>
<div>30</div> <div> <div>88 / 261</div> <div>106 / 274</div> <div>269 / 674</div> <div>19th St</div> <div>246 / 636</div> <div>2151 / 1854</div> <div>280 / 376</div> <div>Palm Ave (SR-75)</div> <div>105 / 216</div> <div>1431 / 2127</div> <div>34 / 30</div> <div>87 / 76</div> <div>83 / 203</div> <div>884 / 611</div> <div>Saturn Blvd</div> </div>	<div>31</div> <div> <div>1435 / 1901</div> <div>178 / 504</div> <div>I-5 SB Exit Ramp</div> <div>1244 / 971</div> <div>Palm Ave (SR-75)</div> <div>326 / 581</div> </div>	<div>32</div> <div> <div>I-5 NB Ramps</div> <div>600 / 287</div> <div>489 / 604</div> <div>Palm Ave (SR-75)</div> <div>504 / 1078</div> <div>872 / 492</div> <div>2 / 3</div> <div>165 / 123</div> </div>	<div>33</div> <div> <div>14 / 38</div> <div>Silver Strand Blvd</div> <div>YMCA Dwy</div> <div>4 / 11</div> <div>5 / 9</div> <div>67 / 4</div> </div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



Figure 6-2c

Mitigation

As mentioned, seven study intersections would experience significant impacts that would require mitigation with the addition of Alternative 1 project trips with one CVN in port. Six of the proposed mitigation measures that would allow the intersection to operate at or better than the No-Action Alternative conditions are the same mitigations that have been previously described:

- [M1] Intersection #10, Silver Strand Boulevard (SR-75) and Tulagi Road
- [M2] Intersection #18, Silver Strand Boulevard (SR-75) and Rainbow Drive
- [M3] Intersection #26, 9th Street and Palm Avenue (SR-75)
- [M4] Intersection #28, 13th Street and Palm Avenue (SR-75)
- [M5] Intersection #30, Saturn Boulevard/19th Street and Palm Avenue (SR-75)
- [M6] Intersection #19, 7th Street and Silver Strand Boulevard (SR-75)

For the intersection of Palm Avenue and I-5 Southbound Exit Ramp, the timing adjustment previously described would not provide enough improvement to mitigate the impact.

M11. Intersection #31, I-5 SB Exit Ramp and Palm Avenue (SR-75)

The significant impact at this intersection can be partially mitigated by extending the southbound right turn storage pockets. This would require widening the exit ramp. No feasible improvement was identified to improve operations to LOS D or better, but providing additional storage space keeps vehicles off of the freeway mainline.

Table 6-3 shows the intersection delay and LOS with the proposed mitigation measures in place.

Table 6-3. Year 2040 with 1 CVN Alternative 1 Intersection Mitigation Summary

INTERSECTION	PROPOSED MITIGATION	BEFORE MITIGATION		AFTER MITIGATION	
		AM	PM	AM	PM
10 Silver Strand Blvd (SR-75) & Tulagi Rd	Change signal timings to reflect new traffic patterns	3.8 (A)	114.4 (F)	3.8 (A)	42.7 (D)
18 Silver Strand Blvd (SR-75) & Rainbow Dr	Change through-right lane on Rainbow Dr to a left-through-right lane and extend storage pockets	196.7 (F)	80.4 (F)	81.4 (F)	41.4 (D)
19 7 th St & Silver Strand Blvd (SR-75)	Stripe a southbound left-turn pocket	154.8 (F)	85.8 (F)	73.5 (E)	60.1 (E)
26 9 th St & Silver Strand Blvd (SR-75)	Modify northbound/southbound approaches to have protected lefts instead of split phasing	86.5 (F)	73.3 (E)	46.8 (D)	53.4 (D)
28 13 th St & Palm Ave (SR-75)	Remove the northbound pedestrian crossing and shorten the northbound split time	43.9 (D)	76.3 (E)	43.8 (D)	54.0 (D)
30 Saturn Blvd/19 th St & Palm Ave (SR-75)	Add a second WB left-turn lane along Palm Ave (SR-75)	99.8 (F)	254.5 (F)	66.7 (E)	142.1 (F)
31 I-5 SB Exit Ramps & Palm Ave (SR-75)	Extend storage length for southbound right on exit ramp	68.1 (E)	85.7 (F)	68.1 (E)	85.7 (F)

Note: Table reflects intersection Delay (LOS). Although all mitigations may not improve operations to LOS D or better, it restores average delay to better than what is experienced under the No-Action Alternative.

Alternative 3

Road Network

The only roadway network change associated with Alternative 3 is implementation of P947, the new ECP at SSTC-South and new signal at the intersection of Silver Strand Boulevard (SR-75) and Hooper Boulevard. All other roadways and intersections within the study area would remain the same with the addition of Alternative 3.

Traffic Volumes

Traffic associated with the completed construction of the Proposed Action Alternative 3 was added to the No-Action Alternative volumes. **Figure 6-3** shows the resulting Year 2040 Alternative 3 Conditions volumes with 1 CVN in port.

Intersection Analysis

All intersections would operate at LOS D or better during both peak periods, except at the following locations:

▪ #1 Glorietta Boulevard and Fourth Street (SR-75)	<i>AM peak (LOS E)</i>
▪ #2 Fourth Street (SR-75) and Pomona Avenue	<i>PM peak (LOS F)</i>
▪ #4 Orange Avenue (SR-75) and Fourth Street (SR-75)	<i>PM peak (LOS E)</i>
▪ #8 Silver Strand Boulevard (SR-75) and Tarawa Road	<i>PM peak (LOS E)</i>
▪ #9 Strand Way and Guadalcanal Road	<i>PM peak (LOS E)</i>
▪ #10 Silver Strand Boulevard (SR-75) and Tulagi Road	<i>PM peak (LOS F)</i>
▪ #12 Silver Strand Boulevard (SR-75) and Leyte Road	<i>AM peak (LOS E)</i>
▪ #13 Silver Strand Boulevard (SR-75) and Attu Avenue	<i>AM peak (LOS E)</i>
▪ #18 Silver Strand Boulevard (SR-75) and Rainbow Drive	<i>AM & PM peaks (LOS F/E)</i>
▪ #19 7th Street and Silver Strand Boulevard (SR-75)	<i>AM & PM peaks (LOS F/F)</i>
▪ #23 Palm Avenue and Rainbow Drive	<i>AM peak (LOS E)</i>
▪ #26 9th Street and Palm Avenue (SR-75)	<i>AM & PM peaks (LOS E/E)</i>
▪ #28 13th Street and Palm Avenue (SR-75)	<i>PM peak (LOS E)</i>
▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75)	<i>AM & PM peak (LOS F/F)</i>
▪ #31 I-5 SB Exit Ramp and Palm Avenue (SR-75)	<i>AM & PM peak (LOS E/F)</i>

Of the intersections that operate at an unacceptable LOS E or F, seven (shown in **bold**) would result in a significant impact that would need to be mitigated by the project.

With the addition of Alternative 3 the intersections in Coronado are similar to No-Action Alternative results, intersections near NAB Coronado and along Silver Strand have a decrease in delay, and intersections along Palm Avenue (SR-75) in Imperial Beach have an increase in delay.

Intersection Lane Vehicle Analysis

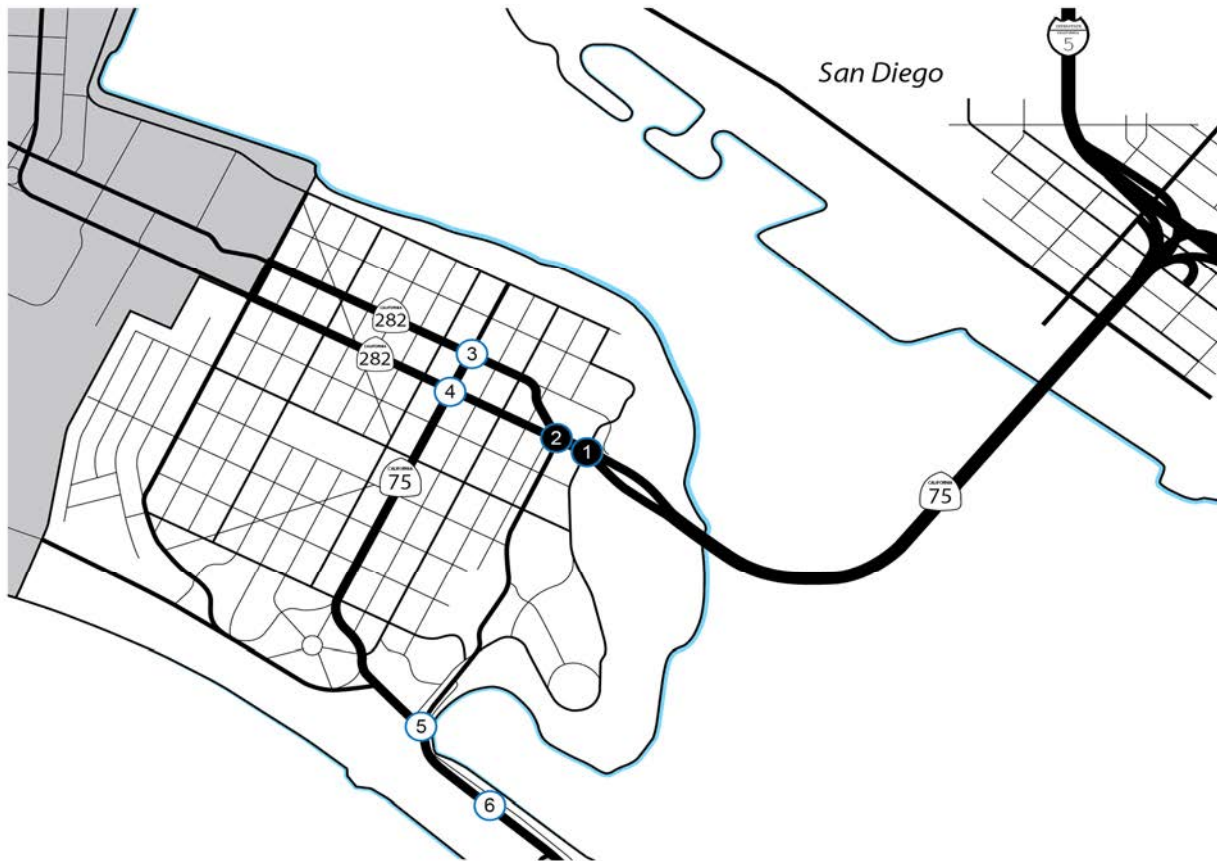
Both signalized intersections at the Palm Avenue and I-5 interchange would be below or approaching capacity during both peak periods.

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1 <div>10 / 56</div> <div>Glorietta Blvd</div> <div>535 / 241 3296 / 1686</div> <div>Fourth St (SR-75)</div> <div>1315 / 3573 35 / 18</div> <div>479 / 908</div>	2 <div>3195 / 1724</div> <div>Fourth St (SR-75)</div> <div>1176 / 3336 204 / 132</div> <div>Pomona Ave</div> <div>232 / 191</div>	3 <div>6 / 15 260 / 771</div> <div>Orange Ave (SR-75)</div> <div>251 / 87 1555 / 543 1561 / 986</div> <div>Third Street (SR-75)</div> <div>42 / 87 94 / 245</div>	4 <div>1443 / 1102 437 / 676</div> <div>Orange Ave (SR-75)</div> <div>504 / 1720 68 / 49</div> <div>Fourth St (SR-75)</div> <div>128 / 340 218 / 451</div>
5 <div>1308 / 1384</div> <div>Orange Ave (SR-75)</div> <div>8 / 14 253 / 203</div> <div>Pomona Ave</div> <div>1298 / 1040 702 / 793</div>	6 <div>43 / 178 1473 / 1646 46 / 79</div> <div>Silver Strand Blvd (SR-75)</div> <div>7 / 29 0 / 12 9 / 30</div> <div>Avenidas De Las Arenas</div> <div>55 / 168 3 / 12 12 / 34</div> <div>23 / 27 1546 / 1737 30 / 58</div>		

CORONADO

Study intersections 1 - 6



Legend

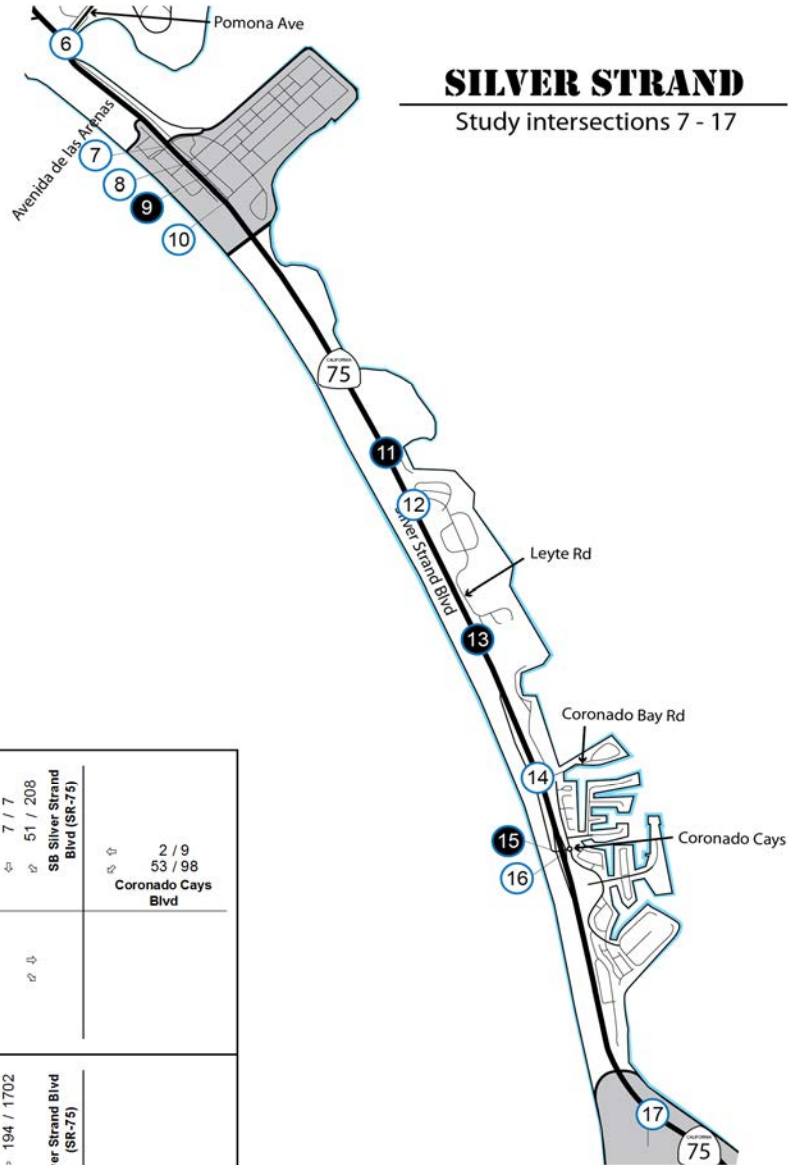
X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

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<div>7</div> <div> <div> <div>965 / 1808</div> <div>499 / 38</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>27 / 169</div> <div>0 / 9</div> <div>Rendova Rd</div> </div> <div> <div>1482 / 1510</div> <div>9 / 0</div> </div> </div>	<div>8</div> <div> <div> <div>328 / 68</div> <div>455 / 1638</div> <div>228 / 135</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>140 / 402</div> <div>66 / 70</div> <div>2 / 8</div> <div>Tarawa Rd</div> </div> <div> <div>30 / 289</div> <div>49 / 48</div> <div>15 / 123</div> </div> <div> <div>144 / 29</div> <div>1309 / 843</div> <div>7 / 3</div> </div> </div>	<div>9</div> <div> <div> <div>10 / 4</div> <div>260 / 180</div> <div>Strand Way</div> </div> <div> <div>220 / 478</div> <div>44 / 331</div> <div>Guadalcanal Rd</div> </div> <div> <div>5 / 4</div> <div>64 / 55</div> </div> </div>	<div>10</div> <div> <div> <div>426 / 1787</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>3 / 5</div> <div>47 / 337</div> <div>Tulagi Rd</div> </div> <div> <div>1474 / 884</div> <div>440 / 58</div> </div> </div>
<div>11</div> <div> <div> <div>474 / 1663</div> <div>7 / 18</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>18 / 8</div> <div>0 / 5</div> <div>Fiddler's Cove Dwy</div> </div> <div> <div>2396 / 711</div> <div>7 / 4</div> </div> </div>			
<div>12</div> <div> <div> <div>430 / 1548</div> <div>44 / 120</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>101 / 66</div> <div>20 / 35</div> <div>Leyte Rd</div> </div> <div> <div>2295 / 648</div> <div>14 / 14</div> </div> </div>			
<div>13</div> <div> <div> <div>448 / 1583</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>38 / 27</div> <div>Attu Ave</div> </div> <div> <div>2269 / 637</div> <div>30 / 22</div> </div> </div>			
<div>14</div> <div> <div> <div>421 / 1555</div> <div>18 / 27</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>8 / 30</div> <div>12 / 35</div> <div>Coronado Bay Rd</div> </div> <div> <div>2299 / 629</div> <div>38 / 22</div> </div> </div>	<div>15</div> <div> <div> <div>3 / 15</div> <div>7 / 7</div> <div>51 / 208</div> <div>SB Silver Strand Blvd (SR-75)</div> </div> <div> <div>2 / 9</div> <div>53 / 98</div> <div>Coronado Cays Blvd</div> </div> <div> <div>3 / 13</div> <div>0 / 17</div> </div> </div>		
<div>16</div> <div> <div> <div>NB Silver Strand Blvd (SR-75)</div> </div> <div> <div>262 / 160</div> <div>38 / 95</div> <div>Coronado Cays Blvd</div> </div> <div> <div>3 / 12</div> <div>43 / 215</div> </div> <div> <div>4 / 14</div> <div>2072 / 538</div> <div>59 / 80</div> </div> </div>	<div>17</div> <div> <div> <div>191 / 47</div> <div>194 / 1702</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>21 / 189</div> <div>40 / 351</div> <div>Hooper Blvd</div> </div> <div> <div>355 / 88</div> <div>1819 / 516</div> </div> </div>		



Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

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18 <div> <div> 51 / 226 180 / 1536 4 / 19 Silver Strand Blvd (SR-75) </div> <div> 21 / 7 8 / 4 50 / 19 Rainbow Dr </div> </div> <div> 458 / 101 2 / 7 45 / 79 </div> <div> 30 / 85 2031 / 436 11 / 58 </div>	19 <div> 60 / 24 48 / 30 23 / 28 7th St </div> <div> 20 / 40 1863 / 478 Silver Strand Blvd (SR-75) </div> <div> 9 / 66 247 / 1480 20 / 69 </div> <div> 46 / 19 27 / 46 2 / 5 </div>	20 <div> 15 / 4 Delaware St </div> <div> 10 / 44 1873 / 521 457 / 580 Silver Strand Blvd (SR-75) </div> <div> 264 / 1514 </div> <div> 67 / 56 39 / 26 83 / 23 </div>	21 <div> 5 / 9 49 / 107 Silver Strand Blvd </div> <div> 107 / 42 132 / 318 Palm Ave </div> <div> 10 / 4 243 / 219 Dwy </div> <div> 514 / 490 5 / 9 Delaware St </div> <div> 3 / 7 6 / 3 </div>
22 <div> 15 / 14 11 / 34 12 / 29 3rd St </div> <div> 25 / 25 215 / 332 27 / 87 Palm Ave </div> <div> 8 / 8 283 / 302 5 / 13 </div> <div> 12 / 15 15 / 40 129 / 70 </div>	23 <div> 71 / 146 18 / 54 Rainbow Dr </div> <div> 156 / 41 340 / 466 Palm Ave </div> <div> 232 / 75 435 / 432 </div> <div> 67 / 56 39 / 26 83 / 23 </div>	24 <div> 28 / 31 28 / 45 2 / 13 7th St </div> <div> 0 / 4 341 / 468 27 / 32 Palm Ave </div> <div> 17 / 29 428 / 441 16 / 30 </div> <div> 67 / 56 39 / 26 83 / 23 </div>	25 <div> Palm Ave </div> <div> 514 / 490 5 / 9 Delaware St </div> <div> 3 / 7 6 / 3 </div>
26 <div> 28 / 29 52 / 90 102 / 197 Palm Ave (SR-75) </div> <div> 50 / 149 2000 / 948 27 / 66 Palm Ave (SR-75) </div> <div> 24 / 47 764 / 1821 40 / 143 9th St </div> <div> 187 / 111 42 / 102 58 / 71 </div>	27 <div> 17 / 16 12 / 15 63 / 72 Florida St </div> <div> 14 / 63 2198 / 1410 23 / 56 Palm Ave (SR-75) </div> <div> 3 / 23 1027 / 2143 40 / 65 </div> <div> 21 / 24 5 / 12 35 / 40 </div>	28 <div> 17 / 23 41 / 51 192 / 176 13th St </div> <div> 59 / 93 2031 / 1494 110 / 179 Palm Ave (SR-75) </div> <div> 4 / 30 1107 / 2008 72 / 227 </div> <div> 167 / 147 22 / 46 104 / 146 </div>	29 <div> 24 / 12 3 / 12 44 / 27 16th St </div> <div> 14 / 18 2179 / 1834 50 / 195 Palm Ave (SR-75) </div> <div> 16 / 11 1410 / 2153 29 / 57 </div> <div> 18 / 45 8 / 10 56 / 93 </div>
30 <div> 88 / 261 106 / 274 269 / 674 19th St </div> <div> 246 / 636 2108 / 1844 280 / 376 Palm Ave (SR-75) </div> <div> 105 / 216 1427 / 2084 34 / 30 Saturn Blvd </div> <div> 86 / 75 83 / 203 884 / 611 </div>	31 <div> 1392 / 1891 178 / 504 I-5 SB Exit Ramp </div> <div> 1245 / 971 Palm Ave (SR-75) </div> <div> 326 / 581 </div> <div> 872 / 492 2 / 3 165 / 123 </div>	32 <div> I-5 NB Ramps </div> <div> 600 / 287 489 / 604 Palm Ave (SR-75) </div> <div> 504 / 1078 </div> <div> 872 / 492 2 / 3 165 / 123 </div>	33 <div> 14 / 38 Silver Strand Blvd </div> <div> YMCA Dwy </div> <div> 4 / 11 </div> <div> 5 / 9 67 / 4 </div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

Mitigation

As mentioned, seven study intersections would experience significant impacts that would require mitigation with the addition of Alternative 3 project trips. The proposed mitigation measures that would allow the intersections to operate at or better than the No Action Alternative conditions for Alternative 3 are the same that were previously described for Alternative 1:

- [M1] Intersection #10, Silver Strand Boulevard (SR-75) and Tulagi Road
- [M2] Intersection #18, Silver Strand Boulevard (SR-75) and Rainbow Drive
- [M3] Intersection #26, 9th Street and Palm Avenue (SR-75)
- [M4] Intersection #28, 13th Street and Palm Avenue (SR-75)
- [M5] Intersection #30, Saturn Boulevard/19th Street and Palm Avenue (SR-75)
- [M6] Intersection #19, 7th Street and Silver Strand Boulevard (SR-75)
- [M11] Intersection #31, I-5 Southbound Exit Ramp and Palm Avenue (SR-75)

A summary of the mitigation and the operation analysis results with the mitigations in place are shown in **Table 6-4**.

Table 6-4. Year 2040 with 1 CVN Alternative 3 Intersection Mitigation Summary

INTERSECTION	PROPOSED MITIGATION	BEFORE MITIGATION		AFTER MITIGATION	
		AM	PM	AM	PM
10 Silver Strand Blvd (SR-75) & Tulagi Rd	Change signal timings to reflect new traffic patterns	3.8 (A)	112.8 (F)	3.8 (A)	42.2 (D)
18 Silver Strand Blvd (SR-75) & Rainbow Dr	Change through-right lane on Rainbow Dr to a left-through-right lane and extend storage pockets	187.0 (F)	72.8 (E)	75.3 (E)	38.2 (D)
19 7 th St & Silver Strand Blvd (SR-75)	Stripe a southbound left-turn pocket	151.4 (F)	84.1 (F)	68.4 (E)	57.9 (E)
26 9 th St & Silver Strand Blvd (SR-75)	Modify northbound/southbound approaches to have protected lefts instead of split phasing	79.8 (E)	69.1 (E)	45.4 (D)	52.1 (D)
28 13 th St & Palm Ave (SR-75)	Remove the northbound pedestrian crossing and shorten the northbound split time	42.8 (D)	71.9 (E)	43.2 (D)	51.7 (D)
30 Saturn Blvd/19 th St & Palm Ave (SR-75)	Add a second WB left-turn lane along Palm Ave (SR-75)	95.8 (F)	248.6 (F)	65.3 (E)	137.1 (F)
31 I-5 SB Exit Ramps & Palm Ave (SR-75)	Extend storage length for southbound right on exit ramp	64.5 (E)	84.4 (F)	64.5 (E)	84.4 (F)

Note: Table reflects intersection Delay (LOS). Although all mitigations may not improve operations to LOS D or better, it restores average delay to better than what is experienced under the No-Action Alternative.

Plus Project without P947 Conditions

As previously mentioned, the implementation of P947 provides traffic relief from the local streets within Imperial Beach by shifting access to SSTC-South onto SR-75. This scenario was analyzed to determine traffic impacts if P947 is not constructed until the end of the ten-year development period, or not implemented at all.

Alternatives 1 and 2

Road Network

It is assumed that all intersections and roadway segments in the study area would remain the same as Existing Conditions with the development of Proposed Action Alternative 1 without P947.

Traffic Volumes

Traffic associated with the completed construction of the Proposed Action Alternative 1 without P947 was added to the No-Action Alternative volumes. **Figure 6-4** shows the resulting volumes.

Intersection Analysis

All intersections would operate at LOS D or better during both peak periods, except at the following locations:

▪ #1 Glorietta Boulevard and Fourth Street (SR-75)	<i>AM peak (LOS E)</i>
▪ #2 Fourth Street (SR-75) and Pomona Avenue	<i>PM peak (LOS F)</i>
▪ #4 Orange Avenue (SR-75) and Fourth Street (SR-75)	<i>PM peak (LOS E)</i>
▪ #8 Silver Strand Boulevard (SR-75) and Tarawa Road	<i>PM peak (LOS E)</i>
▪ #10 Silver Strand Boulevard (SR-75) and Tulagi Road	<i>PM peak (LOS F)</i>
▪ #13 Silver Strand Boulevard (SR-75) and Attu Ave	<i>AM peak (LOS E)</i>
▪ #18 Silver Strand Boulevard (SR-75) and Rainbow Drive	<i>AM peak (LOS F)</i>
▪ #19 7th Street and Silver Strand Boulevard (SR-75)	<i>AM & PM peaks (LOS F/F)</i>
▪ #21 Silver Strand Boulevard and Palm Avenue	<i>PM peak (LOS F)</i>
▪ #22 3rd Street and Palm Avenue	<i>AM & PM peaks (LOS F/F)</i>
▪ #23 Palm Avenue and Rainbow Drive	<i>AM & PM peaks (LOS F/F)</i>
▪ #26 9th Street and Palm Avenue (SR-75)	<i>AM & PM peaks (LOS F/F)</i>
▪ #28 13th Street and Palm Avenue (SR-75)	<i>PM peak (LOS F)</i>
▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75)	<i>AM & PM peak (LOS F/F)</i>
▪ #31 I-5 SB Exit Ramp and Palm Avenue (SR-75)	<i>AM & PM peak (LOS E/F)</i>

Of the intersections that operate at an unacceptable LOS E or F, nine (shown in **bold**) would result in a significant impact that would need to be mitigated by the project. All nine of the impacts were also impacts under the Year 2024 with 1 CVN Conditions.

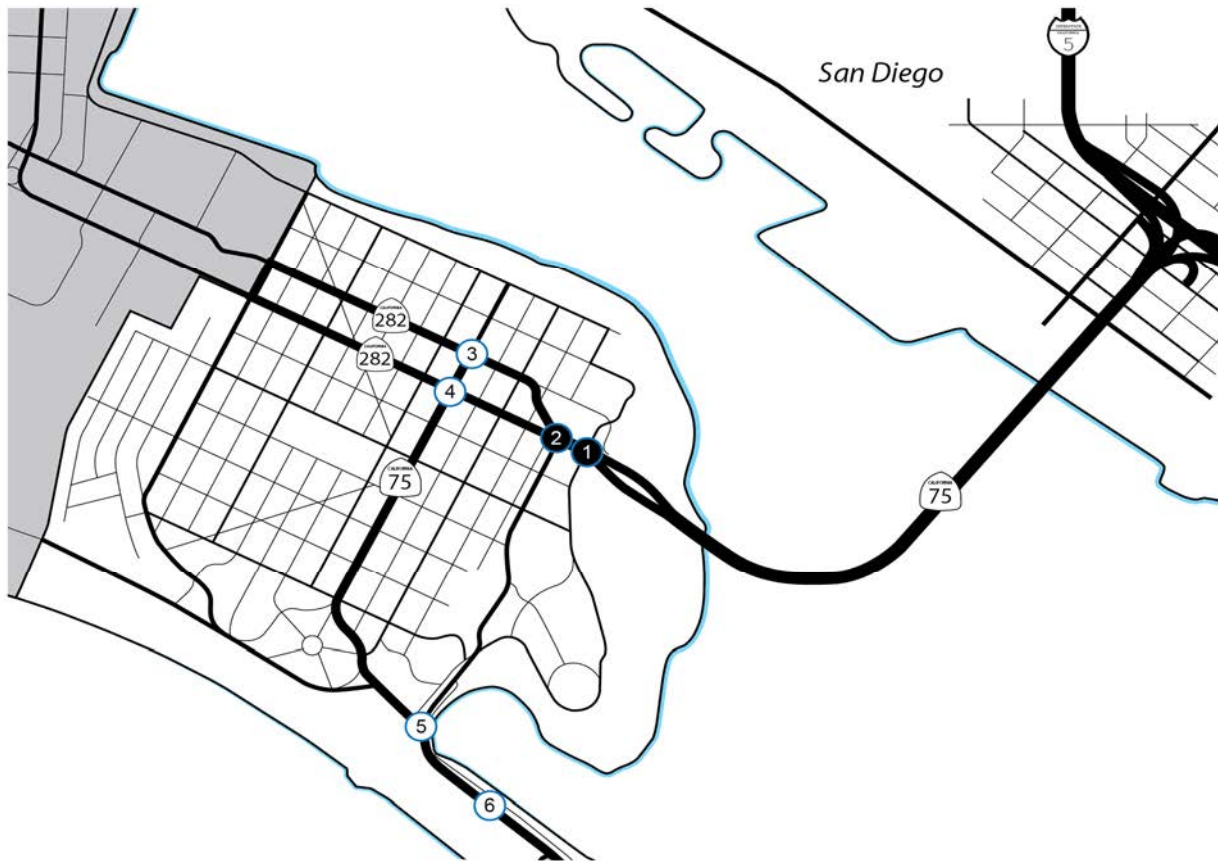
The addition of Alternative 1 traffic without P947 would result in three additional impacts on local streets in Imperial Beach that would not be impacts if P947 were in place.

Intersecting Lane Vehicle Analysis

Both signalized intersections at the Palm Avenue and I-5 interchange would operate below or approaching capacity during both peak periods.

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<div>1</div> <div> <div> <div>10 / 56</div> <div>↔</div> <div>Glorietta Blvd</div> </div> <div> <div>535 / 241</div> <div>↕</div> <div>3182 / 1658</div> </div> <div> <div>Fourth St (SR-75)</div> </div> </div> <div> <div>1303 / 3464</div> <div>↕</div> <div>35 / 18</div> </div> <div> <div>479 / 908</div> <div>↕</div> </div>	<div>2</div> <div> <div>3081 / 1696</div> <div>↕</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1164 / 3227</div> <div>↕</div> <div>204 / 132</div> </div> <div> <div>Pomona Ave</div> </div> <div> <div>232 / 185</div> <div>↕</div> </div>	<div>3</div> <div> <div>6 / 15</div> <div>↕</div> <div>260 / 771</div> </div> <div> <div>Orange Ave (SR-75)</div> </div> <div> <div>251 / 87</div> <div>↕</div> <div>1545 / 540</div> <div>1457 / 961</div> <div>Third Street (SR-75)</div> </div> <div> <div>43 / 86</div> <div>↕</div> <div>94 / 245</div> </div>	<div>4</div> <div> <div>1339 / 1077</div> <div>↕</div> <div>437 / 676</div> </div> <div> <div>Orange Ave (SR-75)</div> </div> <div> <div>Fourth St (SR-75)</div> </div> <div> <div>503 / 1710</div> <div>↕</div> <div>68 / 48</div> </div> <div> <div>129 / 339</div> <div>↕</div> <div>207 / 352</div> </div>
<div>5</div> <div> <div>1204 / 1358</div> <div>↕</div> <div>Orange Ave (SR-75)</div> </div> <div> <div>8 / 14</div> <div>↕</div> <div>253 / 203</div> </div> <div> <div>Pomona Ave</div> </div> <div> <div>1286 / 942</div> <div>↕</div> <div>702 / 787</div> </div>	<div>6</div> <div> <div>43 / 178</div> <div>↕</div> <div>1369 / 1620</div> <div>46 / 79</div> </div> <div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>7 / 29</div> <div>↕</div> <div>0 / 12</div> <div>9 / 30</div> </div> <div> <div>Avenidas De Las Arenas</div> </div> <div> <div>55 / 168</div> <div>↕</div> <div>3 / 12</div> <div>12 / 34</div> </div> <div> <div>23 / 27</div> <div>↕</div> <div>1534 / 1633</div> <div>30 / 58</div> </div>	<div> <div>CORONADO</div> <div>Study intersections 1 - 6</div> </div>	



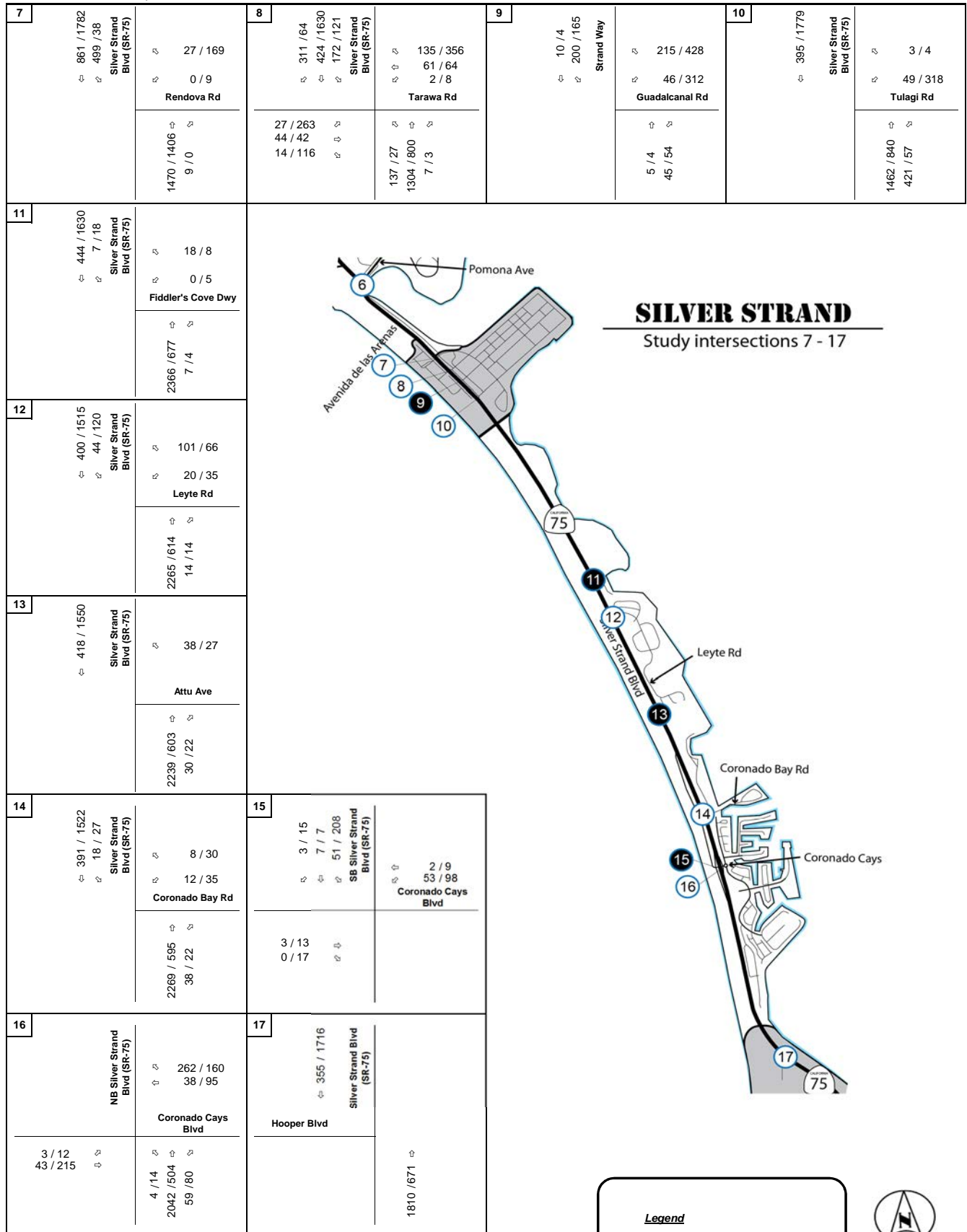
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

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18 <div> <div> 214 / 261 138 / 1164 4 / 19 Silver Strand Blvd (SR-75) </div> <div> 21 / 7 8 / 4 50 / 19 Rainbow Dr </div> </div> <div> 470 / 262 2 / 7 45 / 79 </div> <div> 30 / 85 1656 / 343 11 / 58 </div>	19 <div> 60 / 24 48 / 30 23 / 28 7th St </div> <div> 20 / 40 1494 / 387 Silver Strand Blvd (SR-75) </div> <div> 9 / 66 206 / 1115 19 / 63 </div> <div> 40 / 18 27 / 46 2 / 5 </div>	20 <div> 15 / 4 Delaware St </div> <div> 10 / 44 1504 / 430 935 / 698 Silver Strand Blvd (SR-75) </div> <div> 223 / 1149 </div>	21 <div> 6 / 15 121 / 748 Silver Strand Blvd </div> <div> 755 / 202 131 / 313 Palm Ave </div> <div> 17 / 6 238 / 218 Dwy </div>
22 <div> 15 / 14 11 / 34 12 / 29 3rd St </div> <div> 25 / 25 862 / 487 27 / 87 Palm Ave </div> <div> 8 / 8 350 / 942 5 / 13 </div> <div> 12 / 15 15 / 40 129 / 70 </div>	23 <div> 234 / 181 18 / 54 Rainbow Dr </div> <div> 156 / 41 825 / 586 Palm Ave </div> <div> 244 / 236 489 / 911 </div>	24 <div> 28 / 31 27 / 39 2 / 13 7th St </div> <div> 0 / 4 819 / 586 27 / 32 Palm Ave </div> <div> 17 / 29 481 / 913 17 / 36 </div> <div> 74 / 58 33 / 25 83 / 23 </div>	25 <div> 567 / 962 5 / 9 Delaware St </div> <div> 3 / 7 6 / 3 Palm Ave </div>
26 <div> 28 / 29 52 / 90 102 / 197 </div> <div> 50 / 149 2109 / 975 27 / 66 Palm Ave (SR-75) </div> <div> 24 / 47 777 / 1928 40 / 143 9th St </div> <div> 188 / 112 42 / 102 58 / 71 </div>	27 <div> 17 / 16 12 / 15 63 / 72 Florida St </div> <div> 14 / 63 2307 / 1437 23 / 56 Palm Ave (SR-75) </div> <div> 3 / 23 1040 / 2250 40 / 65 </div> <div> 21 / 24 5 / 12 35 / 40 </div>	28 <div> 17 / 23 41 / 51 192 / 176 13th St </div> <div> 59 / 93 2140 / 1521 110 / 179 Palm Ave (SR-75) </div> <div> 4 / 30 1120 / 2115 72 / 227 </div> <div> 168 / 148 22 / 46 104 / 146 </div>	29 <div> 24 / 12 3 / 12 44 / 27 16th St </div> <div> 14 / 18 2288 / 1861 50 / 195 Palm Ave (SR-75) </div> <div> 16 / 11 1423 / 2260 29 / 57 </div> <div> 18 / 45 8 / 10 56 / 93 </div>
30 <div> 88 / 261 106 / 274 269 / 674 19th St </div> <div> 246 / 636 2217 / 1870 280 / 376 Palm Ave (SR-75) </div> <div> 105 / 216 1438 / 2192 34 / 30 Saturn Blvd </div> <div> 87 / 76 83 / 203 884 / 611 </div>	31 <div> 1500 / 1917 178 / 504 I-5 SB Exit Ramp </div> <div> 1244 / 971 Palm Ave (SR-75) </div> <div> 326 / 581 50 / 440 </div>	32 <div> I-5 NB Ramps </div> <div> 600 / 287 489 / 604 Palm Ave (SR-75) </div> <div> 504 / 1078 </div> <div> 872 / 492 2 / 3 165 / 123 </div>	33 <div> 87 / 685 Silver Strand Blvd </div> <div> YMCA Dwy </div> <div> 4 / 11 </div> <div> 5 / 9 722 / 166 </div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

Mitigation

As mentioned, nine study intersections would experience significant impacts that would require mitigation with the addition of Alternative 1 project trips without P947. The following mitigation measures identified previously would apply for this scenario:

- [M1] Intersection #10, Silver Strand Boulevard (SR-75) and Tulagi Road
- [M3] Intersection #26, 9th Street and Palm Avenue (SR-75)
- [M4] Intersection #28, 13th Street and Palm Avenue (SR-75)
- [M5] Intersection #30, Saturn Boulevard/19th Street and Palm Avenue (SR-75)
- [M6] Intersection #19, 7th Street and Silver Strand Boulevard (SR-75)
- [M7] Intersection #21, Silver Strand Boulevard and Palm Avenue
- [M8] Intersection #22, 3rd Street and Palm Avenue
- [M9] Intersection #23, Palm Avenue and Rainbow Drive
- [M11] Intersection #31, I-5 Southbound Exit Ramp and Palm Avenue (SR-75)

Table 6-5 summarizes all of the mitigation measures and shows the intersection delay and LOS with the proposed mitigation measures in place.

Table 6-5. Year 2040 with 1 CVN Alternative 1 without P947 Intersection Mitigation Summary

INTERSECTION		PROPOSED MITIGATION	BEFORE MITIGATION		AFTER MITIGATION	
			AM	PM	AM	PM
10	Silver Strand Blvd (SR-75) & Tulagi Rd	Change signal timings to reflect new traffic patterns	3.8 (A)	112.9 (F)	3.8 (A)	78.0 (E)
19	7 th St & Silver Strand Blvd (SR-75)	Stripe a southbound left-turn pocket	151.9 (F)	82.5 (F)	51.4 (D)	49.7 (D)
21	Silver Strand Blvd & Palm Ave	Widen Silver Strand Boulevard, install traffic signal	31.3 (D)	>1000 (F)	7.0 (A)	25.3 (C)
22	3 rd St & Palm Ave	Install a traffic signal	170.6 (F)	390.5 (F)	9.0 (A)	21.8 (C)
23	Palm Ave & Rainbow Dr	Restrict SB left-turn movement	436.0 (F)	722.4 (F)	12.1 (B)	15.1 (C)
26	9 th St & Silver Strand Blvd (SR-75)	Modify northbound/southbound approaches to have protected lefts instead of split phasing	97.1 (F)	80.6 (F)	51.0 (D)	51.2 (D)
28	13 th St & Palm Ave (SR-75)	Remove the northbound pedestrian crossing and shorten the northbound split time	45.9 (D)	82.9 (F)	44.7 (D)	54.2 (D)
30	Saturn Blvd/19 th St & Palm Ave (SR-75)	Add a second WB left-turn lane along Palm Ave (SR-75)	106.2 (F)	263.7 (F)	75.9 (E)	149.2 (F)
31	I-5 SB Exit Ramps & Palm Ave (SR-75)	Extend storage length for southbound right on exit ramp	75.5 (E)	87.9 (F)	75.5 (E)	87.9 (F)

Note: Table reflects intersection Delay (LOS). Although all mitigations may not improve operations to LOS D or better, it restores average delay to better than what is experienced under the No-Action Alternative.

Alternative 3

Road Network

It is assumed that all intersections and roadway segments in the study area would remain the same as Existing Conditions with the development of Proposed Action Alternative 3 without P947.

Traffic Volumes

Traffic associated with the completed construction of the Proposed Action Alternative 3 without P947 was added to the No-Action Alternative volumes. **Figure 6-5** shows the resulting volumes.

Intersection Analysis

All intersections would operate at LOS D or better during both peak periods with, except at the following locations:

▪ #1 Glorietta Boulevard and Fourth Street (SR-75)	<i>AM peak (LOS E)</i>
▪ #2 Fourth Street (SR-75) and Pomona Avenue	<i>PM peak (LOS F)</i>
▪ #4 Orange Avenue (SR-75) and Fourth Street (SR-75)	<i>PM peak (LOS E)</i>
▪ #8 Silver Strand Boulevard (SR-75) and Tarawa Road	<i>PM peak (LOS E)</i>
▪ #9 Strand Way and Guadalcanal Road	<i>PM Peak (LOS E)</i>
▪ #10 Silver Strand Boulevard (SR-75) and Tulagi Road	<i>PM peak (LOS F)</i>
▪ #12 Silver Strand Boulevard (SR-75) and Leyte Road	<i>AM peak (LOS E)</i>
▪ #13 Silver Strand Boulevard (SR-75) and Attu Ave	<i>AM peak (LOS E)</i>
▪ #18 Silver Strand Boulevard (SR-75) and Rainbow Drive	<i>AM peak (LOS F)</i>
▪ #19 7th Street and Silver Strand Boulevard (SR-75)	<i>AM & PM peaks (LOS F/F)</i>
▪ #21 Silver Strand Boulevard and Palm Avenue	<i>PM peak (LOS F)</i>
▪ #22 3rd Street and Palm Avenue	<i>AM & PM peaks (LOS F/F)</i>
▪ #23 Palm Avenue and Rainbow Drive	<i>AM & PM peaks (LOS F/F)</i>
▪ #26 9th Street and Palm Avenue (SR-75)	<i>AM & PM peaks (LOS F/E)</i>
▪ #28 13th Street and Palm Avenue (SR-75)	<i>PM peak (LOS E)</i>
▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75)	<i>AM & PM peak (LOS F/F)</i>
▪ #31 I-5 SB Exit Ramp and Palm Avenue (SR-75)	<i>AM & PM peak (LOS E/F)</i>

Of the intersections that operate at an unacceptable LOS E or F, nine (shown in **bold**) would result in a significant impact that would need to be mitigated by the project. Eight of the nine impacts were also impacts under the Year 2024 with 1 CVN Conditions, with the intersection of I-5 Southbound Exit Ramp and Palm Avenue (SR-75) being the intersection that was not an impact under that scenario.

The addition of Alternative 3 traffic without P947 would result in three additional impacts on local streets in Imperial Beach that would not be impacts if P947 were in place.

Intersecting Lane Vehicle Analysis

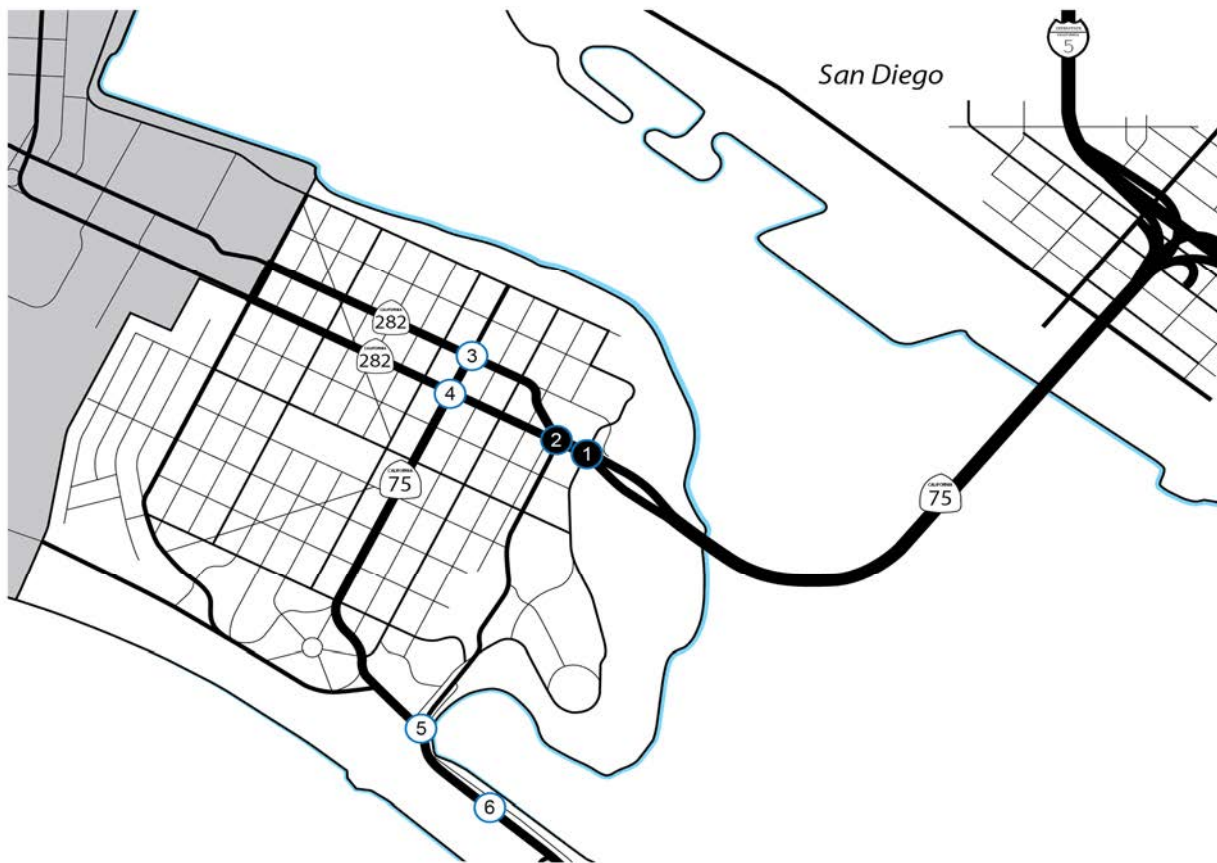
Both signalized intersections at the Palm Avenue and I-5 interchange would operate below or approaching capacity during both peak periods.

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<div><div>1</div><div>↻</div><div>10 / 56</div><div>Glorietta Blvd</div></div> <div><div>↻</div><div>535 / 241</div><div>↻</div><div>3241 / 1673</div><div>Fourth St (SR-75)</div></div> <div><div>1309 / 3519</div><div>35 / 18</div><div>↻</div><div>479 / 908</div></div>	<div><div>2</div><div>↻</div><div>3140 / 1711</div><div>Fourth St (SR-75)</div></div> <div><div>1170 / 3282</div><div>204 / 132</div><div>↻</div><div>Pomona Ave</div><div>232 / 191</div></div>	<div><div>3</div><div>↻</div><div>6 / 15</div><div>↻</div><div>260 / 771</div><div>Orange Ave (SR-75)</div></div> <div><div>↻</div><div>251 / 87</div><div>↻</div><div>1555 / 543</div><div>↻</div><div>1506 / 973</div><div>Third Street (SR-75)</div></div> <div><div>42 / 87</div><div>94 / 245</div></div>	<div><div>4</div><div>↻</div><div>1388 / 1089</div><div>↻</div><div>437 / 676</div><div>Orange Ave (SR-75)</div></div> <div><div>504 / 1720</div><div>68 / 49</div><div>↻</div></div> <div><div>↻</div><div>128 / 340</div><div>↻</div><div>212 / 397</div></div>
<div><div>5</div><div>↻</div><div>1254 / 1370</div><div>Orange Ave (SR-75)</div></div> <div><div>↻</div><div>8 / 14</div><div>↻</div><div>253 / 203</div><div>Pomona Ave</div></div> <div><div>↻</div><div>1292 / 986</div><div>↻</div><div>702 / 793</div><div>Silver Strand Blvd (SR-75)</div></div>	<div><div>6</div><div>↻</div><div>43 / 178</div><div>↻</div><div>1419 / 1632</div><div>↻</div><div>46 / 79</div><div>Silver Strand Blvd (SR-75)</div></div> <div><div>↻</div><div>7 / 29</div><div>↻</div><div>0 / 12</div><div>↻</div><div>9 / 30</div><div>Avenidas De Las Arenas</div></div> <div><div>55 / 168</div><div>3 / 12</div><div>12 / 34</div><div>↻</div><div>↻</div><div>↻</div></div>	<div><div><div>CORONADO</div><div>Study intersections 1 - 6</div></div></div>	

CORONADO

Study intersections 1 - 6



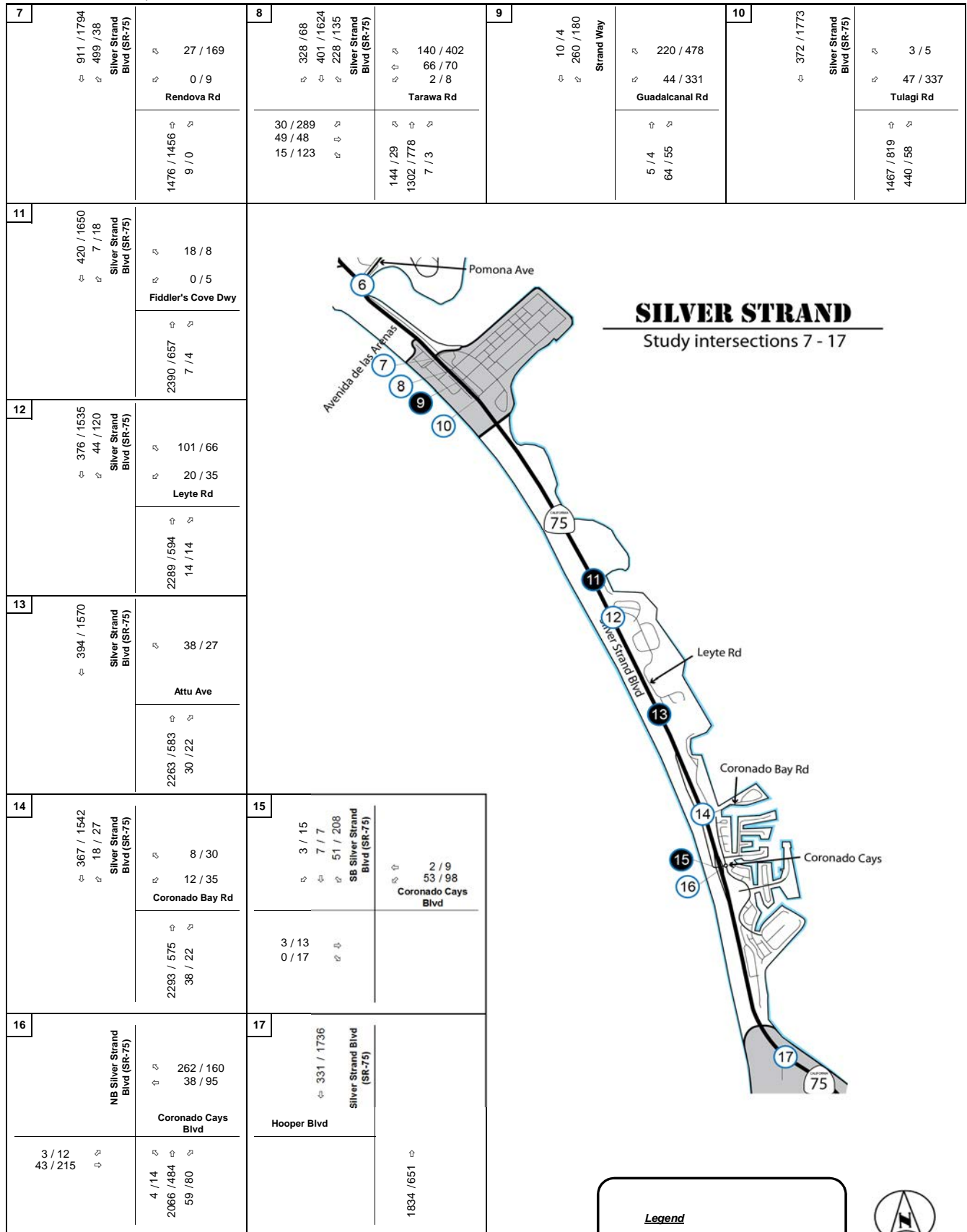
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus



NBC Coastal Campus

<div>18</div> <div> <div>187 / 255</div> <div>141 / 1190</div> <div>4 / 19</div> <div>Silver Strand Blvd (SR-75)</div> <div>21 / 7</div> <div>8 / 4</div> <div>50 / 19</div> <div>Rainbow Dr</div> <div>468 / 235</div> <div>2 / 7</div> <div>45 / 79</div> <div>30 / 85</div> <div>1682 / 350</div> <div>11 / 58</div> </div>	<div>19</div> <div> <div>60 / 24</div> <div>48 / 30</div> <div>23 / 28</div> <div>7th St</div> <div>20 / 40</div> <div>1519 / 393</div> <div>Silver Strand Blvd (SR-75)</div> <div>9 / 66</div> <div>209 / 1140</div> <div>19 / 64</div> <div>41 / 18</div> <div>27 / 46</div> <div>2 / 5</div> </div>	<div>20</div> <div> <div>15 / 4</div> <div>Delaware St</div> <div>10 / 44</div> <div>1529 / 436</div> <div>856 / 679</div> <div>Silver Strand Blvd (SR-75)</div> <div>226 / 1174</div> </div>	<div>21</div> <div> <div>6 / 14</div> <div>109 / 642</div> <div>Silver Strand Blvd</div> <div>648 / 176</div> <div>131 / 313</div> <div>Palm Ave</div> <div>15 / 5</div> <div>238 / 218</div> <div>Dwy</div> </div>
<div>22</div> <div> <div>15 / 14</div> <div>11 / 34</div> <div>12 / 29</div> <div>3rd St</div> <div>25 / 25</div> <div>755 / 461</div> <div>27 / 87</div> <div>Palm Ave</div> <div>8 / 8</div> <div>338 / 836</div> <div>5 / 13</div> <div>12 / 15</div> <div>15 / 40</div> <div>129 / 70</div> </div>	<div>23</div> <div> <div>207 / 175</div> <div>18 / 54</div> <div>Rainbow Dr</div> <div>156 / 41</div> <div>744 / 566</div> <div>Palm Ave</div> <div>242 / 209</div> <div>480 / 832</div> </div>	<div>24</div> <div> <div>28 / 31</div> <div>27 / 40</div> <div>2 / 13</div> <div>7th St</div> <div>0 / 4</div> <div>740 / 567</div> <div>27 / 32</div> <div>Palm Ave</div> <div>17 / 29</div> <div>473 / 835</div> <div>17 / 35</div> <div>72 / 57</div> <div>34 / 25</div> <div>83 / 23</div> </div>	<div>25</div> <div> <div>559 / 884</div> <div>5 / 9</div> <div>Delaware St</div> <div>3 / 7</div> <div>6 / 3</div> <div>Palm Ave</div> </div>
<div>26</div> <div> <div>28 / 29</div> <div>52 / 90</div> <div>102 / 197</div> <div>50 / 149</div> <div>2054 / 961</div> <div>27 / 66</div> <div>Palm Ave (SR-75)</div> <div>24 / 47</div> <div>770 / 1875</div> <div>40 / 143</div> <div>187 / 111</div> <div>42 / 102</div> <div>58 / 71</div> </div>	<div>27</div> <div> <div>17 / 16</div> <div>12 / 15</div> <div>63 / 72</div> <div>Florida St</div> <div>14 / 63</div> <div>2252 / 1423</div> <div>23 / 56</div> <div>Palm Ave (SR-75)</div> <div>3 / 23</div> <div>1033 / 2197</div> <div>40 / 65</div> <div>21 / 24</div> <div>5 / 12</div> <div>35 / 40</div> </div>	<div>28</div> <div> <div>17 / 23</div> <div>41 / 51</div> <div>192 / 176</div> <div>13th St</div> <div>59 / 93</div> <div>2086 / 1508</div> <div>110 / 179</div> <div>Palm Ave (SR-75)</div> <div>4 / 30</div> <div>1113 / 2062</div> <div>72 / 227</div> <div>167 / 147</div> <div>22 / 46</div> <div>104 / 146</div> </div>	<div>29</div> <div> <div>24 / 12</div> <div>3 / 12</div> <div>44 / 27</div> <div>16th St</div> <div>14 / 18</div> <div>2234 / 1848</div> <div>50 / 195</div> <div>Palm Ave (SR-75)</div> <div>16 / 11</div> <div>1416 / 2207</div> <div>29 / 57</div> <div>18 / 45</div> <div>8 / 10</div> <div>56 / 93</div> </div>
<div>30</div> <div> <div>88 / 261</div> <div>106 / 274</div> <div>269 / 674</div> <div>19th St</div> <div>246 / 636</div> <div>2162 / 1858</div> <div>280 / 376</div> <div>Palm Ave (SR-75)</div> <div>105 / 216</div> <div>1433 / 2138</div> <div>34 / 30</div> <div>86 / 75</div> <div>83 / 203</div> <div>884 / 611</div> </div>	<div>31</div> <div> <div>1446 / 1904</div> <div>178 / 504</div> <div>I-5 SB Exit Ramp</div> <div>1245 / 971</div> <div>Palm Ave (SR-75)</div> <div>326 / 581</div> <div>41 / 367</div> </div>	<div>32</div> <div> <div>I-5 NB Ramps</div> <div>600 / 287</div> <div>489 / 604</div> <div>Palm Ave (SR-75)</div> <div>504 / 1078</div> <div>872 / 492</div> <div>2 / 3</div> <div>165 / 123</div> </div>	<div>33</div> <div> <div>75 / 578</div> <div>Silver Strand Blvd</div> <div>YMCA Dwy</div> <div>4 / 11</div> <div>5 / 9</div> <div>613 / 139</div> </div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

Mitigation

As mentioned, nine study intersections would experience significant impacts that would require mitigation with the addition of Alternative 3 project trips without P947. The mitigation measures identified for Alternative 1 would also apply for this scenario:

- [M1] Intersection #10, Silver Strand Boulevard (SR-75) and Tulagi Road
- [M3] Intersection #26, 9th Street and Palm Avenue (SR-75)
- [M4] Intersection #28, 13th Street and Palm Avenue (SR-75)
- [M5] Intersection #30, Saturn Boulevard/19th Street and Palm Avenue (SR-75)
- [M6] Intersection #19, 7th Street and Silver Strand Boulevard (SR-75)
- [M7] Intersection #21, Silver Strand Boulevard and Palm Avenue
- [M8] Intersection #22, 3rd Street and Palm Avenue
- [M9] Intersection #23, Palm Avenue and Rainbow Drive
- [M11] Intersection #31, I-5 Southbound Exit Ramp and Palm Avenue (SR-75)

Table 6-6 summarizes all of the mitigation measures and shows the intersection delay and LOS with the proposed mitigation measures in place.

Table 6-6. Year 2040 with 1 CVN Alternative 3 without P947 Intersection Mitigation Summary

INTERSECTION	PROPOSED MITIGATION	BEFORE MITIGATION		AFTER MITIGATION	
		AM	PM	AM	PM
10 Silver Strand Blvd (SR-75) & Tulagi Rd	Change signal timings to reflect new traffic patterns	3.8 (A)	111.4 (F)	3.8 (A)	76.8 (E)
19 7 th St & Silver Strand Blvd (SR-75)	Stripe a southbound left-turn pocket	150.9 (F)	82.4 (F)	51.9 (D)	50.0 (D)
21 Silver Strand Blvd & Palm Ave	Widen Silver Strand Boulevard, install traffic signal	25.2 (D)	879.9 (F)	13.0 (B)	19.3 (B)
22 3 rd St & Palm Ave	Install a traffic signal	116.4 (F)	308.8 (F)	8.5 (A)	14.4 (B)
23 Palm Ave & Rainbow Dr	Restrict SB left-turn movement	274.3 (F)	463.5 (F)	12.0 (B)	14.6 (B)
26 9 th St & Silver Strand Blvd (SR-75)	Modify northbound/southbound approaches to have protected lefts instead of split phasing	88.2 (E)	74.6 (F)	48.2 (D)	50.2 (D)
28 13 th St & Palm Ave (SR-75)	Remove the northbound pedestrian crossing and shorten the northbound split time	44.2 (D)	77.3 (E)	43.8 (D)	51.7 (D)
30 Saturn Blvd/19 th St & Palm Ave (SR-75)	Add a second WB left-turn lane along Palm Ave (SR-75)	100.7 (F)	256.1 (F)	71.8 (E)	143.4 (F)
31 I-5 SB Exit Ramps & Palm Ave (SR-75)	Extend storage length for southbound right on exit ramp	69.4 (E)	86.1 (F)	69.4 (E)	86.1 (F)

Note: Table reflects intersection Delay (LOS). Although all mitigations may not improve operations to LOS D or better, it restores average delay to better than what is experienced under the No-Action Alternative.

Conditions with 2 Carrier Vessels Nuclear (CVN)

Table 6-7 displays the LOS analysis results for the study intersections under Year 2024 with 2 CVNs Conditions. **Table 6-8** displays the ILV analysis results for the Palm Avenue and I-5 interchange under the Year 2024 with 2 CVNs Conditions. **Appendix G** contains the LOS calculation worksheets and **Appendix H** contains the ILV calculation worksheets. The results of the analyses are summarized below.

No-Action Conditions

Traffic Volumes

Year 2040 1 CVN volumes were adjusted using forecast methodology contained in **Appendix C** to determine the Year 2040 volume when two and three CVNs are in port. **Figure 6-6** shows the Year 2024 No Action Alternative volumes with two CVNs in port. When there are three CVNs in port, staggered work hours are required, so three CVNs results in lower peak-hour volumes than two CVNs and are not included in the analysis. However, the volumes with three CVNs in port are provided in **Appendix E**.

Intersection Analysis

All intersections would operate at LOS D or better during both peak periods, except at the following locations:

- | | |
|--|------------------------------------|
| ▪ #1 Glorietta Boulevard and Fourth Street (SR-75) | <i>AM peak (LOS F)</i> |
| ▪ #2 Fourth Street (SR-75) and Pomona Avenue | <i>PM peak (LOS F)</i> |
| ▪ #4 Orange Avenue (SR-75) and Fourth Street (SR-75) | <i>PM peak (LOS F)</i> |
| ▪ #8 Silver Strand Boulevard (SR-75) and Tarawa Road | <i>AM & PM peaks (LOS E/F)</i> |
| ▪ #9 Strand Way and Guadalcanal Road | <i>PM peak (LOS F)</i> |
| ▪ #10 Silver Strand Boulevard (SR-75) and Tulagi Road | <i>PM peak (LOS F)</i> |
| ▪ #11 Silver Strand Boulevard (SR-75) and Fiddler's Cove Dwy | <i>AM peak (LOS E)</i> |
| ▪ #12 Silver Strand Boulevard (SR-75) and Leyte Rd | <i>AM peak (LOS E)</i> |
| ▪ #13 Silver Strand Boulevard (SR-75) and Attu Ave | <i>AM peak (LOS E)</i> |
| ▪ #16 Silver Strand Boulevard (SR-75) and Coronado Cays Blvd | <i>AM peak (LOS E)</i> |
| ▪ #18 Silver Strand Boulevard (SR-75) and Rainbow Dr | <i>AM peak (LOS E)</i> |
| ▪ #19 7 th Street and Silver Strand Boulevard (SR-75) | <i>AM & PM peaks (LOS F/F)</i> |
| ▪ #23 Palm Avenue and Rainbow Drive | <i>AM peak (LOS E)</i> |
| ▪ #28 13 th Street and Palm Avenue (SR-75) | <i>PM peak (LOS E)</i> |
| ▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75) | <i>AM & PM peak (LOS E/F)</i> |
| ▪ #31 I-5 SB Exit Ramp and Palm Avenue (SR-75) | <i>PM peak (LOS E)</i> |

Intersecting Lane Vehicle Analysis

Both signalized intersections at the Palm Avenue and I-5 interchange would operate below or approaching capacity during both peak periods.

Table 6-7. Year 2040 with 2 CVNs Intersection Analysis Summary

INTERSECTION		NO ACTION		PLUS PROJECT				PLUS PROJECT (W/O P947)			
				ALT. 1/2		ALT. 3		ALT. 1/2		ALT. 3	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	63.1 (F)	20.1 (C)	61.5 (F)	20.0 (C)	63.4 (F)	20.2 (C)	59.0 (F)	19.9 (C)	61.3 (F)	20.0 (C)
2	Fourth St (SR-75) & Pomona Ave	27.9 (D)	558.4 (F)	27.6 (D)	473.2 (F)	27.7 (D)	520.8 (F)	27.3 (D)	443.9 (F)	27.5 (D)	494.5 (F)
3	Orange Ave (SR-75) & Third St (SR-75)	48.1 (D)	43.9 (D)	46.2 (D)	45.0 (D)	48.7 (D)	46.0 (D)	43.5 (D)	43.5 (D)	45.9 (D)	44.9 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	38.3 (D)	107.3 (F)	38.1 (D)	107.4 (F)	38.3 (D)	108.4 (F)	37.9 (D)	108.1 (F)	38.1 (D)	108.9 (F)
5	Silver Strand Blvd/Orange Ave (SR-75) & Pomona Ave	35.8 (D)	19.0 (B)	36.0 (D)	18.9 (B)	35.6 (D)	19.2 (B)	33.1 (C)	18.4 (B)	36.1 (D)	18.8 (B)
6	Silver Strand Blvd (SR-75) & Avenida De Las Arenas	14.8 (B)	24.1 (C)	14.8 (B)	23.8 (C)	14.9 (B)	24.5 (C)	14.6 (B)	23.0 (C)	14.7 (B)	23.6 (C)
7	Silver Strand Blvd (SR-75) & Rendova Rd	26.8 (C)	13.9 (B)	26.8 (C)	13.8 (B)	26.6 (C)	14.1 (B)	26.5 (C)	13.3 (B)	26.5 (C)	13.6 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	60.4 (E)	107.4 (F)	47.8 (D)	66.7 (E)	51.1 (D)	83.0 (F)	46.6 (D)	64.7 (E)	50.2 (D)	80.7 (F)
9	Strand Way & Guadalcanal Rd	11.5 (B)	174.4 (F)	10.3 (B)	19.3 (C)	10.8 (B)	39.5 (E)	10.3 (B)	19.3 (C)	10.8 (B)	39.7 (E)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	3.3 (A)	114.6 (F)	3.9 (A)	121.2 (F)	3.8 (A)	119.7 (F)	3.9 (A)	119.9 (F)	3.9 (A)	118.4 (F)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	36.5 (E)	25.9 (D)	34.7 (D)	35.5 (E)	35.4 (E)	34.2 (D)	34.4 (D)	31.5 (D)	35.2 (E)	30.9 (D)
12	Silver Strand Blvd (SR-75) & Leyte Rd	74.2 (E)	10.5 (B)	59.4 (E)	11.1 (B)	63.4 (E)	11.0 (B)	59.7 (E)	10.8 (B)	64.0 (E)	10.8 (B)
13	Silver Strand Blvd (SR-75) & Attu Ave	39.2 (E)	10.3 (B)	36.9 (E)	11.4 (B)	37.8 (E)	11.2 (B)	36.6 (E)	11.0 (B)	37.5 (E)	10.9 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	12.2 (B)	4.3 (A)	9.9 (A)	4.4 (A)	10.5 (B)	4.4 (A)	10.0 (A)	4.4 (A)	10.6 (B)	4.3 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.9 (A)	7.9 (A)	7.9 (A)	7.9 (A)	7.9 (A)	7.9 (A)	7.9 (A)	7.9 (A)	7.9 (A)	7.9 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	66.8 (E)	10.3 (B)	57.3 (E)	10.4 (B)	61.0 (E)	10.3 (B)	56.0 (E)	10.3 (B)	59.9 (E)	10.2 (B)
17	Silver Strand Blvd (SR-75) & Hooper Blvd*	**		15.5 (B)	52.8 (D)	12.2 (B)	31.9 (C)	**		**	

Notes: P947 is a MILCON project that would construct a new ECP at SSTC-South along SR-75.

*Delay shown represents a signalized intersection and P947 improvements; the existing unsignalized intersection configuration would operate at LOS F. ** Intersection does not exist under this scenario
Table reflects intersection Delay (LOS). **Bold** indicates intersections operating at an unacceptable LOS E or F. **Bold and shaded** cells indicate locations where the project has an impact.

Table 6-7. Year 2040 with 2 CVNs Intersection Analysis Summary (cont.)

INTERSECTION		NO ACTION		PLUS PROJECT				PLUS PROJECT (W/O P947)			
				ALT. 1/2		ALT. 3		ALT. 1/2		ALT. 3	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
18	Silver Strand Blvd (SR-75) & Rainbow Dr	132.3 (F)	35.1 (D)	204.3 (F)	86.7 (E)	194.6 (F)	78.9 (E)	114.7 (F)	48.4 (D)	120.1 (F)	38.9 (D)
19	7th St & Silver Strand Blvd (SR-75)	148.0 (F)	81.7 (F)	158.0 (F)	87.6 (F)	154.0 (F)	85.3 (F)	150.5 (F)	82.2 (F)	149.6 (F)	82.1 (F)
20	Silver Strand Blvd (SR-75) & Delaware St	8.2 (A)	11.0 (B)	7.9 (A)	15.6 (B)	7.9 (A)	14.7 (B)	13.4 (B)	11.9 (B)	12.4 (B)	11.7 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	13.3 (B)	21.0 (C)	13.4 (B)	21.3 (C)	13.4 (B)	21.3 (C)	31.3 (D)	>1000 (F)	25.2 (D)	879.9 (F)
22	3rd St & Palm Ave	11.3 (B)	21.2 (C)	11.4 (B)	21.8 (C)	11.4 (B)	21.6 (C)	170.6 (F)	390.5 (F)	116.4 (F)	308.8 (F)
23	Palm Ave & Rainbow Dr	37.8 (E)	28.1 (D)	38.7 (E)	28.3 (D)	38.4 (E)	28.2 (D)	436.0 (F)	722.4 (F)	274.3 (F)	463.5 (F)
24	7th St & Palm Ave	8.5 (A)	5.8 (A)	8.5 (A)	5.8 (A)	8.5 (A)	5.8 (A)	9.7 (A)	6.9 (A)	9.3 (A)	6.8 (A)
25	Delaware St & Palm Ave	12.1 (B)	12.8 (B)	12.1 (B)	12.8 (B)	12.1 (B)	12.8 (B)	12.7 (B)	22.7 (C)	12.6 (B)	20.4 (C)
26	9th St & Palm Ave (SR-75)	49.7 (D)	53.6 (D)	92.2 (F)	77.0 (E)	85.3 (F)	72.4 (E)	102.8 (F)	84.6 (F)	94.0 (F)	78.4 (E)
27	Florida St & Palm Ave (SR-75)	8.8 (A)	9.1 (A)	9.0 (A)	8.7 (A)	9.0 (A)	8.7 (A)	9.1 (A)	8.8 (A)	9.0 (A)	8.7 (A)
28	13th St & Palm Ave (SR-75)	39.4 (D)	55.0 (E)	44.9 (D)	79.6 (E)	43.6 (D)	75.3 (E)	47.5 (D)	86.5 (F)	45.3 (D)	80.8 (F)
29	16th St & Palm Ave (SR-75)	15.6 (B)	22.1 (C)	20.8 (C)	38.6 (D)	19.4 (B)	35.0 (C)	23.5 (C)	44.4 (D)	21.1 (C)	39.5 (D)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	78.1 (E)	216.7 (F)	103.6 (F)	259.3 (F)	99.3 (F)	253.2 (F)	109.9 (F)	268.6 (F)	104.4 (F)	260.8 (F)
31	I-5 SB Exit Ramp & Palm Avenue (SR-75)	54.5 (D)	77.0 (E)	73.7 (E)	87.0 (F)	70.3 (E)	85.7 (F)	80.9 (F)	89.2 (F)	75.0 (E)	87.4 (F)
32	I-5 NB Ramps & Palm Avenue (SR-75)	13.2 (B)	10.4 (B)	13.8 (B)	10.6 (B)	13.8 (B)	10.6 (B)	13.8 (B)	10.6 (B)	13.8 (B)	10.6 (B)
33	Silver Strand Blvd & YMCA Dwy	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)	9.4 (A)	17.8 (C)	9.3 (A)	15.3 (C)

Notes: P947 is a MILCON project that would construct a new ECP at SSTC-South along SR-75.

Table reflects intersection Delay (LOS). **Bold** indicates intersections operating at an unacceptable LOS E or F. **Bold and shaded** cells indicate locations where the project has an impact.

Table 6-8. Year 2040 with 2 CVNs ILV Analysis Summary

INTERSECTION		PEAK HOUR	YEAR 2040 NO ACTION		YEAR 2040 ALTERNATIVE 1/2		YEAR 2040 ALTERNATIVE 3	
			ILV TOTAL	CAPACITY	ILV TOTAL	CAPACITY	ILV TOTAL	CAPACITY
31	I-5 SB Exit Ramp & Palm Avenue (SR-75)	AM	1195	Below Capacity	1358	Approaching Capacity	1337	Approaching Capacity
		PM	1402	Approaching Capacity	1441	Approaching Capacity	1436	Approaching Capacity
32	I-5 NB Ramps & Palm Avenue (SR-75)	AM	1117	Below Capacity	1138	Below Capacity	1138	Below Capacity
		PM	845	Below Capacity	853	Below Capacity	853	Below Capacity

INTERSECTION		PEAK HOUR	YEAR 2040 ALTERNATIVE 1/2 WITHOUT P947		YEAR 2040 ALTERNATIVE 3 WITHOUT P947	
			ILV TOTAL	CAPACITY	ILV TOTAL	CAPACITY
31	I-5 SB Exit Ramp & Palm Avenue (SR-75)	AM	1390	Approaching Capacity	1364	Approaching Capacity
		PM	1449	Approaching Capacity	1442	Approaching Capacity
32	I-5 NB Ramps & Palm Avenue (SR-75)	AM	1138	Below Capacity	1138	Below Capacity
		PM	853	Below Capacity	853	Below Capacity

Notes: P947 is a MILCON project that would construct a new ECP at SSTC-South along SR-75.

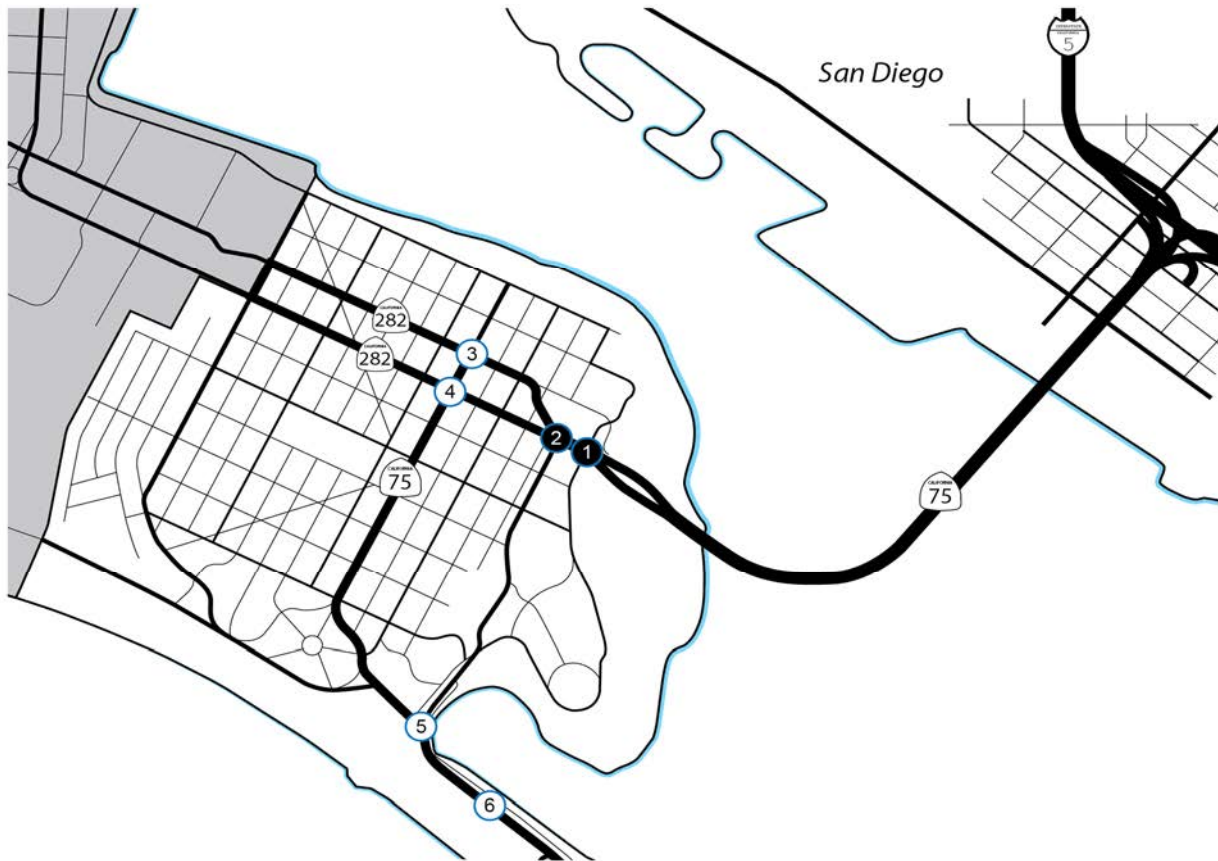
<1200 = Below Capacity; 1200 – 1500 = Approaching Capacity; >1500 = Above Capacity

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<div>1</div> <div><div>↔</div>10 / 56</div> <div>Glorietta Blvd</div>	<div>↔</div> 557 / 246 <div>↔</div> 3822 / 1813	<div>↔</div> 3721 / 1851	<div>↔</div> 13 / 17 <div>↔</div> 280 / 867	<div>Orange Ave (SR-75)</div> <div>↔</div> 345 / 110 <div>↔</div> 1957 / 639 <div>↔</div> 1591 / 994	<div>↔</div> 1474 / 1117 <div>↔</div> 455 / 766
<div>1419 / 4076</div> <div>35 / 18</div> <div>↔</div>	<div>↔</div> 480 / 915	<div>1280 / 3839</div> <div>204 / 132</div> <div>↔</div> <div>Pomona Ave</div>	<div>↔</div> 234 / 202	<div>↔</div> 106 / 87 <div>↔</div> 103 / 254	<div>↔</div> Orange Ave (SR-75)
<div>Fourth St (SR-75)</div>		<div>Fourth St (SR-75)</div>		<div>Third Street (SR-75)</div>	<div>Fourth St (SR-75)</div>
<div>5</div> <div><div>↔</div>1293 / 1413</div> <div>Orange Ave (SR-75)</div>	<div>↔</div> 8 / 14 <div>↔</div> 253 / 203	<div>↔</div> 43 / 178 <div>↔</div> 1458 / 1675 <div>↔</div> 46 / 79	<div>↔</div> 7 / 29 <div>↔</div> 0 / 12 <div>↔</div> 9 / 30	<div>↔</div> 1 / 7 <div>↔</div> 587 / 2123 <div>↔</div> 65 / 107	
<div>Silver Strand Blvd (SR-75)</div>	<div>↔</div> 1330 / 1016 <div>↔</div> 704 / 804	<div>Silver Strand Blvd (SR-75)</div>	<div>Avenidas De Las Arenas</div>	<div>↔</div> 199 / 341 <div>↔</div> 221 / 461	
<div><div><div>CORONADO</div><div>Study intersections 1 - 6</div></div></div>					

CORONADO

Study intersections 1 - 6



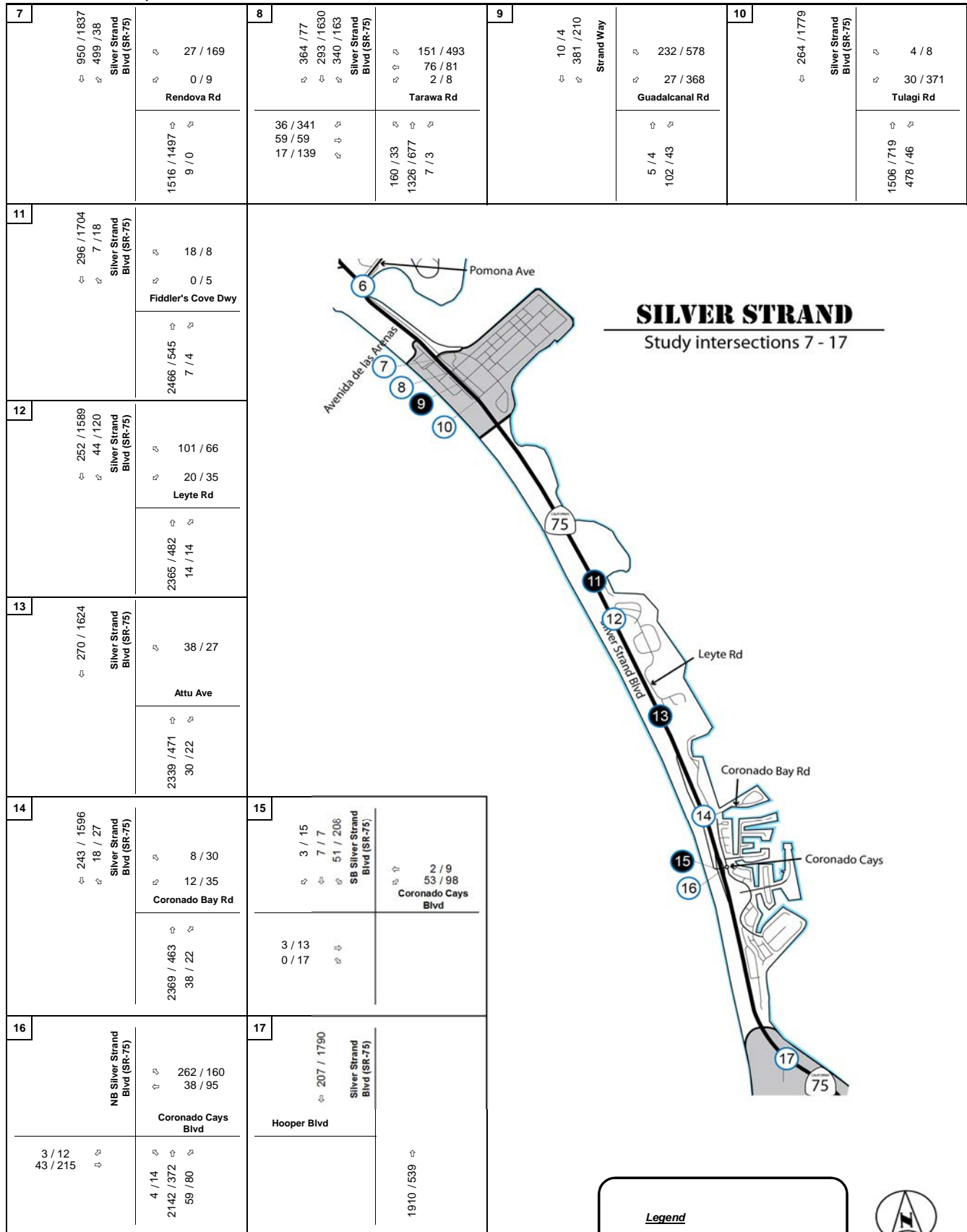
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



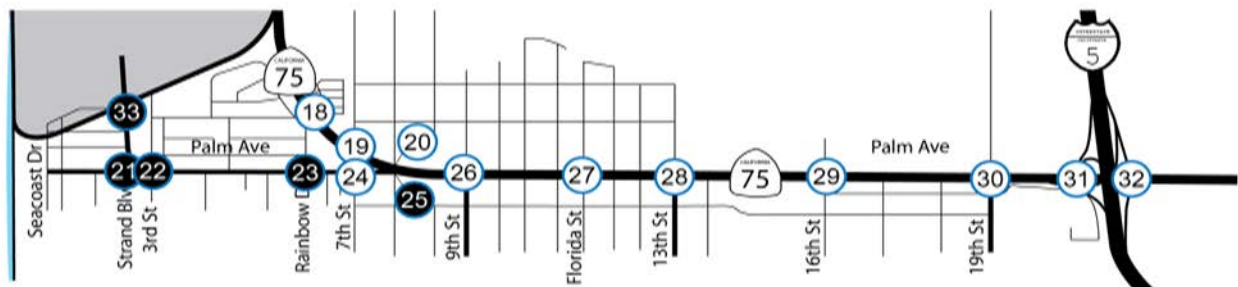
NOT TO SCALE

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NBC Coastal Campus

<div>18</div> <div> <div>51 / 224</div> <div>154 / 1276</div> <div>4 / 19</div> <div>Silver Strand Blvd (SR-75)</div> <div>21 / 7</div> <div>8 / 4</div> <div>50 / 19</div> <div>Rainbow Dr</div> <div>456 / 101</div> <div>2 / 7</div> <div>45 / 79</div> <div>30 / 85</div> <div>1771 / 372</div> <div>11 / 58</div> </div>	<div>19</div> <div> <div>60 / 24</div> <div>48 / 30</div> <div>23 / 28</div> <div>7th St</div> <div>20 / 40</div> <div>1606 / 415</div> <div>Silver Strand Blvd (SR-75)</div> <div>9 / 66</div> <div>222 / 1224</div> <div>20 / 67</div> <div>44 / 19</div> <div>27 / 46</div> <div>2 / 5</div> </div>	<div>20</div> <div> <div>15 / 4</div> <div>Delaware St</div> <div>10 / 44</div> <div>1616 / 458</div> <div>457 / 580</div> <div>Silver Strand Blvd (SR-75)</div> <div>239 / 1258</div> </div>	<div>21</div> <div> <div>5 / 9</div> <div>49 / 107</div> <div>Silver Strand Blvd</div> <div>107 / 42</div> <div>131 / 313</div> <div>Palm Ave</div> <div>10 / 4</div> <div>238 / 218</div> <div>Dwy</div> </div>
<div>22</div> <div> <div>15 / 14</div> <div>11 / 34</div> <div>12 / 29</div> <div>3rd St</div> <div>25 / 25</div> <div>214 / 327</div> <div>27 / 87</div> <div>Palm Ave</div> <div>8 / 8</div> <div>278 / 301</div> <div>5 / 13</div> <div>12 / 15</div> <div>15 / 40</div> <div>129 / 70</div> </div>	<div>23</div> <div> <div>71 / 144</div> <div>18 / 54</div> <div>Rainbow Dr</div> <div>156 / 41</div> <div>340 / 466</div> <div>Palm Ave</div> <div>230 / 75</div> <div>435 / 432</div> </div>	<div>24</div> <div> <div>28 / 31</div> <div>28 / 43</div> <div>2 / 13</div> <div>7th St</div> <div>0 / 4</div> <div>341 / 468</div> <div>27 / 32</div> <div>Palm Ave</div> <div>17 / 29</div> <div>428 / 441</div> <div>16 / 30</div> <div>67 / 56</div> <div>37 / 26</div> <div>83 / 23</div> </div>	<div>25</div> <div> <div>514 / 490</div> <div>5 / 9</div> <div>Delaware St</div> <div>3 / 7</div> <div>6 / 3</div> <div>Palm Ave</div> </div>
<div>26</div> <div> <div>28 / 29</div> <div>52 / 90</div> <div>102 / 197</div> <div>50 / 149</div> <div>1746 / 885</div> <div>27 / 66</div> <div>Palm Ave (SR-75)</div> <div>24 / 47</div> <div>739 / 1568</div> <div>40 / 141</div> <div>185 / 111</div> <div>42 / 102</div> <div>58 / 71</div> <div>9th St</div> </div>	<div>27</div> <div> <div>17 / 16</div> <div>12 / 15</div> <div>63 / 72</div> <div>Florida St</div> <div>14 / 63</div> <div>1944 / 1347</div> <div>23 / 56</div> <div>Palm Ave (SR-75)</div> <div>3 / 23</div> <div>1002 / 1890</div> <div>40 / 65</div> <div>21 / 24</div> <div>5 / 12</div> <div>35 / 40</div> </div>	<div>28</div> <div> <div>17 / 23</div> <div>41 / 51</div> <div>192 / 176</div> <div>13th St</div> <div>59 / 93</div> <div>1780 / 1433</div> <div>110 / 179</div> <div>Palm Ave (SR-75)</div> <div>4 / 30</div> <div>1083 / 1759</div> <div>72 / 225</div> <div>165 / 147</div> <div>22 / 46</div> <div>104 / 146</div> </div>	<div>29</div> <div> <div>24 / 12</div> <div>3 / 12</div> <div>44 / 27</div> <div>16th St</div> <div>14 / 18</div> <div>1928 / 1773</div> <div>50 / 195</div> <div>Palm Ave (SR-75)</div> <div>16 / 11</div> <div>1386 / 1904</div> <div>29 / 57</div> <div>18 / 45</div> <div>8 / 10</div> <div>56 / 93</div> </div>
<div>30</div> <div> <div>88 / 261</div> <div>106 / 274</div> <div>269 / 674</div> <div>19th St</div> <div>246 / 636</div> <div>1860 / 1783</div> <div>280 / 376</div> <div>Palm Ave (SR-75)</div> <div>105 / 216</div> <div>1402 / 1838</div> <div>34 / 28</div> <div>84 / 75</div> <div>83 / 203</div> <div>884 / 611</div> <div>Saturn Blvd</div> </div>	<div>31</div> <div> <div>1157 / 1833</div> <div>178 / 504</div> <div>I-5 SB Exit Ramp</div> <div>1232 / 969</div> <div>Palm Ave (SR-75)</div> <div>326 / 575</div> </div>	<div>32</div> <div> <div>I-5 NB Ramps</div> <div>600 / 287</div> <div>483 / 603</div> <div>Palm Ave (SR-75)</div> <div>504 / 1072</div> <div>866 / 491</div> <div>2 / 3</div> <div>165 / 123</div> </div>	<div>33</div> <div> <div>14 / 38</div> <div>Silver Strand Blvd</div> <div>YMCA Dwy</div> <div>4 / 11</div> <div>5 / 9</div> <div>67 / 4</div> </div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

Plus Project Conditions

Alternatives 1 and 2

Alternative 1 would have the same external improvements and reallocation of personnel as Alternative 2. Therefore, the analysis for Alternative 1 would be identical to the findings for Alternative 2.

Road Network

The only roadway network change associated with Alternative 1 is implementation of P947, which would install a new ECP at SSTC-South and signalize the intersection of Silver Strand Boulevard (SR-75) and Hooper Boulevard. All other roadways and intersections within the study area would remain the same with the addition of Alternative 1.

Traffic Volumes

Traffic associated with the completed construction of the Proposed Action Alternative 1 was added to the No-Action Alternative volumes. **Figure 6-7** shows the Year 2024 Alternative 1 Conditions volumes with 2 CVNs in port.

Intersection Analysis

All intersections would operate at LOS D or better during both peak periods, except at the following locations:

▪ #1 Glorietta Boulevard and Fourth Street (SR-75)	<i>AM peak (LOS F)</i>
▪ #2 Fourth Street (SR-75) and Pomona Avenue	<i>PM peak (LOS F)</i>
▪ #4 Orange Avenue (SR-75) and Fourth Street (SR-75)	<i>PM peak (LOS F)</i>
▪ #8 Silver Strand Boulevard (SR-75) and Tarawa Road	<i>PM peak (LOS E)</i>
▪ #10 Silver Strand Boulevard (SR-75) and Tulagi Road	<i>PM peak (LOS F)</i>
▪ #11 Silver Strand Boulevard (SR-75) and Fiddler's Cove Dwy	<i>PM peak (LOS E)</i>
▪ #12 Silver Strand Boulevard (SR-75) and Leyte Road	<i>AM peak (LOS E)</i>
▪ #13 Silver Strand Boulevard (SR-75) and Attu Ave	<i>AM peak (LOS E)</i>
▪ #16 NB Silver Strand Boulevard (SR-75) and Coronado Cays Blvd	<i>AM peak (LOS E)</i>
▪ #18 Silver Strand Boulevard (SR-75) and Rainbow Dr	<i>AM & PM peaks (LOS F/E)</i>
▪ #19 7th Street and Silver Strand Boulevard (SR-75)	<i>AM & PM peaks (LOS F/F)</i>
▪ #23 Palm Avenue and Rainbow Drive	<i>AM peak (LOS E)</i>
▪ #26 9th Street and Palm Avenue (SR-75)	<i>AM & PM peaks (LOS F/E)</i>
▪ #28 13th Street and Palm Avenue (SR-75)	<i>PM peak (LOS E)</i>
▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75)	<i>AM & PM peak (LOS F/F)</i>
▪ #31 I-5 SB Exit Ramp and Palm Avenue (SR-75)	<i>AM & PM peak (LOS E/F)</i>

Of the intersections that operate at an unacceptable LOS E or F, eight (shown in **bold**) would result in a significant impact that would need to be mitigated by the project. Seven of the eight locations would have impacts with one CVN in port. The intersection of Silver Strand Boulevard (SR-75) and Fiddler's Cove Driveway would be a new impact when two CVNs are in port.

Intersection Lane Vehicle Analysis

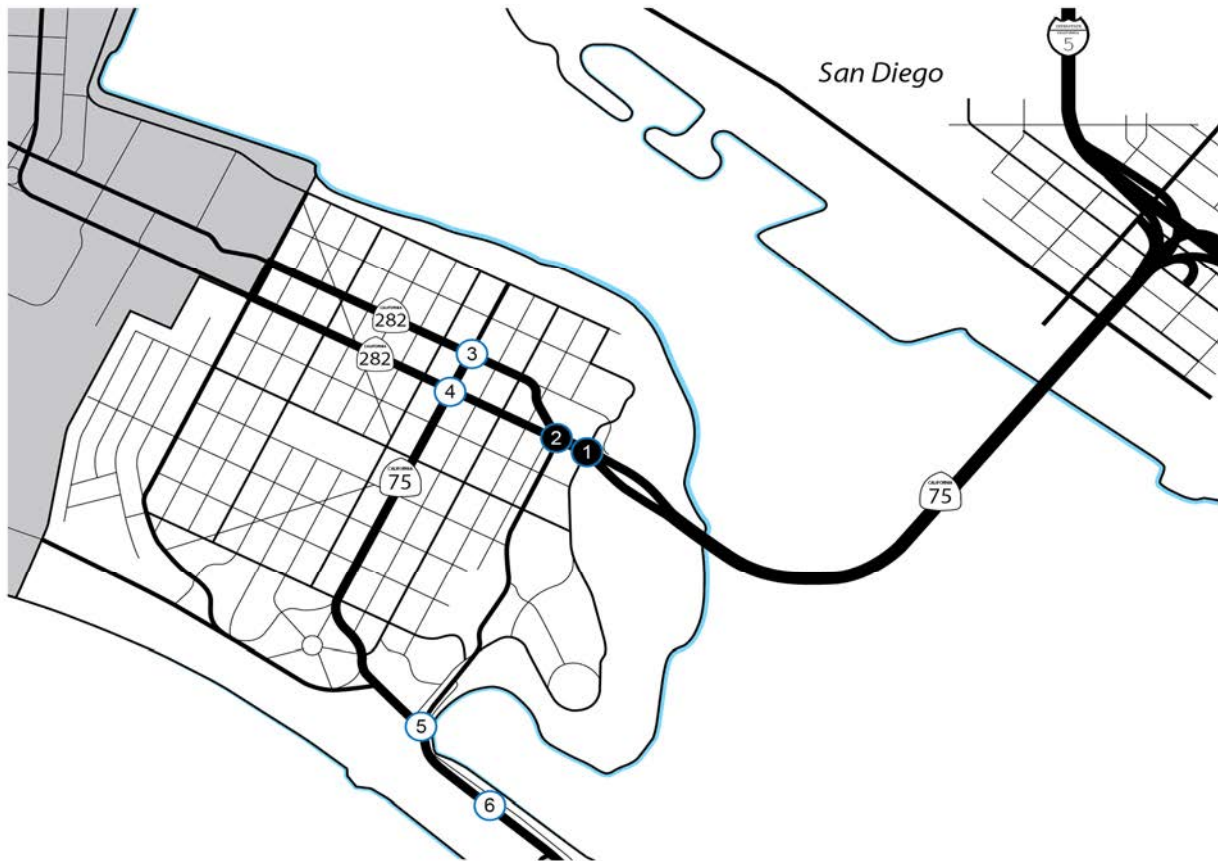
Both signalized intersections at the Palm Avenue and I-5 interchange would be below or approaching capacity during both peak periods.

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<div>1</div> <div>10 / 56</div> <div>Glorietta Blvd</div> <div>557 / 246 3782 / 1803</div> <div>Fourth St (SR-75)</div> <div>1417 / 4052 35 / 18</div> <div>480 / 915</div>	<div>2</div> <div>3681 / 1841</div> <div>Fourth St (SR-75)</div> <div>1278 / 3815 204 / 132</div> <div>Pomona Ave</div> <div>232 / 185</div>	<div>3</div> <div>13 / 17 280 / 867</div> <div>Orange Ave (SR-75)</div> <div>345 / 110 1957 / 639 1551 / 984</div> <div>Third Street (SR-75)</div> <div>108 / 102 103 / 254</div>	<div>4</div> <div>1434 / 1107 455 / 766</div> <div>Orange Ave (SR-75)</div> <div>1 / 7 587 / 2123 81 / 110</div> <div>Fourth St (SR-75)</div> <div>201 / 356 219 / 437</div>
<div>5</div> <div>1276 / 1408</div> <div>Orange Ave (SR-75)</div> <div>8 / 14 253 / 203</div> <div>Pomona Ave</div> <div>1330 / 1016 702 / 787</div>	<div>6</div> <div>43 / 178 1441 / 1670 46 / 79</div> <div>Silver Strand Blvd (SR-75)</div> <div>7 / 29 0 / 12 9 / 30</div> <div>Avenidas De Las Arenas</div> <div>55 / 168 3 / 12 12 / 34</div> <div>23 / 27 1578 / 1707 30 / 58</div>		

CORONADO

Study intersections 1 - 6



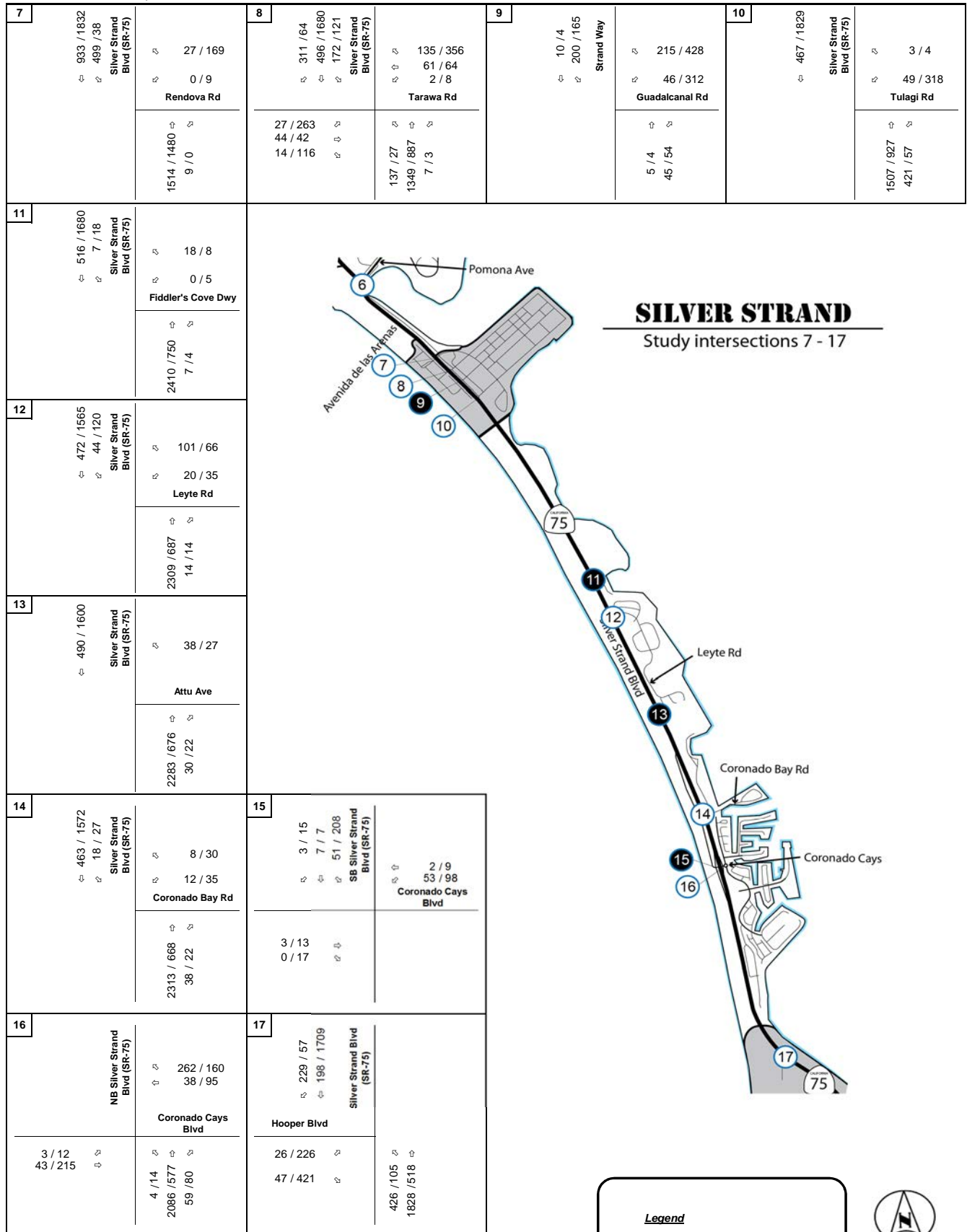
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

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18 <div> <div> 51 / 226 192 / 1612 4 / 19 Silver Strand Blvd (SR-75) </div> <div> 21 / 7 8 / 4 50 / 19 Rainbow Dr </div> </div> <div> 459 / 102 2 / 7 45 / 79 </div> <div> 30 / 85 2111 / 456 11 / 58 </div>	19 <div> 60 / 24 48 / 30 23 / 28 7th St </div> <div> 20 / 40 1943 / 498 Silver Strand Blvd (SR-75) </div> <div> 9 / 66 259 / 1557 20 / 69 </div> <div> 47 / 20 27 / 46 2 / 5 </div>	20 <div> 15 / 4 Delaware St </div> <div> 10 / 44 1953 / 541 457 / 580 Silver Strand Blvd (SR-75) </div> <div> 276 / 1591 </div>	21 <div> 5 / 9 49 / 107 Silver Strand Blvd </div> <div> 107 / 42 132 / 319 Palm Ave </div> <div> 10 / 4 245 / 220 Dwy </div>
22 <div> 15 / 14 11 / 34 12 / 29 3rd St </div> <div> 25 / 25 215 / 333 27 / 87 Palm Ave </div> <div> 8 / 8 285 / 303 5 / 13 </div> <div> 12 / 15 15 / 40 129 / 70 </div>	23 <div> 71 / 146 18 / 54 Rainbow Dr </div> <div> 156 / 41 340 / 466 Palm Ave </div> <div> 233 / 76 435 / 432 </div>	24 <div> 28 / 31 28 / 45 2 / 13 7th St </div> <div> 0 / 4 341 / 468 27 / 32 Palm Ave </div> <div> 17 / 29 428 / 441 16 / 30 </div> <div> 67 / 56 40 / 27 83 / 23 </div>	25 <div> 514 / 490 5 / 9 Delaware St </div> <div> 3 / 7 6 / 3 Palm Ave </div>
26 <div> 28 / 29 52 / 90 102 / 197 </div> <div> 50 / 149 2079 / 967 27 / 66 Palm Ave (SR-75) </div> <div> 24 / 47 776 / 1897 40 / 143 9th St </div> <div> 188 / 112 42 / 102 58 / 71 </div>	27 <div> 17 / 16 12 / 15 63 / 72 Florida St </div> <div> 14 / 63 2277 / 1429 23 / 56 Palm Ave (SR-75) </div> <div> 3 / 23 1039 / 2219 40 / 65 </div> <div> 21 / 24 5 / 12 35 / 40 </div>	28 <div> 17 / 23 41 / 51 192 / 176 13th St </div> <div> 59 / 93 2111 / 1514 110 / 179 Palm Ave (SR-75) </div> <div> 4 / 30 1120 / 2085 72 / 227 </div> <div> 168 / 148 22 / 46 104 / 146 </div>	29 <div> 24 / 12 3 / 12 44 / 27 16th St </div> <div> 14 / 18 2259 / 1854 50 / 195 Palm Ave (SR-75) </div> <div> 16 / 11 1423 / 2230 29 / 57 </div> <div> 18 / 45 8 / 10 56 / 93 </div>
30 <div> 88 / 261 106 / 274 269 / 674 19th St </div> <div> 246 / 636 2187 / 1863 280 / 376 Palm Ave (SR-75) </div> <div> 105 / 216 1438 / 2161 34 / 30 Saturn Blvd </div> <div> 87 / 76 83 / 203 884 / 611 </div>	31 <div> 1435 / 1901 178 / 504 I-5 SB Exit Ramp </div> <div> 1280 / 980 Palm Ave (SR-75) </div> <div> 326 / 581 </div>	32 <div> I-5 NB Ramps </div> <div> 600 / 287 489 / 604 Palm Ave (SR-75) </div> <div> 504 / 1078 </div> <div> 908 / 501 2 / 3 165 / 123 </div>	33 <div> 14 / 38 Silver Strand Blvd </div> <div> YMCA Dwy </div> <div> 4 / 11 </div> <div> 5 / 9 67 / 4 </div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

Mitigation

As mentioned, eight study intersections would experience significant impacts that would require mitigation with the addition of Alternative 1 project trips with two CVNs in port. At seven of the eight locations, the proposed mitigation measures that would allow the intersections to operate at or better than the No-Action Alternative are the same as those previously described:

- [M1] Intersection #10, Silver Strand Boulevard (SR-75) and Tulagi Road
- [M2] Intersection #18, Silver Strand Boulevard (SR-75) and Rainbow Drive
- [M3] Intersection #26, 9th Street and Palm Avenue (SR-75)
- [M4] Intersection #28, 13th Street and Palm Avenue (SR-75)
- [M5] Intersection #30, Saturn Boulevard/19th Street and Palm Avenue (SR-75)
- [M6] Intersection #19, 7th Street and Silver Strand Boulevard (SR-75)
- [M11] Intersection #31, I-5 Southbound Exit Ramp and Palm Avenue (SR-75)

The proposed mitigation for Silver Strand Boulevard (SR-75) and Fiddler's Cove Driveway is described below.

M12. Intersection #11, Silver Strand Boulevard (SR-75) and Fiddlers' Cove Driveway

The significant impact at this intersection during the PM peak-hour can be mitigated by restricting the westbound left-turn movements out of Fiddler's Cove. Vehicles attempting to make a left-turn out of the driveway would have a difficult time finding a gap in traffic. Further, this movement has been identified as a safety concern by the Navy in the past. If the left-turn movement was restricted, vehicles exiting Fiddler's Cove would be forced to make a right-turn and head northbound on Silver Strand Boulevard (SR-75). While this proposed recommendation improves operations and safety at the intersection, it would be inconvenient for vehicles wanting to go south on Silver Strand Boulevard (SR-75). Currently, there is not a place to make a U-turn for northbound traffic until the intersection with Tarawa Road, approximately 1.6 miles north of Fiddler's Cove Driveway. This mitigation measure results in the intersection operating at LOS B and LOS C during the AM and PM peak-hours, respectively. The City of Coronado has requested that this intersection is evaluated under separate environmental review at a later date to determine when, if, and what type of traffic control safety measures are necessary at this location.

Table 6-9 summarizes the mitigation measures and shows the intersection delay and LOS with the proposed mitigation measures in place.

Table 6-9. Year 2040 with 2 CVNs Alternative 1 Intersection Mitigation Summary

INTERSECTION	PROPOSED MITIGATION	BEFORE MITIGATION		AFTER MITIGATION	
		AM	PM	AM	PM
10 Silver Strand Blvd (SR-75) & Tulagi Rd	Change signal timings to reflect new traffic patterns	3.9 (A)	121.2 (F)	3.9 (A)	46.3 (D)
11 Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	Restrict westbound left turns	34.7 (D)	35.5 (E)	34.7 (D)	11.7 (B)
18 Silver Strand Blvd (SR-75) & Rainbow Dr	Change through-right lane on Rainbow Dr to a left-through-right lane and extend storage pockets	204.3 (F)	86.7 (E)	86.5 (F)	42.9 (D)
19 7 th St & Silver Strand Blvd (SR-75)	Stripe a southbound left-turn pocket	158.0 (F)	87.6 (F)	78.1 (E)	62.4 (E)
26 9 th St & Silver Strand Blvd (SR-75)	Modify northbound/southbound approaches to have protected lefts instead of split phasing	92.2 (F)	77.0 (E)	52.7 (D)	54.9 (D)
28 13 th St & Palm Ave (SR-75)	Remove the northbound pedestrian crossing and shorten the northbound split time	44.9 (D)	79.6 (E)	45.6 (D)	55.0 (D)
30 Saturn Blvd/19 th St & Palm Ave (SR-75)	Add a second WB left-turn lane along Palm Ave (SR-75)	103.6 (F)	259.3 (F)	68.4 (E)	142.8 (F)
31 I-5 SB Exit Ramps & Palm Ave (SR-75)	Extend storage length for southbound right on exit ramp	73.7 (E)	87.0 (F)	73.7 (E)	87.0 (F)

Note: Table reflects intersection Delay (LOS). Although all mitigations may not improve operations to LOS D or better, it restores average delay to better than what is experienced under the No-Action Alternative.

Alternative 3

Road Network

The only roadway network change associated with Alternative 3 is implementation of P947, which would install a new ECP at SSTC-South and signalize the intersection of Silver Strand Boulevard (SR-75) and Hooper Boulevard. All other roadways and intersections within the study area would remain the same with the addition of Alternative 3.

Traffic Volumes

Traffic associated with the completed construction of the Proposed Action Alternative 3 was added to the No-Action Alternative volumes. **Figure 6-8** shows the Year 2024 Alternative 3 Conditions volumes with 2 CVNs in port.

Intersection Analysis

All intersections would operate at LOS D or better during both peak periods, except at the following locations:

▪ #1 Glorietta Boulevard and Fourth Street (SR-75)	<i>AM peak (LOS F)</i>
▪ #2 Fourth Street (SR-75) and Pomona Avenue	<i>PM peak (LOS F)</i>
▪ #4 Orange Avenue (SR-75) and Fourth Street (SR-75)	<i>PM peak (LOS F)</i>
▪ #8 Silver Strand Boulevard (SR-75) and Tarawa Road	<i>PM peak (LOS F)</i>
▪ #9 Strand Way and Guadalcanal Road	<i>PM peak (LOS E)</i>
▪ #10 Silver Strand Boulevard (SR-75) and Tulagi Road	<i>PM peak (LOS F)</i>
▪ #11 Silver Strand Boulevard (SR-75) and Fiddler's Cove Dwy	<i>AM peak (LOS E)</i>
▪ #12 Silver Strand Boulevard (SR-75) and Leyte Road	<i>AM peak (LOS E)</i>
▪ #13 Silver Strand Boulevard (SR-75) and Attu Ave	<i>AM peak (LOS E)</i>
▪ #16 NB Silver Strand Boulevard (SR-75) and Coronado Cays Blvd	<i>AM peak (LOS E)</i>
▪ #18 Silver Strand Boulevard (SR-75) and Rainbow Dr	<i>AM & PM peaks (LOS F/E)</i>
▪ #19 7th Street and Silver Strand Boulevard (SR-75)	<i>AM & PM peaks (LOS F/F)</i>
▪ #23 Palm Avenue and Rainbow Drive	<i>AM peak (LOS E)</i>
▪ #26 9th Street and Palm Avenue (SR-75)	<i>AM & PM peaks (LOS F/E)</i>
▪ #28 13th Street and Palm Avenue (SR-75)	<i>PM peak (LOS E)</i>
▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75)	<i>AM & PM peak (LOS F/F)</i>
▪ #31 I-5 SB Exit Ramp and Palm Avenue (SR-75)	<i>AM & PM peak (LOS E/F)</i>

Of the intersections that operate at an unacceptable LOS E or F, eight (shown in **bold**) would result in a significant impact that would need to be mitigated by the project. Seven of the eight locations are the same intersections that would have impacts with one CVN in port. The intersection of Orange Avenue (SR-75) and Fourth Street (SR-75) would be an additional impact when two CVNs are in port.

Intersection Lane Vehicle Analysis

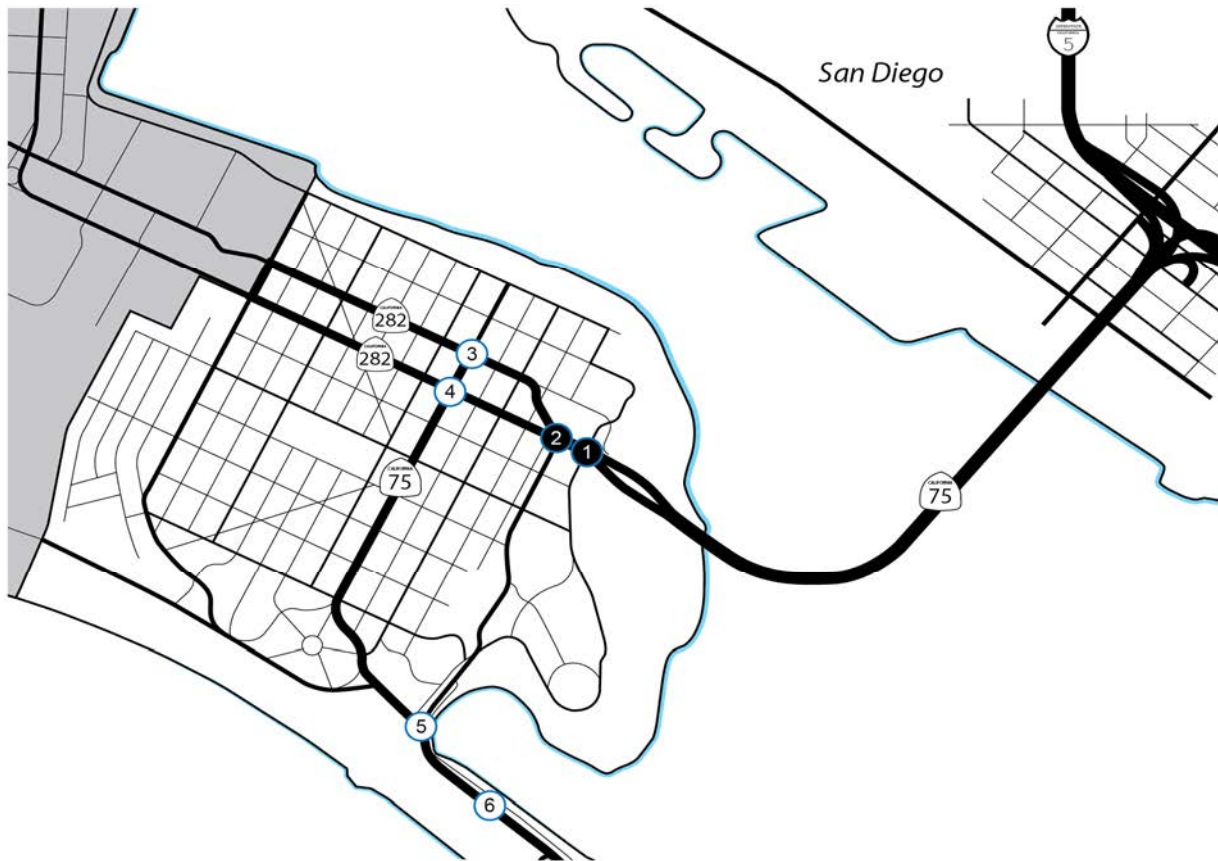
Both signalized intersections at the Palm Avenue and I-5 interchange would be below or approaching capacity during both peak periods.

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<div>1</div> <div>10 / 56</div> <div>Glorietta Blvd</div> <div>557 / 246 3831 / 1815</div> <div>Fourth St (SR-75)</div> <div>1421 / 4097 35 / 18</div> <div>480 / 915</div>	<div>2</div> <div>3730 / 1853</div> <div>Fourth St (SR-75)</div> <div>1282 / 3860 204 / 132</div> <div>Pomona Ave</div> <div>232 / 191</div>	<div>3</div> <div>13 / 17 280 / 867</div> <div>Orange Ave (SR-75)</div> <div>345 / 110 1967 / 642 1590 / 993</div> <div>Third Street (SR-75)</div> <div>107 / 103 103 / 254</div>	<div>4</div> <div>1473 / 1116 455 / 766</div> <div>Orange Ave (SR-75)</div> <div>1 / 7 588 / 2133 81 / 111</div> <div>Fourth St (SR-75)</div> <div>200 / 357 222 / 472</div>
<div>5</div> <div>1315 / 1418</div> <div>Orange Ave (SR-75)</div> <div>8 / 14 253 / 203</div> <div>Pomona Ave</div> <div>1334 / 1049 702 / 793</div>	<div>6</div> <div>43 / 178 1480 / 1680 46 / 79</div> <div>Silver Strand Blvd (SR-75)</div> <div>7 / 29 0 / 12 9 / 30</div> <div>Avenidas De Las Arenas</div> <div>55 / 168 3 / 12 12 / 34</div> <div>23 / 27 1582 / 1746 30 / 58</div>		

CORONADO

Study intersections 1 - 6



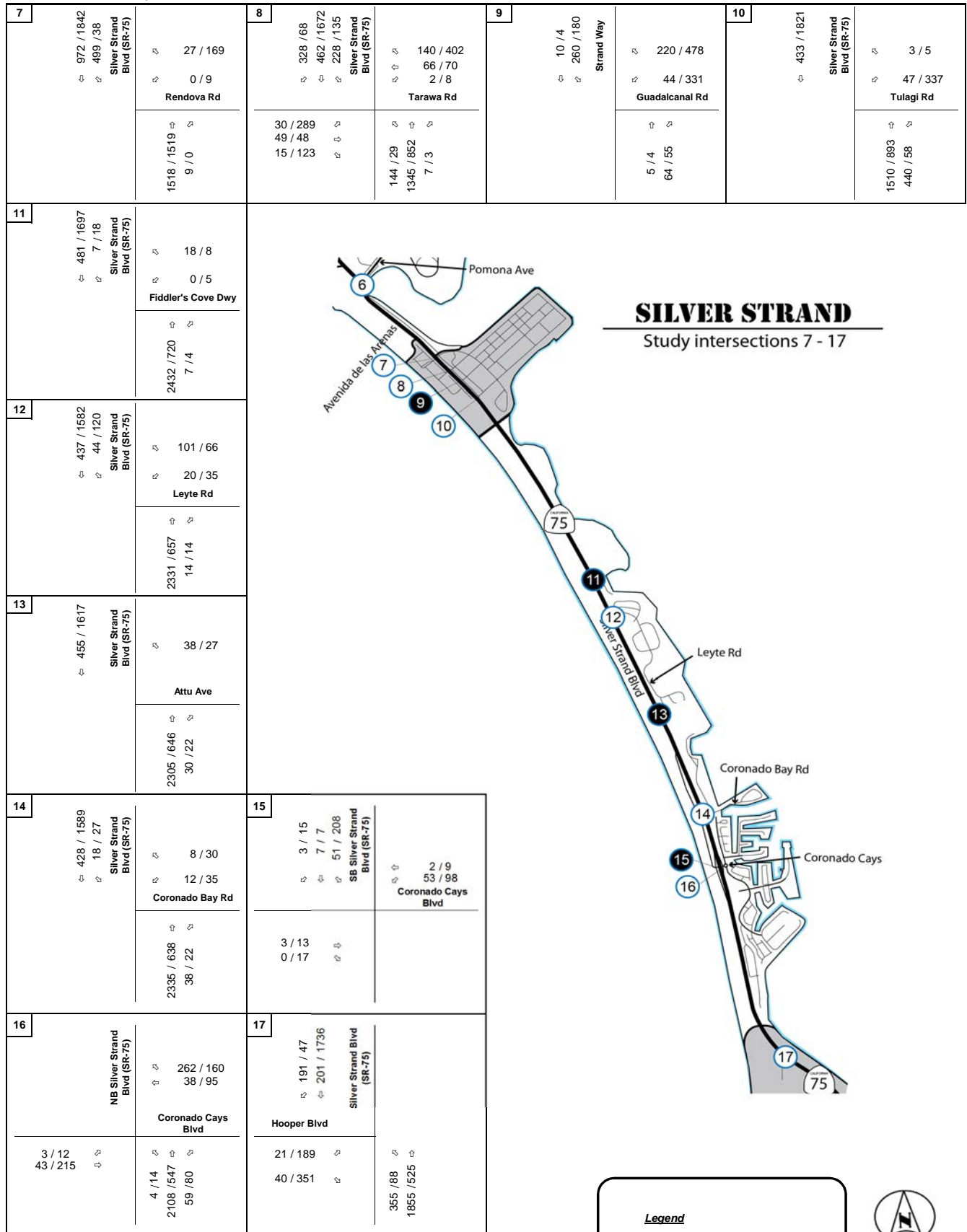
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

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18 <div> <div> 51 / 226 187 / 1570 4 / 19 Silver Strand Blvd (SR-75) </div> <div> 21 / 7 8 / 4 50 / 19 Rainbow Dr </div> </div> <div> 458 / 101 2 / 7 45 / 79 </div> <div> 30 / 85 2067 / 445 11 / 58 </div>	19 <div> 60 / 24 48 / 30 23 / 28 7th St </div> <div> 20 / 40 1899 / 487 Silver Strand Blvd (SR-75) </div> <div> 9 / 66 254 / 1514 20 / 69 </div> <div> 46 / 19 27 / 46 2 / 5 </div>	20 <div> 15 / 4 Delaware St </div> <div> 10 / 44 1909 / 530 457 / 580 Silver Strand Blvd (SR-75) </div> <div> 271 / 1548 </div>	21 <div> 5 / 9 49 / 107 Silver Strand Blvd </div> <div> 107 / 42 132 / 318 Palm Ave </div> <div> 10 / 4 243 / 219 Dwy </div>
22 <div> 15 / 14 11 / 34 12 / 29 3rd St </div> <div> 25 / 25 215 / 332 27 / 87 Palm Ave </div> <div> 8 / 8 283 / 302 5 / 13 </div> <div> 12 / 15 15 / 40 129 / 70 </div>	23 <div> 71 / 146 18 / 54 Rainbow Dr </div> <div> 156 / 41 340 / 466 Palm Ave </div> <div> 232 / 75 435 / 432 </div>	24 <div> 28 / 31 28 / 45 2 / 13 7th St </div> <div> 0 / 4 341 / 468 27 / 32 Palm Ave </div> <div> 17 / 29 428 / 441 16 / 30 </div> <div> 67 / 56 39 / 26 83 / 23 </div>	25 <div> 514 / 490 5 / 9 Delaware St </div> <div> 3 / 7 6 / 3 Palm Ave </div>
26 <div> 28 / 29 52 / 90 102 / 197 9th St </div> <div> 50 / 149 2036 / 957 27 / 66 Palm Ave (SR-75) </div> <div> 24 / 47 771 / 1855 40 / 143 </div> <div> 187 / 111 42 / 102 58 / 71 </div>	27 <div> 17 / 16 12 / 15 63 / 72 Florida St </div> <div> 14 / 63 2234 / 1419 23 / 56 Palm Ave (SR-75) </div> <div> 3 / 23 1034 / 2177 40 / 65 </div> <div> 21 / 24 5 / 12 35 / 40 </div>	28 <div> 17 / 23 41 / 51 192 / 176 13th St </div> <div> 59 / 93 2067 / 1503 110 / 179 Palm Ave (SR-75) </div> <div> 4 / 30 1114 / 2042 72 / 227 </div> <div> 167 / 147 22 / 46 104 / 146 </div>	29 <div> 24 / 12 3 / 12 44 / 27 16th St </div> <div> 14 / 18 2215 / 1843 50 / 195 Palm Ave (SR-75) </div> <div> 16 / 11 1417 / 2187 29 / 57 </div> <div> 18 / 45 8 / 10 56 / 93 </div>
30 <div> 88 / 261 106 / 274 269 / 674 19th St </div> <div> 246 / 636 2144 / 1853 280 / 376 Palm Ave (SR-75) </div> <div> 105 / 216 1434 / 2118 34 / 30 </div> <div> 86 / 75 83 / 203 884 / 611 </div>	31 <div> 1392 / 1891 178 / 504 I-5 SB Exit Ramp </div> <div> 1281 / 980 Palm Ave (SR-75) </div> <div> 326 / 581 </div>	32 <div> 600 / 287 489 / 604 Palm Ave (SR-75) </div> <div> 504 / 1078 </div> <div> 908 / 501 2 / 3 165 / 123 </div>	33 <div> 14 / 38 Silver Strand Blvd </div> <div> YMCA Dwy </div> <div> 4 / 11 </div> <div> 5 / 9 67 / 4 </div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

Mitigation

As mentioned, eight study intersections would experience significant impacts that would require mitigation with the addition of Alternative 3 project trips. At seven of the eight locations, the proposed mitigation measures that would allow the intersections to operate at or better than the No-Action Alternative are the same as those previously described:

- [M1] Intersection #10, Silver Strand Boulevard (SR-75) and Tulagi Road
- [M2] Intersection #18, Silver Strand Boulevard (SR-75) and Rainbow Drive
- [M3] Intersection #26, 9th Street and Palm Avenue (SR-75)
- [M4] Intersection #28, 13th Street and Palm Avenue (SR-75)
- [M5] Intersection #30, Saturn Boulevard/19th Street and Palm Avenue (SR-75)
- [M6] Intersection #19, 7th Street and Silver Strand Boulevard (SR-75)
- [M11] Intersection #31, I-5 Southbound Exit Ramp and Palm Avenue (SR-75)

As previously noted for Year 2024 with two CVNs and Alternative 3, no feasible mitigation was found at the intersection of Orange Avenue (SR-75) and Fourth Avenue (SR-75).

A summary of the mitigations and the operation analysis results with the mitigations in place are shown in **Table 6-10**.

Table 6-10. Year 2040 with 2 CVNs Alternative 3 Intersection Mitigation Summary

INTERSECTION		PROPOSED MITIGATION	BEFORE MITIGATION		AFTER MITIGATION	
			AM	PM	AM	PM
4	Orange Ave (SR-75) & Fourth Ave (SR-75)	None [significant and unavoidable]	38.3 (D)	108.4 (F)	38.3 (D)	108.4 (F)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	Change signal timings to reflect new traffic patterns	3.8 (A)	119.7 (F)	3.8 (A)	45.7 (D)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	Change through-right lane on Rainbow Dr to a left-through-right lane and extend storage pockets	194.6 (F)	78.9 (E)	80.2 (F)	42.6 (D)
19	7 th St & Silver Strand Blvd (SR-75)	Stripe a southbound left-turn pocket	154.0 (F)	85.3 (F)	72.5 (E)	59.6 (E)
26	9 th St & Silver Strand Blvd (SR-75)	Modify northbound/southbound approaches to have protected lefts instead of split phasing	85.3 (F)	72.4 (E)	52.1 (D)	53.2 (D)
28	13 th St & Palm Ave (SR-75)	Remove the northbound pedestrian crossing and shorten the northbound split time	43.6 (D)	75.3 (E)	49.6 (D)	53.3 (D)
30	Saturn Blvd/19 th St & Palm Ave (SR-75)	Add a second WB left-turn lane along Palm Ave (SR-75)	99.3 (E)	253.2 (F)	66.5 (E)	126.5 (F)
31	I-5 SB Exit Ramps & Palm Ave (SR-75)	Extend storage length for southbound right on exit ramp	70.3 (E)	85.7 (F)	70.3 (E)	85.7 (F)

Note: Table reflects intersection Delay (LOS). Although all mitigations may not improve operations to LOS D or better, it restores average delay to better than what is experienced under the No-Action Alternative.

Plus Project without P947 Conditions

As previously mentioned, the implementation of P947 provides traffic relief from the local streets within Imperial Beach by shifting access to SSTC-South onto SR-75. This scenario was analyzed to determine traffic impacts if P947 is not constructed until the end of the ten-year development period, or not implemented at all.

Alternatives 1 and 2

Road Network

It is assumed that all intersections and roadway segments in the study area would remain the same as Existing Conditions with the development of Proposed Action Alternative 1 without P947.

Traffic Volumes

Traffic associated with the completed construction of the Proposed Action Alternative 1 without P947 was added to the No-Action Alternative volumes. **Figure 6-9** shows the resulting volumes.

Intersection Analysis

All intersections would operate at LOS D or better during both peak periods, except at the following locations:

- | | |
|--|------------------------------------|
| ▪ #1 Glorietta Boulevard and Fourth Street (SR-75) | <i>AM peak (LOS F)</i> |
| ▪ #2 Fourth Street (SR-75) and Pomona Avenue | <i>PM peak (LOS F)</i> |
| ▪ #4 Orange Avenue (SR-75) and Fourth Street (SR-75) | <i>PM peak (LOS F)</i> |
| ▪ #8 Silver Strand Boulevard (SR-75) and Tarawa Road | <i>PM peak (LOS E)</i> |
| ▪ #10 Silver Strand Boulevard (SR-75) and Tulagi Road | <i>PM peak (LOS F)</i> |
| ▪ #12 Silver Strand Boulevard (SR-75) and Leyte Road | <i>AM peak (LOS E)</i> |
| ▪ #13 Silver Strand Boulevard (SR-75) and Attu Ave | <i>AM peak (LOS E)</i> |
| ▪ #16 NB Silver Strand Boulevard (SR-75) and Coronado Cays Blvd | <i>AM peak (LOS E)</i> |
| ▪ #18 Silver Strand Boulevard (SR-75) and Rainbow Drive | <i>AM peak (LOS F)</i> |
| ▪ #19 7th Street and Silver Strand Boulevard (SR-75) | <i>AM & PM peaks (LOS F/F)</i> |
| ▪ #21 Silver Strand Boulevard and Palm Avenue | <i>PM peak (LOS F)</i> |
| ▪ #22 3rd Street and Palm Avenue | <i>AM & PM peaks (LOS F/F)</i> |
| ▪ #23 Palm Avenue and Rainbow Drive | <i>AM & PM peaks (LOS F/F)</i> |
| ▪ #26 9th Street and Palm Avenue (SR-75) | <i>AM & PM peaks (LOS F/F)</i> |
| ▪ #28 13th Street and Palm Avenue (SR-75) | <i>PM peak (LOS F)</i> |
| ▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75) | <i>AM & PM peak (LOS F/F)</i> |
| ▪ #31 I-5 SB Exit Ramp and Palm Avenue (SR-75) | <i>AM & PM peak (LOS F/F)</i> |

Of the intersections that operate at an unacceptable LOS E or F, nine (shown in **bold**) would result in a significant impact that would need to be mitigated by the project. All nine of the impacts were also impacts with one CVN in port.

The addition of Alternative 1 traffic without P947 would result in three additional impacts on local streets in Imperial Beach that would not be impacts if P947 were in place.

Intersecting Lane Vehicle Analysis

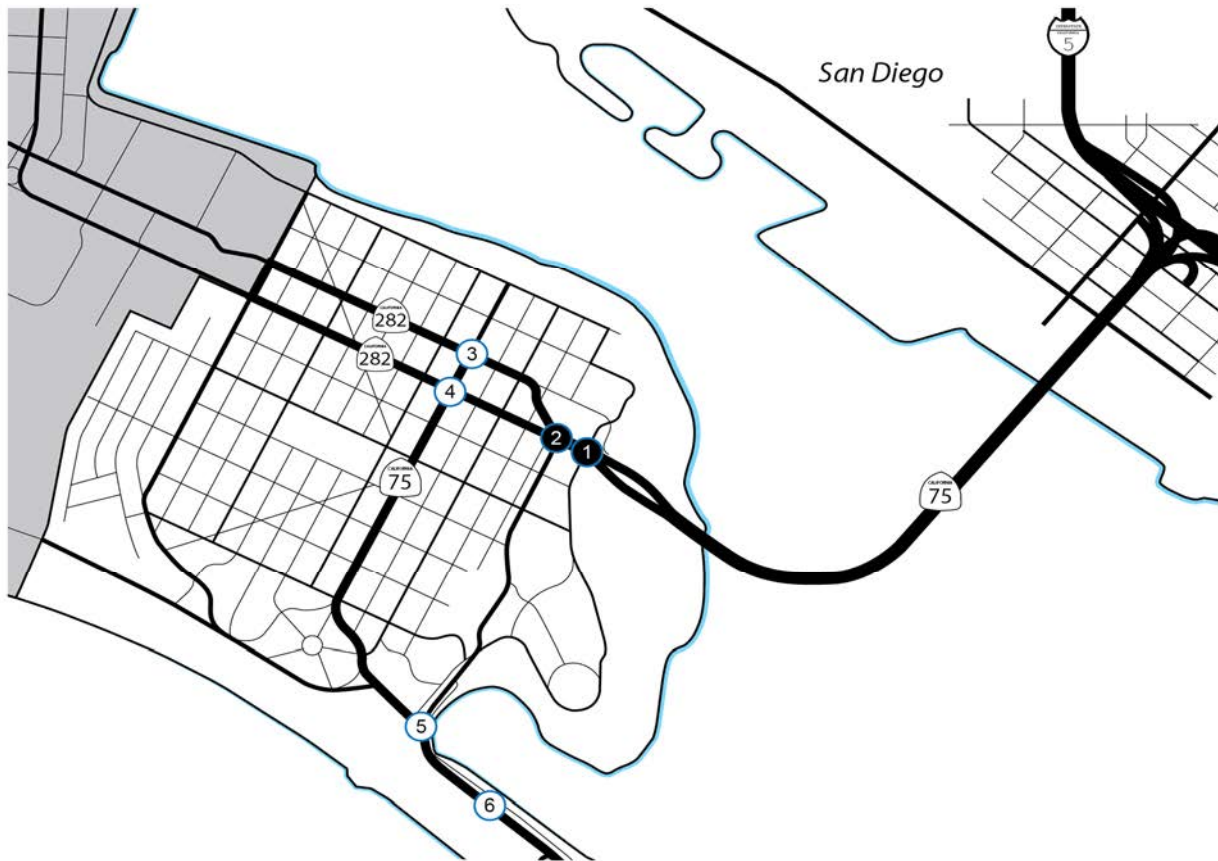
Both signalized intersections at the Palm Avenue and I-5 interchange would operate below or approaching capacity during both peak periods.

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<div>1</div> <div> <div> <div>10 / 56</div> <div>↔</div> <div>Glorietta Blvd</div> </div> <div> <div>557 / 246</div> <div>↕</div> <div>3717 / 1787</div> </div> <div> <div>Fourth St (SR-75)</div> </div> </div> <div> <div>1409 / 3988</div> <div>↕</div> <div>35 / 18</div> </div> <div> <div>480 / 915</div> <div>↕</div> </div>	<div>2</div> <div> <div>3616 / 1825</div> <div>↕</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1270 / 3751</div> <div>↕</div> <div>204 / 132</div> </div> <div> <div>Pomona Ave</div> </div> <div> <div>232 / 185</div> <div>↕</div> </div>	<div>3</div> <div> <div>13 / 17</div> <div>↕</div> <div>280 / 867</div> </div> <div> <div>Orange Ave (SR-75)</div> </div> <div> <div>345 / 110</div> <div>↕</div> <div>1957 / 639</div> <div>1486 / 968</div> </div> <div> <div>Third Street (SR-75)</div> </div> <div> <div>108 / 102</div> <div>↕</div> <div>103 / 254</div> </div>	<div>4</div> <div> <div>1369 / 1091</div> <div>↕</div> <div>455 / 766</div> </div> <div> <div>Orange Ave (SR-75)</div> </div> <div> <div>Fourth St (SR-75)</div> </div> <div> <div>1 / 7</div> <div>↕</div> <div>587 / 2123</div> <div>81 / 110</div> </div> <div> <div>201 / 356</div> <div>↕</div> <div>211 / 373</div> </div>
<div>5</div> <div> <div>1211 / 1392</div> <div>↕</div> <div>Orange Ave (SR-75)</div> </div> <div> <div>8 / 14</div> <div>↕</div> <div>253 / 203</div> </div> <div> <div>Pomona Ave</div> </div> <div> <div>1322 / 951</div> <div>↕</div> <div>702 / 787</div> </div>	<div>6</div> <div> <div>43 / 178</div> <div>↕</div> <div>1376 / 1654</div> <div>46 / 79</div> </div> <div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>7 / 29</div> <div>↕</div> <div>0 / 12</div> <div>9 / 30</div> </div> <div> <div>Avenidas De Las Arenas</div> </div> <div> <div>55 / 168</div> <div>↕</div> <div>3 / 12</div> <div>12 / 34</div> </div> <div> <div>23 / 27</div> <div>↕</div> <div>1570 / 1642</div> <div>30 / 58</div> </div>		

CORONADO

Study intersections 1 - 6



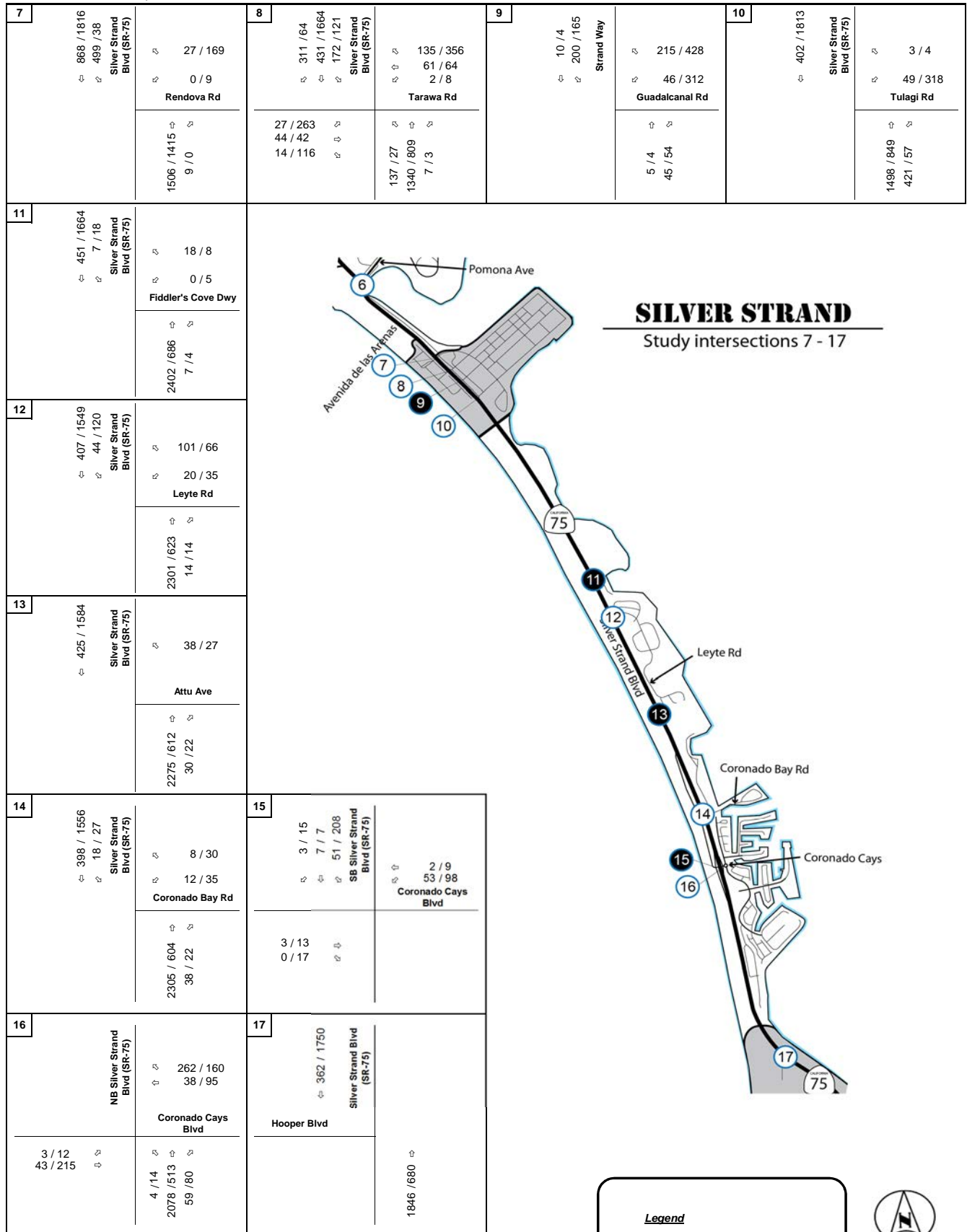
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

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<div>18</div> <div> <div>214 / 261</div> <div>145 / 1198</div> <div>4 / 19</div> <div>Silver Strand Blvd (SR-75)</div> <div>21 / 7</div> <div>8 / 4</div> <div>50 / 19</div> <div>Rainbow Dr</div> <div>470 / 262</div> <div>2 / 7</div> <div>45 / 79</div> <div>30 / 85</div> <div>1692 / 352</div> <div>11 / 58</div> </div>	<div>19</div> <div> <div>60 / 24</div> <div>48 / 30</div> <div>23 / 28</div> <div>7th St</div> <div>20 / 40</div> <div>1530 / 396</div> <div>Silver Strand Blvd (SR-75)</div> <div>9 / 66</div> <div>213 / 1149</div> <div>19 / 63</div> <div>40 / 18</div> <div>27 / 46</div> <div>2 / 5</div> </div>	<div>20</div> <div> <div>15 / 4</div> <div>Delaware St</div> <div>10 / 44</div> <div>1540 / 439</div> <div>935 / 698</div> <div>Silver Strand Blvd (SR-75)</div> <div>230 / 1183</div> </div>	<div>21</div> <div> <div>6 / 15</div> <div>121 / 748</div> <div>Silver Strand Blvd</div> <div>755 / 202</div> <div>131 / 313</div> <div>Palm Ave</div> <div>17 / 6</div> <div>238 / 218</div> <div>Dwy</div> </div>
<div>22</div> <div> <div>15 / 14</div> <div>11 / 34</div> <div>12 / 29</div> <div>3rd St</div> <div>25 / 25</div> <div>862 / 487</div> <div>27 / 87</div> <div>Palm Ave</div> <div>8 / 8</div> <div>350 / 942</div> <div>5 / 13</div> <div>12 / 15</div> <div>15 / 40</div> <div>129 / 70</div> </div>	<div>23</div> <div> <div>234 / 181</div> <div>18 / 54</div> <div>Rainbow Dr</div> <div>156 / 41</div> <div>825 / 586</div> <div>Palm Ave</div> <div>244 / 236</div> <div>489 / 911</div> </div>	<div>24</div> <div> <div>28 / 31</div> <div>27 / 39</div> <div>2 / 13</div> <div>7th St</div> <div>0 / 4</div> <div>819 / 586</div> <div>27 / 32</div> <div>Palm Ave</div> <div>17 / 29</div> <div>481 / 913</div> <div>17 / 36</div> <div>74 / 58</div> <div>33 / 25</div> <div>83 / 23</div> </div>	<div>25</div> <div> <div>567 / 962</div> <div>5 / 9</div> <div>Delaware St</div> <div>3 / 7</div> <div>6 / 3</div> <div>Palm Ave</div> </div>
<div>26</div> <div> <div>28 / 29</div> <div>52 / 90</div> <div>102 / 197</div> <div>50 / 149</div> <div>2145 / 984</div> <div>27 / 66</div> <div>Palm Ave (SR-75)</div> <div>24 / 47</div> <div>784 / 1962</div> <div>40 / 143</div> <div>188 / 112</div> <div>42 / 102</div> <div>58 / 71</div> </div>	<div>27</div> <div> <div>17 / 16</div> <div>12 / 15</div> <div>63 / 72</div> <div>Florida St</div> <div>14 / 63</div> <div>2343 / 1446</div> <div>23 / 56</div> <div>Palm Ave (SR-75)</div> <div>3 / 23</div> <div>1047 / 2284</div> <div>40 / 65</div> <div>21 / 24</div> <div>5 / 12</div> <div>35 / 40</div> </div>	<div>28</div> <div> <div>17 / 23</div> <div>41 / 51</div> <div>192 / 176</div> <div>13th St</div> <div>59 / 93</div> <div>2176 / 1530</div> <div>110 / 179</div> <div>Palm Ave (SR-75)</div> <div>4 / 30</div> <div>1127 / 2149</div> <div>72 / 227</div> <div>168 / 148</div> <div>22 / 46</div> <div>104 / 146</div> </div>	<div>29</div> <div> <div>24 / 12</div> <div>3 / 12</div> <div>44 / 27</div> <div>16th St</div> <div>14 / 18</div> <div>2324 / 1870</div> <div>50 / 195</div> <div>Palm Ave (SR-75)</div> <div>16 / 11</div> <div>1430 / 2294</div> <div>29 / 57</div> <div>18 / 45</div> <div>8 / 10</div> <div>56 / 93</div> </div>
<div>30</div> <div> <div>88 / 261</div> <div>106 / 274</div> <div>269 / 674</div> <div>19th St</div> <div>246 / 636</div> <div>2253 / 1879</div> <div>280 / 376</div> <div>Palm Ave (SR-75)</div> <div>105 / 216</div> <div>1445 / 2226</div> <div>34 / 30</div> <div>87 / 76</div> <div>83 / 203</div> <div>884 / 611</div> </div>	<div>31</div> <div> <div>1500 / 1917</div> <div>178 / 504</div> <div>I-5 SB Exit Ramp</div> <div>1280 / 980</div> <div>Palm Ave (SR-75)</div> <div>326 / 581</div> <div>50 / 440</div> </div>	<div>32</div> <div> <div>I-5 NB Ramps</div> <div>600 / 287</div> <div>489 / 604</div> <div>Palm Ave (SR-75)</div> <div>504 / 1078</div> <div>908 / 501</div> <div>2 / 3</div> <div>165 / 123</div> </div>	<div>33</div> <div> <div>87 / 685</div> <div>Silver Strand Blvd</div> <div>YMCA Dwy</div> <div>4 / 11</div> <div>5 / 9</div> <div>722 / 166</div> </div>



IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

Mitigation

As mentioned, nine study intersections would experience significant impacts that would require mitigation with the addition of Alternative 1 project trips without P947. The following mitigation measures identified previously would apply for this scenario:

- [M1] Intersection #10, Silver Strand Boulevard (SR-75) and Tulagi Road
- [M3] Intersection #26, 9th Street and Palm Avenue (SR-75)
- [M4] Intersection #28, 13th Street and Palm Avenue (SR-75)
- [M5] Intersection #30, Saturn Boulevard/19th Street and Palm Avenue (SR-75)
- [M6] Intersection #19, 7th Street and Silver Strand Boulevard (SR-75)
- [M7] Intersection #21, Silver Strand Boulevard and Palm Avenue
- [M8] Intersection #22, 3rd Street and Palm Avenue
- [M9] Intersection #23, Palm Avenue and Rainbow Drive
- [M11] Intersection #31, I-5 Southbound Exit Ramp and Palm Avenue (SR-75)

Table 6-11 summarizes all of the mitigation measures and shows the intersection delay and LOS with the proposed mitigation measures in place.

Table 6-11. Year 2040 with 2 CVNs Alternative 1 without P947 Intersection Mitigation Summary

INTERSECTION	PROPOSED MITIGATION	BEFORE MITIGATION		AFTER MITIGATION	
		AM	PM	AM	PM
10 Silver Strand Blvd (SR-75) & Tulagi Rd	Change signal timings to reflect new traffic patterns	3.9 (A)	119.9 (F)	3.9 (A)	83.9 (F)
19 7 th St & Silver Strand Blvd (SR-75)	Stripe a southbound left-turn pocket	150.5 (F)	82.2 (F)	52.1 (D)	50.1 (D)
21 Silver Strand Blvd & Palm Ave	Widen Silver Strand Boulevard, install traffic signal	31.3 (D)	>1000 (F)	7.0 (A)	25.3 (C)
22 3 rd St & Palm Ave	Install a traffic signal	170.6 (F)	390.5 (F)	9.0 (A)	21.8 (C)
23 Palm Ave & Rainbow Dr	Restrict SB left-turn movement	436.0 (F)	722.4 (F)	12.1 (B)	15.0 (C)
26 9 th St & Silver Strand Blvd (SR-75)	Modify northbound/southbound approaches to have protected lefts instead of split phasing	102.8 (F)	84.6 (F)	53.2 (D)	52.2 (D)
28 13 th St & Palm Ave (SR-75)	Remove the northbound pedestrian crossing and shorten the northbound split time	47.5 (D)	86.5 (F)	45.3 (D)	55.0 (D)
30 Saturn Blvd/19 th St & Palm Ave (SR-75)	Add a second WB left-turn lane along Palm Ave (SR-75)	109.9 (F)	286.6 (F)	78.9 (E)	136.8 (F)
31 I-5 SB Exit Ramps & Palm Ave (SR-75)	Extend storage length for southbound right on exit ramp	80.9 (F)	89.2 (F)	80.9 (F)	89.2 (F)

Note: Table reflects intersection Delay (LOS). Although all mitigations may not improve operations to LOS D or better, it restores average delay to better than what is experienced under the No-Action Alternative.

Alternative 3

Road Network

It is assumed that all intersections and roadway segments in the study area would remain the same as Existing Conditions with the development of Proposed Action Alternative 3 without P947.

Traffic Volumes

Traffic associated with the completed construction of the Proposed Action Alternative 3 without P947 was added to the No-Action Alternative volumes. **Figure 6-10** shows the resulting volumes.

Intersection Analysis

All intersections would operate at LOS D or better during both peak periods, except at the following locations:

▪ #1 Glorietta Boulevard and Fourth Street (SR-75)	<i>AM peak (LOS F)</i>
▪ #2 Fourth Street (SR-75) and Pomona Avenue	<i>PM peak (LOS F)</i>
▪ #4 Orange Avenue (SR-75) and Fourth Street (SR-75)	<i>PM peak (LOS F)</i>
▪ #8 Silver Strand Boulevard (SR-75) and Tarawa Road	<i>PM peak (LOS F)</i>
▪ #9 Strand Way & Guadalcanal Road	<i>PM peak (LOS E)</i>
▪ #10 Silver Strand Boulevard (SR-75) and Tulagi Road	<i>PM peak (LOS F)</i>
▪ #11 Silver Strand Boulevard (SR-75) and Fiddler's Cove Dwy	<i>AM peak (LOS E)</i>
▪ #12 Silver Strand Boulevard (SR-75) and Leyte Road	<i>AM peak (LOS E)</i>
▪ #13 Silver Strand Boulevard (SR-75) and Attu Ave	<i>AM peak (LOS E)</i>
▪ #16 NB Silver Strand Boulevard (SR-75) and Coronado Cays Blvd	<i>AM peak (LOS E)</i>
▪ #18 Silver Strand Boulevard (SR-75) and Rainbow Drive	<i>AM peak (LOS F)</i>
▪ #19 7th Street and Silver Strand Boulevard (SR-75)	<i>AM & PM peaks (LOS F/F)</i>
▪ #21 Silver Strand Boulevard and Palm Avenue	<i>PM peak (LOS F)</i>
▪ #22 3rd Street and Palm Avenue	<i>AM & PM peaks (LOS F/F)</i>
▪ #23 Palm Avenue and Rainbow Drive	<i>AM & PM peaks (LOS F/F)</i>
▪ #26 9th Street and Palm Avenue (SR-75)	<i>AM & PM peaks (LOS F/E)</i>
▪ #28 13th Street and Palm Avenue (SR-75)	<i>PM peak (LOS F)</i>
▪ #30 Saturn Boulevard/19th Street and Palm Avenue (SR-75)	<i>AM & PM peak (LOS F/F)</i>
▪ #31 I-5 SB Exit Ramp and Palm Avenue (SR-75)	<i>AM & PM peak (LOS E/F)</i>

Of the intersections that operate at an unacceptable LOS E or F, ten (shown in **bold**) would result in a significant impact that would need to be mitigated by the project.

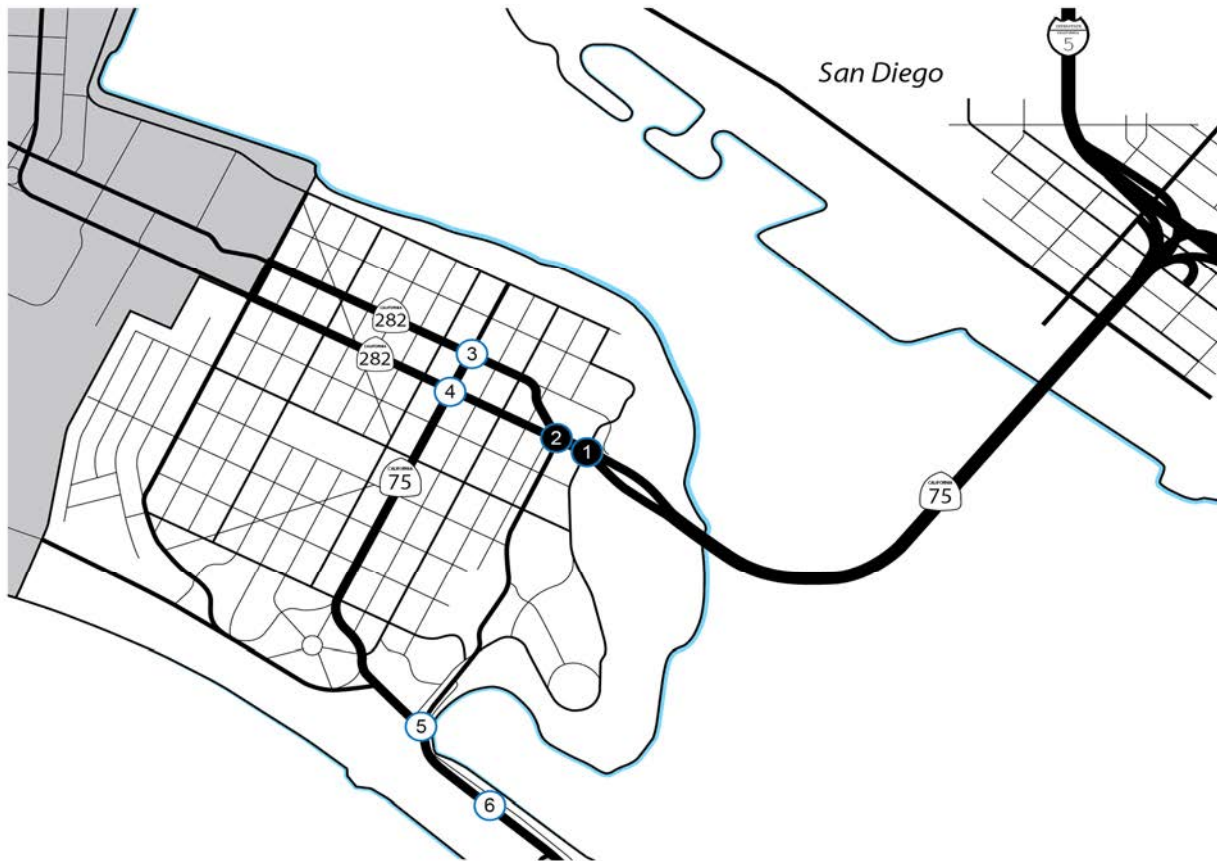
The addition of Alternative 3 traffic without P947 would result in three additional impacts on local streets in Imperial Beach that would not be impacts if P947 were in place.

Intersecting Lane Vehicle Analysis

Both signalized intersections at the Palm Avenue and I-5 interchange would operate below or approaching capacity during both peak periods.

NBC Coastal Campus

1 <div> <div>10 / 56</div> <div>Glorietta Blvd</div> <div> <div>557 / 246</div> <div>3776 / 1802</div> </div> <div>Fourth St (SR-75)</div> </div> <div> <div>1415 / 4043</div> <div>35 / 18</div> </div> <div> <div>480 / 915</div> </div>	2 <div> <div>3675 / 1840</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1276 / 3806</div> <div>204 / 132</div> </div> <div>Pomona Ave</div> <div> <div>232 / 191</div> </div>	3 <div> <div>13 / 17</div> <div>280 / 867</div> </div> <div>Orange Ave (SR-75)</div> <div> <div>345 / 110</div> <div>1967 / 642</div> <div>1535 / 980</div> </div> <div>Third Street (SR-75)</div> <div> <div>107 / 103</div> <div>103 / 254</div> </div>	4 <div> <div>1418 / 1103</div> <div>455 / 766</div> </div> <div>Orange Ave (SR-75)</div> <div> <div>1 / 7</div> <div>588 / 2133</div> <div>81 / 111</div> </div> <div>Fourth St (SR-75)</div> <div> <div>200 / 357</div> <div>216 / 418</div> </div>
5 <div> <div>1261 / 1404</div> <div>Orange Ave (SR-75)</div> </div> <div> <div>8 / 14</div> <div>253 / 203</div> </div> <div>Pomona Ave</div> <div> <div>1328 / 995</div> <div>702 / 793</div> </div>	6 <div> <div>43 / 178</div> <div>1426 / 1666</div> <div>46 / 79</div> </div> <div>Silver Strand Blvd (SR-75)</div> <div> <div>7 / 29</div> <div>0 / 12</div> <div>9 / 30</div> </div> <div>Avenidas De Las Arenas</div> <div> <div>55 / 168</div> <div>3 / 12</div> <div>12 / 34</div> </div> <div> <div>23 / 27</div> <div>1576 / 1692</div> <div>30 / 58</div> </div>	<div> <div>CORONADO</div> <div>Study intersections 1 - 6</div> </div>	



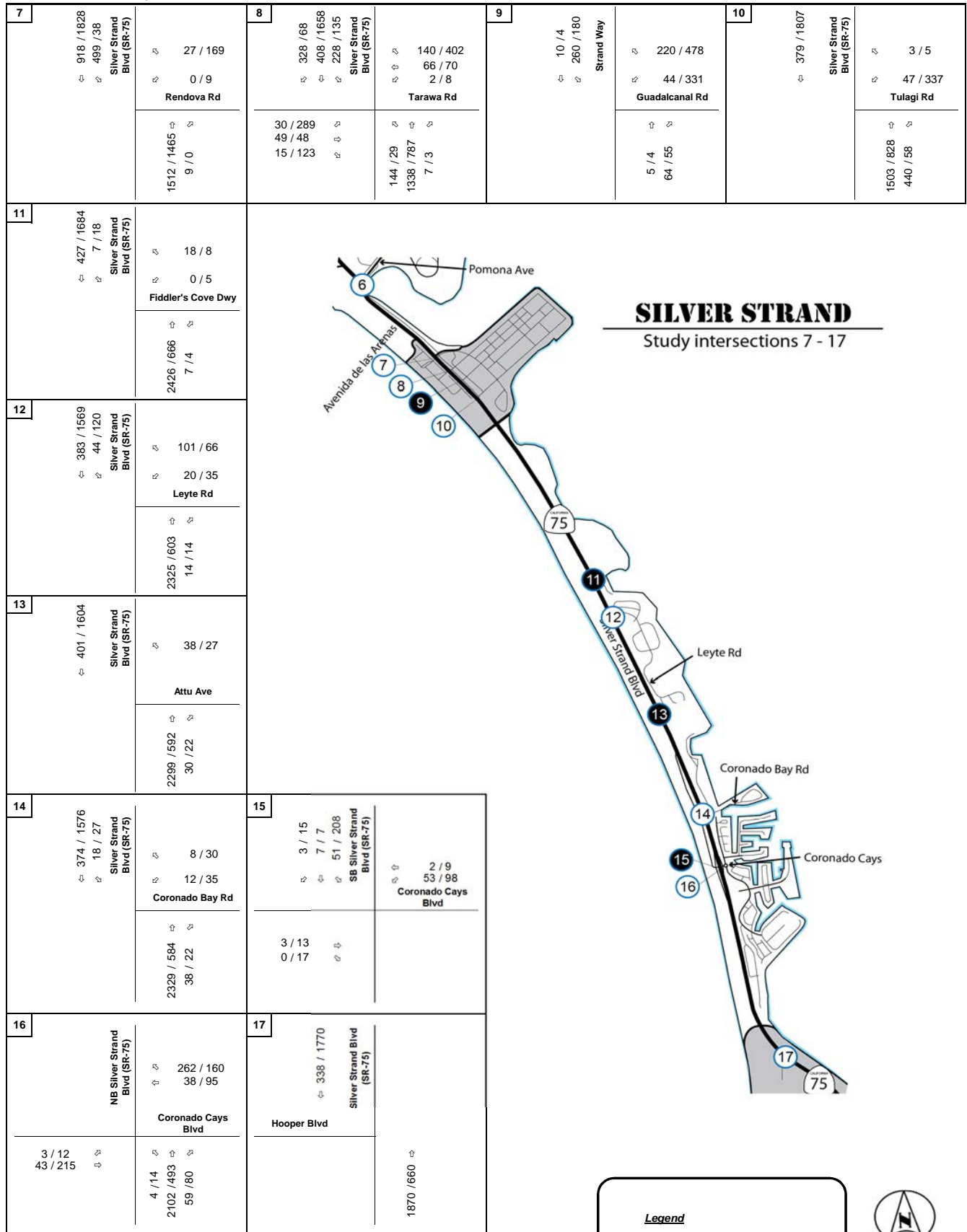
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus



NBC Coastal Campus

18 187 / 255 148 / 1224 4 / 19 Silver Strand Blvd (SR-75) 21 / 7 8 / 4 50 / 19 Rainbow Dr 468 / 235 2 / 7 45 / 79 30 / 85 1718 / 359 11 / 58	19 60 / 24 48 / 30 23 / 28 7th St 20 / 40 1555 / 402 Silver Strand Blvd (SR-75) 9 / 66 216 / 1174 19 / 64 41 / 18 27 / 46 2 / 5	20 15 / 4 Delaware St 10 / 44 1565 / 445 856 / 679 Silver Strand Blvd (SR-75) 233 / 1208 6 / 14 109 / 642 Silver Strand Blvd 648 / 176 131 / 313 Palm Ave 15 / 5 238 / 218 Dwy	21 15 / 14 11 / 34 12 / 29 3rd St 25 / 25 755 / 461 27 / 87 Palm Ave 8 / 8 338 / 836 5 / 13 12 / 15 15 / 40 129 / 70	22 207 / 175 18 / 54 Rainbow Dr 156 / 41 744 / 566 Palm Ave 242 / 209 480 / 832	23 28 / 31 27 / 40 2 / 13 7th St 0 / 4 740 / 567 27 / 32 Palm Ave 17 / 29 473 / 835 17 / 35 72 / 57 34 / 25 83 / 23	24 28 / 29 52 / 90 102 / 197 50 / 149 2090 / 970 27 / 66 Palm Ave (SR-75) 24 / 47 777 / 1909 40 / 143 187 / 111 42 / 102 58 / 71	25 17 / 16 12 / 15 63 / 72 Florida St 14 / 63 2288 / 1432 23 / 56 Palm Ave (SR-75) 3 / 23 1040 / 2231 40 / 65 21 / 24 5 / 12 35 / 40	26 17 / 23 41 / 51 192 / 176 13th St 59 / 93 2122 / 1517 110 / 179 Palm Ave (SR-75) 4 / 30 1120 / 2096 72 / 227 167 / 147 22 / 46 104 / 146	27 24 / 12 3 / 12 44 / 27 16th St 14 / 18 2270 / 1857 50 / 195 Palm Ave (SR-75) 16 / 11 1423 / 2241 29 / 57 18 / 45 8 / 10 56 / 93	28 88 / 261 106 / 274 269 / 674 19th St 246 / 636 2198 / 1867 280 / 376 Palm Ave (SR-75) 105 / 216 1440 / 2172 34 / 30 86 / 75 83 / 203 884 / 611	29 1446 / 1904 178 / 504 I-5 SB Exit Ramp 1281 / 980 Palm Ave (SR-75) 326 / 581 41 / 367	30 600 / 287 489 / 604 Palm Ave (SR-75) 504 / 1078 908 / 501 2 / 3 165 / 123	31 75 / 578 Silver Strand Blvd YMCA Dwy 4 / 11 5 / 9 613 / 139	32 5 / 9 613 / 139
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IMPERIAL BEACH

Study intersections 18 - 33

Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

Mitigation

As mentioned, ten study intersections would experience significant impacts that would require mitigation with the addition of Alternative 3 project trips without P947. The mitigation measures identified for Alternative 1 would also apply for this scenario:

- [M1] Intersection #10, Silver Strand Boulevard (SR-75) and Tulagi Road
- [M3] Intersection #26, 9th Street and Palm Avenue (SR-75)
- [M4] Intersection #28, 13th Street and Palm Avenue (SR-75)
- [M5] Intersection #30, Saturn Boulevard/19th Street and Palm Avenue (SR-75)
- [M6] Intersection #19, 7th Street and Silver Strand Boulevard (SR-75)
- [M7] Intersection #21, Silver Strand Boulevard and Palm Avenue
- [M8] Intersection #22, 3rd Street and Palm Avenue
- [M9] Intersection #23, Palm Avenue and Rainbow Drive
- [M11] Intersection #31, I-5 Southbound Exit Ramp and Palm Avenue (SR-75)

Table 6-12 summarizes all of the mitigation measures and shows the intersection delay and LOS with the proposed mitigation measures in place.

Table 6-12. Year 2040 with 2 CVNs Alternative 3 without P947 Intersection Mitigation Summary

INTERSECTION		PROPOSED MITIGATION	BEFORE MITIGATION		AFTER MITIGATION	
			AM	PM	AM	PM
4	Orange Ave (SR-75) & Fourth Ave (SR-75)	None [significant and unavoidable]	38.1 (D)	108.9 (F)	38.1 (D)	108.9 (F)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	Change signal timings to reflect new traffic patterns	3.9 (A)	118.4 (F)	3.9 (A)	82.8 (F)
19	7 th St & Silver Strand Blvd (SR-75)	Stripe a southbound left-turn pocket	149.6 (F)	82.1 (F)	52.6 (D)	50.5 (D)
21	Silver Strand Blvd & Palm Ave	Widen Silver Strand Boulevard, install traffic signal	25.2 (D)	879.9 (F)	6.7 (A)	19.1 (B)
22	3 rd St & Palm Ave	Install a traffic signal	116.4 (F)	308.8 (F)	8.4 (A)	14.4 (B)
23	Palm Ave & Rainbow Dr	Restrict SB left-turn movement	274.3 (F)	463.5 (F)	12.0 (B)	14.6 (B)
26	9 th St & Silver Strand Blvd (SR-75)	Modify northbound/southbound approaches to have protected lefts instead of split phasing	94.0 (F)	78.4 (F)	45.5 (D)	50.8 (D)
28	13 th St & Palm Ave (SR-75)	Remove the northbound pedestrian crossing and shorten the northbound split time	45.3 (D)	80.8 (F)	44.3 (D)	53.1 (D)
30	Saturn Blvd/19 th St & Palm Ave (SR-75)	Add a second WB left-turn lane along Palm Ave (SR-75)	104.4 (F)	260.8 (F)	68.8 (E)	131.9 (F)
31	I-5 SB Exit Ramps & Palm Ave (SR-75)	Extend storage length for southbound right on exit ramp	75.0 (E)	87.4 (F)	75.0 (E)	87.4 (F)

Note: Table reflects intersection Delay (LOS). Although the mitigation does not improve operations to LOS D or better, it restores average delay to better than what is experienced under the No-Action Alternative.

7.0 OTHER CONSIDERATIONS

Site Access

The Proposed Action includes MILCON P947, implementation of a new ECP on the northern end of SSTC-South that would provide access to Silver Strand Boulevard (SR-75) from an existing intersection location. As part of P947, the existing intersection would require a major overhaul, planned to include installation of a traffic signal, addition of a southbound right-turn lane, and lengthening of the northbound left-turn lane. The upgraded intersection and new ECP would become the main entrance to SSTC-South and provide adequate capacity for the trip generation defined in this study. As a result, the existing ECP in Imperial Beach would no longer be the main access point and would become a secondary ECP that could be used in a variety of ways to balance traffic demand and maintain a connection between SSTC-South and Imperial Beach. Some examples of the limited use include:

- Relieve traffic on the external street network during times of extraordinary traffic demand;
- Open during mid-day lunch hours to encourage shopping and eating at nearby Imperial Beach establishments; and
- Used as a pedestrian and bicycle entrance for users coming from the Imperial Beach area

If P947 is not implemented as part of the ultimate development of the Proposed Action or developed late in the ten-year build-out schedule there will be several additional impacts to the roadway network as reflected in the analysis results, primarily along the local streets of Imperial Beach. Several intersections along Palm Avenue would degrade from minimal delays, minimum queuing, and acceptable operations to extreme delays, long queues, and unacceptable operations. Further, the existing ECP for SSTC-South, located in Imperial Beach on Silver Strand Boulevard north of Palm Avenue, is not designed to accommodate the traffic volumes that the Proposed Action is anticipating. Delays and queues may be worse than what is represented in the analysis results due to heavy queues at the ECP caused by vehicle processing procedures required to maintain security. Furthermore, construction vehicles will need to access SSTC-South during the development of the Proposed Action and would further worsen traffic operations.

For the above reasons, it is recommended that P947 be implemented as early as possible in the Proposed Action development to prevent excessive traffic volumes in Imperial Beach and provide appropriate capacity and security facilities to process the increasing number of vehicles accessing SSTC-South.

Access to SR-75

As part of P947, the Navy will need to coordinate with Caltrans on design and construction of the proposed improvements to the existing access on SR-75. The current access is uncontrolled on SR-75 with a 50-foot northbound left-turn pocket and no dedicated southbound right-turn lane. The existing configuration of the intersection is illustrated in **Figure 7-1**. The projected Year 2040 volumes with 2 CVNs in port and completion of the Proposed Action are also shown on Figure 7-1. To handle the projected volumes at this location with the development of the Proposed Action, it is proposed to add a traffic signal, extend the northbound left-turn pocket, construct an exclusive southbound right-turn pocket, and widen the west leg to have two inbound and three outbound lanes for SSTC-South. The proposed traffic signal would include a crossing that connects to Bayshore Bikeway and signal timing features for bicycles and pedestrians. A conceptual layout of the traffic signal and improvements are illustrated in **Figure 7-2**. It should be noted that although the design of internal roadway layout has not been determined, adequate queuing and storage length for the base security operations to occur shall be provided. It is estimated that the length will be at least 500 feet from the intersection.



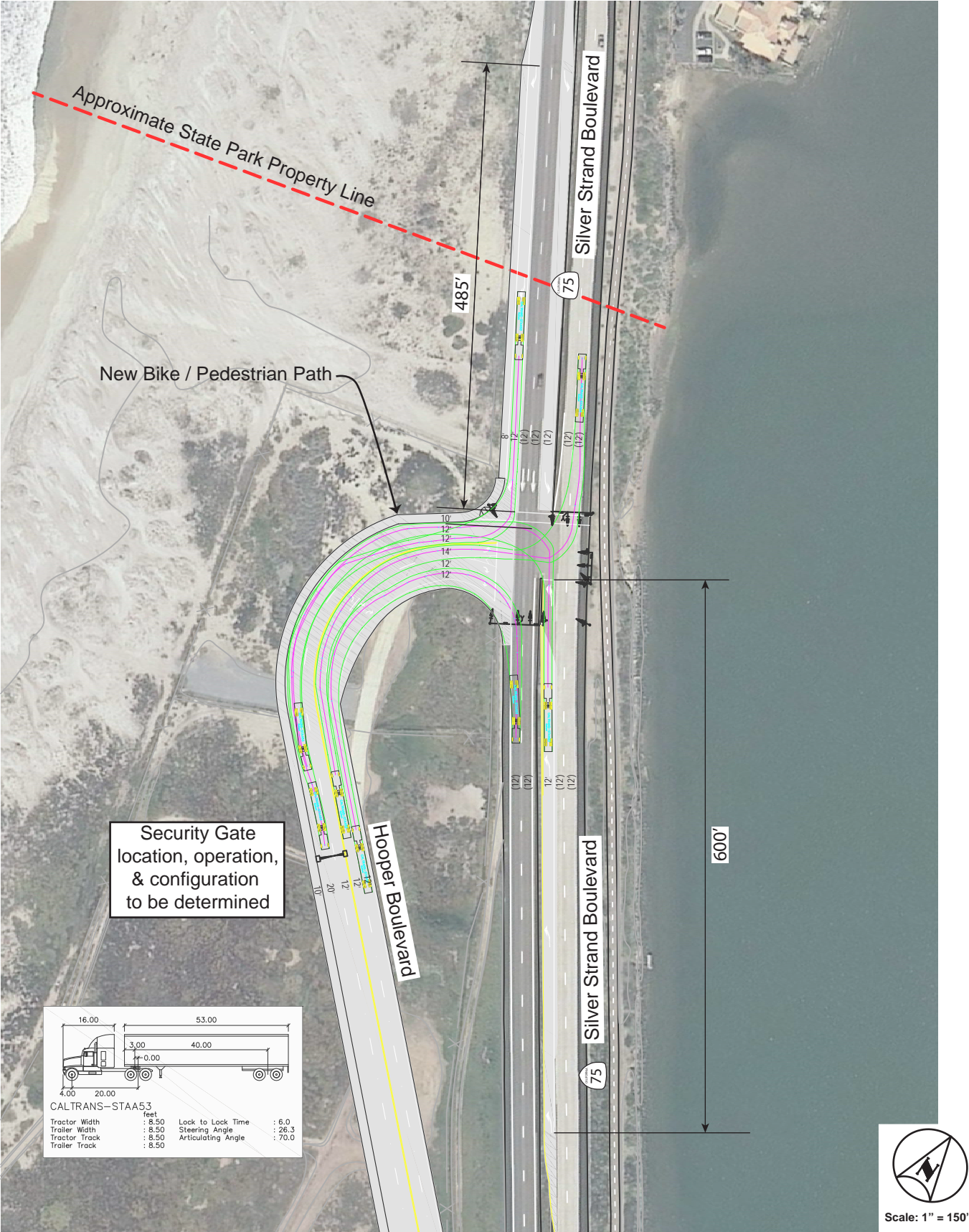


FIGURE 7-2

Intersection analysis was performed at this location for three scenarios under Year 2040 with 2 CVNs conditions: no improvements, proposed traffic signal improvements, and a roundabout option. The results are presented in **Table 7-1**. As shown, the intersection would operate at LOS D or better during both peak periods with the proposed traffic signal improvements. A roundabout would operate at LOS F during both peak periods and is not considered to be a reasonable option at this location.

Table 7-1. Year 2040 (2 CVNs) Peak-Hour Intersection Analysis at Hooper Blvd / SR-75

INTERSECTION		EXISTING LAYOUT		WITH TRAFFIC SIGNAL		WITH ROUNDABOUT	
		AM	PM	AM	PM	AM	PM
17	Silver Strand Blvd (SR-75) & Hooper Blvd	404.6 (F)	ECL (F)	15.5 (B)	52.8 (D)	73.1 (F)	77.4 (F)

Note: Table reflects intersection Delay (LOS). ECL = Exceed Calculable Limit. Roundabout analysis was performed using SIDRA software.

Queuing analysis was performed with the conceptual layout in place and some delays associated with ECP operations on Hooper Boulevard. The results are presented in **Table 7-2**. The proposed storage lengths of the northbound left-turn lane (600 feet) and southbound right-turn lane (485 feet) were determined based on the queuing analysis results, anticipated volumes, and Caltrans design criteria for 55 miles per hour.

Table 7-2. Year 2040 (2 CVNs) Queuing Intersection Analysis at Hooper Blvd / SR-75

INTERSECTION		DIR	AVAILABLE STORAGE	AM PEAK		PM PEAK	
				QUEUE 50TH	QUEUE 95TH	QUEUE 50TH	QUEUE 95TH
17	Silver Strand Blvd (SR-75) & Hooper Blvd	EBL	-	12	40	189	277
		EBR	-	22	63	449	666
		NBL	600 ft	185	428	117	242
		SBR	485 ft	0	38	0	22

Note: Table presents 50th and 95th percentile queues. Design features are based on the 95th percentile queues. Analysis assumes two lanes in each direction on Hooper Boulevard.

A signal warrant analysis was prepared to determine if a signal would be warranted by Year 2024 conditions and is provided in **Appendix J**. With the limited information available for a planning-level study only certain warrants were able to be analyzed. Nonetheless, the intersection was found to meet peak hour warrants during Year 2024.

Construction Traffic

The Proposed Action consists of 25 MILCONs over a ten-year period. Construction activity will vary depending on the facilities being built and the amount of MILCONs underway concurrently. Although the timing of MILCONs has been tentatively planned, actual construction activity will depend on the alternative selected, final design of the campus, funding, and available resources. All of the action alternatives would require similar construction activity, albeit may be at different locations. A key component of the final design and difference between Alternatives 1 and 2 is determining if the existing bunker at SSTC-South will be removed (Alternative 1) or will remain as part of the campus (Alternative 2). Removal of a bunker requires an extraordinary amount of soil removal and would require heavy trucking activity. A key component of Alternative 3 is that some construction activity would occur at NAB Coronado and NASNI in addition to SSTC-South. Alternative 3 would preserve the bunker.

Construction traffic was estimated with the information known at the time of this study. The following assumptions were made for NBC Coastal Campus using known information on the project and input from Navy staff with experience in similar construction projects:

- There are 25 MILCON projects adding traffic to the existing traffic
- Construction of each MILCON would last two years.
- P876 begins construction in 2014
- P797 and P915 begin construction in 2015 although obtaining funding earlier.
- All other MILCONs would start the year after gaining funding. For example, FY2016 projects begin in 2017.
- # of Construction Workers per day varies by size of building:
 - square feet < 25,000: 1 worker per 750 square feet
 - $25,000 \leq \text{square feet} < 75,000$: 1 worker per 1,000 square feet
 - $75,000 \leq \text{square feet}$: 1 worker per 1,500 square feet
- Construction Worker Daily Trips: Average of 3 trips per construction worker per day (one inbound, one outbound, one non-peak)
- # of Construction Delivery Trucks per day: Average of 1 truck per 10,000 square feet
- Construction Delivery Truck Daily Trips: Average of 2 trips per truck per day (one inbound, one outbound)
- Total Construction Daily Trips = [# of Construction Delivery Trucks * passenger car equivalent factor (2.5) * # of trips per truck (2)] + [# of Construction Workers * # of trips per worker (3)]
- Total Construction Peak-Hour Trips = [# of construction workers + 0.25 * # of construction delivery trucks]. All peak-hour trips are inbound in the morning and outbound in the afternoon and the same number of trips would occur in the morning and afternoon peak hour.
- For Alternative 1 bunker removal is required and would have additional construction traffic when compared to Alternative 2 which does not require bunker removal. Construction traffic estimates for bunker removal include:
 - One roundtrip truck trip every five minutes, equal to 12 trucks per hour in each direction.
 - Trips were applied to each peak hour equally, assuming a constant flow of trucks all day at the above rate of 12 trucks per hour per direction.

Based on these assumptions, construction traffic was estimated for each year between 2015 and 2023 for each of the Alternatives.

It is important to note that as the construction projects are completed the finished buildings are planned to be open for operations immediately. Thus, the roadway network will experience a combination of operational traffic and construction traffic during the buildout of the Proposed Action. To account for this in the construction traffic analysis, trip generation for each building was estimated using the same methodology used for the full build-out of the project and applied to the network the year after construction completion. The number of personnel for each construction project was provided by Navy staff to assist the trip generation effort. All personnel using SSTC-South or NASNI during construction years were assumed to be personnel relocating from NAB Coronado.

Two different construction scenarios were evaluated:

“North only” assumes that all construction traffic would access SSTC-South through the location of the new north gate, Intersection 17 –Silver Strand Boulevard (SR-75) and Hooper Boulevard, and would use Palm Avenue (SR-75) to traverse between I-5 and the SSTC-South access point. Similarly, all operational traffic would access SSTC-South through the location of the new north gate. The trip distribution methodology for operational traffic is consistent with the methodology used for full build-out of the project. This scenario assumes that a proper ECP and proposed intersection improvements outside the ECP are completed. “North only” construction scenario summary tables are provided as follows:

- **Table 7-3a** shows the resulting traffic operations for years 2015 – 2023 as construction is being completed at SSTC-South for Alternative 1, which assumes bunker removal.
- **Table 7-3b** shows the resulting traffic operations for years 2016 – 2017 for Alternative 2, which assumes the bunker remains. The table only shows the two years that would be different than Alternative 1. The results for the other years of construction would be identical to what is shown in Table 7-3a.
- **Table 7-3c** shows the resulting traffic operations for years 2021 – 2023 for Alternative 3. The key component of Alternative 3 is that it would include construction of a single facility (P-870) at NASNI and three facilities (P-904, P-912, and P-965) at NAB Coronado. Each of these facilities are planned to begin construction in 2021. Thus, for years 2015 – 2020 the results of construction traffic activity would be identical to Alternative 2, shown in Table 7-3b.

“Construction North, Operations South” assumes that all construction traffic would access SSTC-South through the location of the new north gate, Intersection 17 –Silver Strand Boulevard (SR-75) and Hooper Boulevard, and would use Palm Avenue (SR-75) to traverse between I-5 and the SSTC-South access point. It assumes that all operational traffic would access SSTC-South through the existing south gate in Imperial Beach. This scenario assumes the new ECP may not be in place during the construction years. Proper security checkpoint procedures would still occur at the existing access for non-construction activity. “Construction North, Operations South” construction scenario summary tables are provided as follows:

- **Table 7-4a** shows the resulting traffic operations for years 2015 – 2023 as construction is being completed at SSTC-South for Alternative 1.
- **Table 7-4b** shows the resulting traffic operations for years 2016 – 2017 for Alternative 2 and only shows the two years that would be different than Alternative 1.
- **Table 7-4c** shows the resulting traffic operations for years 2021 – 2023 for Alternative 3.

For all scenarios, the construction year intersection operation summary tables show the difference in traffic operations between the existing layout and a signal improvement at intersection 17, Hooper Boulevard and Silver Strand Boulevard (SR-75). As previously described, this intersection is planned to have a signal installed as part of the new ECP project in addition to an exclusive southbound right-turn lane and extension of the existing northbound left-turn lane. All construction year analyses assumed 2 CVNs in port.

Table 7-3a. “North Only” Construction Scenario - Alternative 1 Intersection Traffic Analysis Summary with 2 CVNs

INTERSECTION		2015		2016		2017		2018		2019	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	60.5 (F)	19.8 (C)	60.6 (F)	19.8 (C)	61.7 (F)	19.9 (C)	62.2 (F)	20 (C)	67.5 (F)	20.3 (C)
2	Fourth St (SR-75) & Pomona Ave	26.7 (D)	ECL (F)	26.7 (D)	ECL (F)	26.8 (D)	ECL (F)	26.9 (D)	ECL (F)	27.5 (D)	ECL (F)
3	Orange Ave (SR-75) & Third St (SR-75)	45.3 (D)	41.1 (D)	45.3 (D)	41.1 (D)	46.8 (D)	42.4 (D)	47.8 (D)	43 (D)	55.6 (E)	50.1 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	38 (D)	105.8 (F)	38 (D)	105.8 (F)	38.2 (D)	105.7 (F)	38.3 (D)	105.7 (F)	39.4 (D)	105.6 (F)
5	Silver Strand Blvd (SR-75)/Orange Ave & Pomona Ave	12.7 (B)	14.3 (B)	12.9 (B)	14.4 (B)	13.2 (B)	14.7 (B)	13.4 (B)	15 (B)	16.7 (B)	16.7 (B)
6	Silver Strand Blvd (SR-75) & Avenida de las Arenas	11.8 (B)	17.3 (B)	11.9 (B)	17.5 (B)	12.1 (B)	17.8 (B)	12.2 (B)	18.1 (B)	13.1 (B)	20.5 (C)
7	Silver Strand Blvd (SR-75) & Rendova Rd	16.8 (B)	11.2 (B)	17 (B)	11.3 (B)	16.9 (B)	11.5 (B)	17 (B)	11.6 (B)	17.3 (B)	12.9 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	46.5 (D)	57.2 (E)	46.9 (D)	58.6 (E)	47.5 (D)	60.4 (E)	47.9 (D)	61.8 (E)	51.6 (D)	73.9 (E)
9	Strand Wy & Guadalcanal Rd	10.5 (B)	18 (C)	10.5 (B)	18.4 (C)	10.8 (B)	19.6 (C)	10.9 (B)	28.4 (D)	12.2 (B)	44.0 (E)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	2.8 (A)	57.1 (E)	2.8 (A)	59 (E)	3.0 (A)	62.0 (E)	3.1 (A)	64.3 (E)	3.8 (A)	79.2 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	24.7 (C)	19 (C)	24.9 (C)	19.2 (C)	25.5 (D)	20.7 (C)	25.9 (D)	21.4 (C)	28 (D)	28.5 (D)
12	Silver Strand Blvd (SR-75) & Leyte Rd	23.8 (C)	8.2 (A)	24.8 (C)	8.2 (A)	25.2 (C)	8.4 (A)	26.2 (C)	8.5 (A)	32.6 (C)	10.2 (B)
13	Silver Strand Blvd (SR-75) & Attu Ave	25 (D)	9.9 (A)	25.3 (D)	9.9 (A)	25.7 (D)	10.1 (B)	26.1 (D)	10.2 (B)	28.8 (D)	11.2 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	5.9 (A)	3.3 (A)	5.9 (A)	3.3 (A)	6.0 (A)	3.3 (A)	6 (A)	3.4 (A)	6.3 (A)	3.7 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.7 (A)	7.7 (A)	7.7 (A)	7.7 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	19.7 (B)	10.5 (B)	20.1 (C)	10.5 (B)	20.7 (C)	10.3 (B)	21.5 (C)	10.3 (B)	28.1 (C)	10.1 (B)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction.

Table 7-3a. “North Only” Construction Scenario - Alternative 1 Intersection Traffic Analysis Summary with 2 CVNs (cont.)

INTERSECTION		2015		2016		2017		2018		2019	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
17	Silver Strand Blvd (SR-75) & Hooper Blvd	8 (A)	ECL (F)	9.1 (A)	ECL (F)	39.5 (E)	ECL (F)	97.5 (F)	ECL (F)	ECL (F)	ECL (F)
	with signal improvement	12 (B)	6.5 (A)	8.8 (A)	12.5 (B)	8.8 (A)	18.9 (B)	8.2 (A)	19.3 (B)	15.4 (B)	36.5 (D)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	30.1 (C)	22.6 (C)	39.9 (D)	26.4 (C)	55.0 (D)	34.2 (C)	61.1 (E)	37.9 (D)	84.9 (F)	54.5 (D)
19	7th St & Silver Strand Blvd (SR-75)	85.5 (F)	59.8 (E)	94.4 (F)	62.1 (E)	96.0 (F)	63.8 (E)	98.2 (F)	64.6 (E)	108.9 (F)	69.8 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	7.5 (A)	10.6 (B)	7.3 (A)	10.9 (B)	7.3 (A)	12.2 (B)	7.2 (A)	12.8 (B)	7.4 (A)	14.2 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	13.1 (B)	19.7 (C)	13.1 (B)	19.7 (C)	13.1 (B)	19.9 (C)	13.1 (B)	19.9 (C)	13.3 (B)	20.4 (C)
22	3rd St & Palm Ave	10.9 (B)	19.1 (C)	10.9 (B)	19.1 (C)	10.9 (B)	19.3 (C)	11 (B)	19.4 (C)	11.1 (B)	20.1 (C)
23	Palm Ave & Rainbow Dr	32.4 (D)	25.2 (D)	32.5 (D)	25.3 (D)	32.8 (D)	25.4 (D)	33.1 (D)	25.5 (D)	34.9 (D)	26.6 (D)
24	7th St & Palm Ave	8.4 (A)	5.8 (A)	8.4 (A)	5.8 (A)	8.4 (A)	5.8 (A)	8.4 (A)	5.8 (A)	8.5 (A)	5.8 (A)
25	Delaware St & Palm Ave	11.9 (B)	14.9 (B)	12.1 (B)	16.7 (C)	12.1 (B)	17.1 (C)	11.9 (B)	16.9 (C)	12 (B)	12.7 (B)
26	9th St & Palm Ave (SR-75)	40.5 (D)	46.6 (D)	43.1 (D)	48.5 (D)	48.2 (D)	51.3 (D)	50.5 (D)	52.4 (D)	59.9 (E)	67.7 (E)
27	Florida St & Palm Ave (SR-75)	7.5 (A)	8.4 (A)	7.7 (A)	8.2 (A)	7.8 (A)	7.9 (A)	7.9 (A)	7.9 (A)	8.2 (A)	7.9 (A)
28	13th St & Palm Ave (SR-75)	37.4 (D)	46.3 (D)	38.4 (D)	49.3 (D)	39.7 (D)	52.1 (D)	40.2 (D)	53.5 (D)	41.8 (D)	67.4 (E)
29	16th St & Palm Ave (SR-75)	13.9 (B)	18.8 (B)	14.4 (B)	20.1 (C)	15.2 (B)	22.4 (C)	15.6 (B)	23.4 (C)	16.7 (B)	28.4 (C)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	45.8 (D)	175.4 (F)	48.9 (D)	ECL (F)	53.7 (D)	ECL (F)	54.3 (D)	ECL (F)	66.6 (E)	ECL (F)
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	32 (C)	34.1 (C)	35.7 (D)	35.8 (D)	41.1 (D)	38.4 (D)	43.2 (D)	39.3 (D)	54.4 (D)	54 (D)
32	I-5 NB Ramps & Palm Ave (SR-75)	11.2 (B)	8.7 (A)	11.4 (B)	8.9 (A)	11.8 (B)	9 (A)	11.9 (B)	9.1 (A)	12.6 (B)	9.5 (A)
33	Silver Strand Blvd & YMCA Dwy	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction.

The signal improvement at intersection 17 include an exclusive southbound right-turn lane and extension of the existing northbound right-turn lane.

Table 7-3a. “North Only” Construction Scenario - Alternative 1 Intersection Traffic Analysis Summary with 2 CVNs (cont.)

INTERSECTION		2020		2021		2022		2023	
		AM	PM	AM	PM	AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	63.8 (F)	20.1 (C)	64.9 (F)	20.2 (C)	66.6 (F)	20.3 (C)	67.5 (F)	20.3 (C)
2	Fourth St (SR-75) & Pomona Ave	27.2 (D)	ECL (F)	27.3 (D)	ECL (F)	27.5 (D)	ECL (F)	27.5 (D)	ECL (F)
3	Orange Ave (SR-75) & Third St (SR-75)	49.9 (D)	44.9 (D)	51.8 (D)	46.4 (D)	54.2 (D)	48.9 (D)	55.6 (E)	50.1 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	38.6 (D)	105.5 (F)	38.8 (D)	105.4 (F)	39.2 (D)	105.4 (F)	39.4 (D)	105.6 (F)
5	Silver Strand Blvd (SR-75)/Orange Ave & Pomona Ave	13.9 (B)	15.4 (B)	15.9 (B)	15.8 (B)	16.3 (B)	16.3 (B)	16.7 (B)	16.7 (B)
6	Silver Strand Blvd (SR-75) & Avenida de las Arenas	12.5 (B)	18.8 (B)	12.7 (B)	19.3 (B)	13 (B)	20 (C)	13.1 (B)	20.5 (C)
7	Silver Strand Blvd (SR-75) & Rendova Rd	17.1 (B)	12.1 (B)	17.1 (B)	12.2 (B)	17.1 (B)	12.5 (B)	17.3 (B)	12.9 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	49 (D)	66.3 (E)	49.9 (D)	68.5 (E)	50.7 (D)	71.9 (E)	51.6 (D)	73.9 (E)
9	Strand Wy & Guadalcanal Rd	11.2 (B)	32.8 (D)	11.6 (B)	35.3 (E)	12 (B)	40.1 (E)	12.2 (B)	44.0 (E)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	3.4 (A)	69.6 (E)	3.6 (A)	72.9 (E)	3.7 (A)	76.4 (E)	3.8 (A)	79.2 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	26.7 (D)	23.6 (C)	27.1 (D)	25.5 (D)	27.5 (D)	28.2 (D)	28 (D)	28.5 (D)
12	Silver Strand Blvd (SR-75) & Leyte Rd	28.2 (C)	8.7 (A)	29.5 (C)	8.8 (A)	30.9 (C)	9.1 (A)	32.6 (C)	10.2 (B)
13	Silver Strand Blvd (SR-75) & Attu Ave	27.1 (D)	10.5 (B)	27.6 (D)	10.7 (B)	28.1 (D)	11 (B)	28.8 (D)	11.2 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	6.1 (A)	3.4 (A)	6.2 (A)	3.5 (A)	6.2 (A)	3.6 (A)	6.3 (A)	3.7 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	23.5 (C)	10.2 (B)	24.8 (C)	10.1 (B)	26.4 (C)	10.1 (B)	28.1 (C)	10.1 (B)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction.

Table 7-3a. “North Only” Construction Scenario - Alternative 1 Intersection Traffic Analysis Summary with 2 CVNs (cont.)

INTERSECTION		2020		2021		2022		2023	
		AM	PM	AM	PM	AM	PM	AM	PM
17	Silver Strand Blvd (SR-75) & Hooper Blvd	ECL (F)	ECL (F)	ECL (F)	ECL (F)	ECL (F)	ECL (F)	ECL (F)	ECL (F)
	with signal improvement	16.1 (B)	80.0 (F)	10.8 (B)	72.5 (E)	10.1 (B)	37.0 (D)	9.6 (A)	29 (C)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	141.1 (F)	113.1 (F)	135.7 (F)	106.8 (F)	97.3 (F)	65.7 (E)	84.9 (F)	54.5 (D)
19	7th St & Silver Strand Blvd (SR-75)	148.5 (F)	107.2 (F)	144 (F)	102.2 (F)	112.8 (F)	74.7 (E)	108.9 (F)	69.8 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	7.4 (A)	41.2 (D)	7.3 (A)	35.1 (D)	7.3 (A)	16 (B)	7.4 (A)	14.2 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	13.1 (B)	20.1 (C)	13.2 (B)	20.2 (C)	13.2 (B)	20.3 (C)	13.3 (B)	20.4 (C)
22	3rd St & Palm Ave	11 (B)	19.6 (C)	11 (B)	19.8 (C)	11.1 (B)	19.9 (C)	11.1 (B)	20.1 (C)
23	Palm Ave & Rainbow Dr	33.6 (D)	25.8 (D)	33.8 (D)	25.9 (D)	34.3 (D)	26.4 (D)	34.9 (D)	26.6 (D)
24	7th St & Palm Ave	8.4 (A)	5.8 (A)	8.4 (A)	5.8 (A)	8.5 (A)	5.8 (A)	8.5 (A)	5.8 (A)
25	Delaware St & Palm Ave	12 (B)	25.3 (D)	12 (B)	21.6 (C)	12 (B)	14.6 (B)	12 (B)	12.7 (B)
26	9th St & Palm Ave (SR-75)	105.6 (F)	90 (F)	100.4 (F)	85.7 (F)	69.2 (E)	75.3 (E)	59.9 (E)	67.7 (E)
27	Florida St & Palm Ave (SR-75)	8.5 (A)	9.3 (A)	8.5 (A)	9 (A)	8.3 (A)	8 (A)	8.2 (A)	7.9 (A)
28	13th St & Palm Ave (SR-75)	58 (E)	81.1 (F)	55.1 (E)	81.1 (F)	43.7 (D)	70.8 (E)	41.8 (D)	67.4 (E)
29	16th St & Palm Ave (SR-75)	28.8 (C)	58.0 (E)	26.6 (C)	54.2 (D)	17.9 (B)	33.6 (C)	16.7 (B)	28.4 (C)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	90.4 (F)	ECL (F)	88.0 (F)	ECL (F)	71.1 (E)	ECL (F)	66.6 (E)	ECL (F)
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	91.0 (F)	44.0 (D)	86.6 (F)	47 (D)	60.3 (E)	51 (D)	54.4 (D)	54.0 (D)
32	I-5 NB Ramps & Palm Ave (SR-75)	12.8 (B)	9.3 (A)	12.8 (B)	9.4 (A)	12.5 (B)	9.5 (A)	12.6 (B)	9.5 (A)
33	Silver Strand Blvd & YMCA Dwy	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction. The temporary measures at intersection 17 include an exclusive southbound right-turn lane and extension of the existing northbound right-turn lane.

Table 7-3b. “North Only” Construction Scenario - Alternative 2 Intersection Traffic Analysis Summary with 2 CVNs

INTERSECTION		2016		2017	
		AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	60.6 (F)	19.8 (C)	61.7 (F)	19.9 (C)
2	Fourth St (SR-75) & Pomona Ave	26.7 (D)	ECL (F)	26.8 (D)	ECL (F)
3	Orange Ave (SR-75) & Third St (SR-75)	45.3 (D)	41.1 (D)	46.8 (D)	42.4 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	38 (D)	105.8 (F)	38.2 (D)	105.7 (F)
5	Silver Strand Blvd (SR-75)/Orange Ave & Pomona Ave	12.9 (B)	14.4 (B)	13.2 (B)	14.7 (B)
6	Silver Strand Blvd (SR-75) & Avenida de las Arenas	11.9 (B)	17.5 (B)	12.1 (B)	17.8 (B)
7	Silver Strand Blvd (SR-75) & Rendova Rd	17 (B)	11.3 (B)	16.9 (B)	11.5 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	46.9 (D)	58.6 (E)	47.5 (D)	60.4 (E)
9	Strand Wy & Guadalcanal Rd	10.5 (B)	18.4 (C)	10.8 (B)	19.6 (C)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	2.8 (A)	59.0 (E)	3.0 (A)	62.0 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	24.9 (C)	19.2 (C)	25.5 (D)	20.7 (C)
12	Silver Strand Blvd (SR-75) & Leyte Rd	24.8 (C)	8.2 (A)	25.2 (C)	8.4 (A)
13	Silver Strand Blvd (SR-75) & Attu Ave	25.3 (D)	9.9 (A)	25.7 (D)	10.1 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	5.9 (A)	3.3 (A)	6 (A)	3.3 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.7 (A)	7.7 (A)	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	20.1 (C)	10.5 (B)	20.7 (C)	10.3 (B)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction.

Table 7-3b. “North Only” Construction Scenario - Alternative 2 Construction Year Analysis Summary with 2 CVNs (cont.)

INTERSECTION		2016		2017	
		AM	PM	AM	PM
17	Silver Strand Blvd (SR-75) & Hooper Blvd	8.3 (A)	ECL (F)	52.6 (F)	ECL (F)
	with signal improvement	6.3 (A)	10.6 (B)	6.5 (A)	15.8 (B)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	38.9 (D)	25.9 (C)	53.3 (D)	33 (C)
19	7th St & Silver Strand Blvd (SR-75)	94.6 (F)	62.1 (E)	96.0 (F)	63.7 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	7.4 (A)	10.8 (B)	7.3 (A)	12 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	13.1 (B)	19.7 (C)	13.1 (B)	19.9 (C)
22	3rd St & Palm Ave	10.9 (B)	19.1 (C)	10.9 (B)	19.3 (C)
23	Palm Ave & Rainbow Dr	32.5 (D)	25.3 (D)	32.8 (D)	25.4 (D)
24	7th St & Palm Ave	8.4 (A)	5.8 (A)	8.4 (A)	5.8 (A)
25	Delaware St & Palm Ave	11.9 (B)	16.5 (C)	11.9 (B)	16.9 (C)
26	9th St & Palm Ave (SR-75)	42.7 (D)	48.2 (D)	47.4 (D)	50.9 (D)
27	Florida St & Palm Ave (SR-75)	7.7 (A)	8.2 (A)	7.8 (A)	8 (A)
28	13th St & Palm Ave (SR-75)	38.3 (D)	49.1 (D)	39.5 (D)	51.8 (D)
29	16th St & Palm Ave (SR-75)	14.4 (B)	20 (C)	15.1 (B)	22.1 (C)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	48.3 (D)	ECL (F)	52.8 (D)	ECL (F)
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	35.3 (D)	35 (D)	40.4 (D)	37.5 (D)
32	I-5 NB Ramps & Palm Ave (SR-75)	11.4 (B)	8.8 (A)	11.7 (B)	9 (A)
33	Silver Strand Blvd & YMCA Dwy	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction. The temporary measures at intersection 17 include an exclusive southbound right-turn lane and extension of the existing northbound right-turn lane. All other years would be equal to Alternative 1 results.

Table 7-3c. “North Only” Construction Scenario - Alternative 3 Intersection Traffic Analysis Summary with 2 CVNs

INTERSECTION		2021		2022		2023	
		AM	PM	AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	67.9 (F)	20.2 (C)	69.8 (F)	20.3 (C)	70.5 (F)	20.5 (C)
2	Fourth St (SR-75) & Pomona Ave	27.3 (D)	ECL (F)	27.5 (D)	ECL (F)	27.8 (D)	ECL (F)
3	Orange Ave (SR-75) & Third St (SR-75)	56.1 (E)	47.6 (D)	58.7 (E)	50.1 (D)	59.8 (E)	53.5 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	39.5 (D)	105.6 (F)	40 (D)	105.9 (F)	40.2 (D)	106.1 (F)
5	Silver Strand Blvd (SR-75)/Orange Ave & Pomona Ave	15.7 (B)	16.4 (B)	16 (B)	17.1 (B)	16.8 (B)	17.5 (B)
6	Silver Strand Blvd (SR-75) & Avenida de las Arenas	12.9 (B)	20.1 (C)	13.2 (B)	21 (C)	13.4 (B)	21.7 (C)
7	Silver Strand Blvd (SR-75) & Rendova Rd	16.8 (B)	12.6 (B)	16.8 (B)	13 (B)	17.2 (B)	13.5 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	60.0 (E)	83.4 (F)	60.8 (E)	86.5 (F)	58.3 (E)	84.2 (F)
9	Strand Wy & Guadalcanal Rd	12.9 (B)	67.6 (F)	13.5 (B)	76.7 (F)	13.5 (B)	109.3 (F)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	3.6 (A)	72.5 (E)	3.7 (A)	76.0 (E)	3.9 (A)	79.6 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	27.7 (D)	26 (D)	28.2 (D)	28.8 (D)	28.5 (D)	30.6 (D)
12	Silver Strand Blvd (SR-75) & Leyte Rd	32.6 (C)	8.9 (A)	33.7 (C)	9.2 (A)	34.4 (C)	10.4 (B)
13	Silver Strand Blvd (SR-75) & Attu Ave	28.3 (D)	10.7 (B)	28.8 (D)	11 (B)	29.4 (D)	11.4 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	6.4 (A)	3.5 (A)	6.4 (A)	3.7 (A)	6.5 (A)	3.8 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	26.8 (C)	10.1 (B)	28.7 (C)	10.1 (B)	30 (C)	10.1 (B)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction.

Table 7-3c. “North Only” Construction Scenario - Alternative Intersection Traffic Analysis Summary with 2 CVNs (cont.)

INTERSECTION		2021		2022		2023	
		AM	PM	AM	PM	AM	PM
17	Silver Strand Blvd (SR-75) & Hooper Blvd	ECL (F)	ECL (F)	ECL (F)	ECL (F)	ECL (F)	ECL (F)
	with signal improvement	12.1 (B)	105.2 (F)	10.7 (B)	58.0 (E)	11.4 (B)	28.8 (C)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	166.6 (F)	138.5 (F)	126.6 (F)	94.5 (F)	98.2 (F)	66.7 (E)
19	7th St & Silver Strand Blvd (SR-75)	170.3 (F)	130 (F)	134.1 (F)	92.2 (F)	115.3 (F)	74.1 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	7.6 (A)	61.4 (E)	7.3 (A)	24.7 (C)	7.3 (A)	15.8 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	13.2 (B)	20.2 (C)	13.2 (B)	20.3 (C)	13.3 (B)	20.4 (C)
22	3rd St & Palm Ave	11 (B)	19.8 (C)	11.1 (B)	19.9 (C)	11.1 (B)	20.1 (C)
23	Palm Ave & Rainbow Dr	34 (D)	25.9 (D)	34.6 (D)	26.4 (D)	35.4 (E)	26.7 (D)
24	7th St & Palm Ave	8.5 (A)	5.8 (A)	8.5 (A)	5.8 (A)	8.5 (A)	5.8 (A)
25	Delaware St & Palm Ave	12 (B)	25.5 (D)	12 (B)	16.8 (C)	12 (B)	12.7 (B)
26	9th St & Palm Ave (SR-75)	123.7 (F)	105.2 (F)	90.5 (F)	93.7 (F)	68.2 (E)	75.2 (E)
27	Florida St & Palm Ave (SR-75)	8.8 (A)	10.1 (B)	8.5 (A)	8.6 (A)	8.3 (A)	7.9 (A)
28	13th St & Palm Ave (SR-75)	69.2 (E)	94.8 (F)	50.5 (D)	83 (F)	43.4 (D)	73.9 (E)
29	16th St & Palm Ave (SR-75)	38.7 (D)	71.3 (E)	22.4 (C)	47.3 (D)	17.7 (B)	32.7 (C)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	102.7 (F)	ECL (F)	83.9 (F)	ECL (F)	71.8 (E)	ECL (F)
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	108.3 (F)	47 (D)	78.0 (E)	51.0 (D)	61.2 (E)	55.7 (E)
32	I-5 NB Ramps & Palm Ave (SR-75)	13.3 (B)	9.4 (A)	13 (B)	9.5 (A)	12.8 (B)	9.6 (A)
33	Silver Strand Blvd & YMCA Dwy	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction. The temporary measures at intersection 17 include an exclusive southbound right-turn lane and extension of the existing northbound right-turn lane.

Table 7-4a. “Construction North, Operations South” Construction Scenario - Alternative 1 Intersection Traffic Analysis Summary with 2 CVNs

INTERSECTION		2015		2016		2017		2018		2019	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	60.5 (F)	19.8 (C)	60.6 (F)	19.8 (C)	61.3 (F)	19.9 (C)	61.6 (F)	19.9 (C)	61.9 (F)	20.0 (C)
2	Fourth St (SR-75) & Pomona Ave	26.7 (D)	ECL (F)	26.7 (D)	ECL (F)	26.8 (D)	ECL (F)	26.8 (D)	ECL (F)	27.1 (D)	ECL (F)
3	Orange Ave (SR-75) & Third St (SR-75)	45.3 (D)	41.1 (D)	45.3 (D)	41.1 (D)	46.2 (D)	42.1 (D)	46.9 (D)	42.7 (D)	47.4 (D)	43.2 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	38.0 (D)	105.8 (F)	38.0 (D)	105.8 (F)	38.1 (D)	105.8 (F)	38.2 (D)	105.8 (F)	38.2 (D)	105.7 (F)
5	Silver Strand Blvd (SR-75)/Orange Ave & Pomona Ave	12.7 (B)	14.3 (B)	12.9 (B)	14.4 (B)	13.2 (B)	14.6 (B)	13.4 (B)	14.9 (B)	13.7 (B)	15.1 (B)
6	Silver Strand Blvd (SR-75) & Avenida de las Arenas	11.8 (B)	17.3 (B)	11.9 (B)	17.5 (B)	12.1 (B)	17.7 (B)	12.2 (B)	17.9 (B)	12.2 (B)	18.1 (B)
7	Silver Strand Blvd (SR-75) & Rendova Rd	16.8 (B)	11.2 (B)	17.0 (B)	11.3 (B)	16.9 (B)	11.4 (B)	17.0 (B)	11.6 (B)	17.1 (B)	11.8 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	46.5 (D)	57.2 (E)	46.9 (D)	58.6 (E)	47.4 (D)	60.2 (E)	47.8 (D)	61.6 (E)	48.3 (D)	63.0 (E)
9	Strand Wy & Guadalcanal Rd	10.5 (B)	18.0 (C)	10.5 (B)	18.4 (C)	10.8 (B)	19.6 (C)	10.9 (B)	28.4 (D)	11.0 (B)	29.8 (D)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	2.8 (A)	57.1 (E)	2.8 (A)	59.0 (E)	3.0 (A)	61.8 (E)	3.1 (A)	63.8 (E)	3.1 (A)	66.3 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	24.7 (C)	19.0 (C)	24.9 (C)	19.2 (C)	25.5 (D)	20.3 (C)	25.8 (D)	20.8 (C)	26.2 (D)	21.6 (C)
12	Silver Strand Blvd (SR-75) & Leyte Rd	23.8 (C)	8.2 (A)	24.8 (C)	8.2 (A)	25.3 (C)	8.4 (A)	26.3 (C)	8.4 (A)	27.2 (C)	8.5 (A)
13	Silver Strand Blvd (SR-75) & Attu Ave	25.0 (D)	9.9 (A)	25.3 (D)	9.9 (A)	25.7 (D)	10.0 (B)	26.0 (D)	10.1 (B)	26.6 (D)	10.2 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	5.9 (A)	3.3 (A)	5.9 (A)	3.3 (A)	6.0 (A)	3.3 (A)	6.1 (A)	3.3 (A)	6.1 (A)	3.4 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.7 (A)	7.7 (A)	7.7 (A)	7.7 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	19.7 (B)	10.5 (B)	20.1 (C)	10.5 (B)	20.7 (C)	10.4 (B)	21.4 (C)	10.3 (B)	22.5 (C)	10.3 (B)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction.

Table 7-4a. “Construction North, Operations South” Construction Scenario - Alternative Intersection Traffic Analysis Summary with 2 CVNs (cont.)

INTERSECTION		2015		2016		2017		2018		2019	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
17	Silver Strand Blvd (SR-75) & Hooper Blvd	8.0 (A)	ECL (F)	9.1 (A)	ECL (F)	9.2 (A)	ECL (F)	8.6 (A)	ECL (F)	9.2 (A)	ECL (F)
	with signal improvement	12.0 (B)	6.5 (A)	8.8 (A)	12.2 (B)	10.2 (B)	13.0 (B)	8.2 (A)	9.5 (A)	7.4 (A)	14.9 (B)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	30.1 (C)	22.6 (C)	39.6 (D)	26.2 (C)	43.8 (D)	32.4 (C)	44.2 (D)	34.8 (C)	65.9 (E)	57.4 (E)
19	7th St & Silver Strand Blvd (SR-75)	85.5 (F)	59.8 (E)	94.4 (F)	62.1 (E)	94.9 (F)	62.5 (E)	96.4 (F)	62.6 (E)	100.1 (F)	65.7 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	7.5 (A)	10.6 (B)	7.4 (A)	10.9 (B)	8.2 (A)	11.3 (B)	8.6 (A)	11.4 (B)	8.8 (A)	13.5 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	13.1 (B)	19.7 (C)	13.1 (B)	20.1 (C)	14.6 (B)	59.0 (F)	15.3 (C)	111.8 (F)	16.3 (C)	ECL (F)
22	3rd St & Palm Ave	10.9 (B)	19.1 (C)	10.9 (B)	19.5 (C)	13.4 (B)	45.1 (E)	15.2 (C)	64.4 (F)	19.0 (C)	95.6 (F)
23	Palm Ave & Rainbow Dr	32.4 (D)	25.2 (D)	32.7 (D)	25.6 (D)	45.3 (E)	38.9 (E)	55.1 (F)	48.9 (E)	76.1 (F)	69.8 (F)
24	7th St & Palm Ave	8.4 (A)	5.8 (A)	8.4 (A)	5.8 (A)	8.5 (A)	5.7 (A)	8.6 (A)	5.7 (A)	8.7 (A)	5.7 (A)
25	Delaware St & Palm Ave	11.9 (B)	14.9 (B)	12.1 (B)	16.8 (C)	12.2 (B)	19.2 (C)	12.1 (B)	19.9 (C)	12.1 (B)	25.3 (D)
26	9th St & Palm Ave (SR-75)	40.5 (D)	46.6 (D)	43.1 (D)	48.5 (D)	49.0 (D)	51.7 (D)	51.9 (D)	53.2 (D)	73.7 (E)	65.7 (E)
27	Florida St & Palm Ave (SR-75)	7.5 (A)	8.4 (A)	7.6 (A)	8.2 (A)	7.8 (A)	7.9 (A)	7.9 (A)	7.9 (A)	8.2 (A)	8.2 (A)
28	13th St & Palm Ave (SR-75)	37.4 (D)	46.3 (D)	38.4 (D)	49.3 (D)	39.8 (D)	52.6 (D)	40.4 (D)	54.3 (D)	44.8 (D)	64.4 (E)
29	16th St & Palm Ave (SR-75)	13.9 (B)	18.8 (B)	14.5 (B)	20.1 (C)	15.2 (B)	22.8 (C)	15.8 (B)	24.0 (C)	18.6 (B)	36.1 (D)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	45.8 (D)	175.4 (F)	48.9 (D)	ECL (F)	54.4 (D)	ECL (F)	55.4 (E)	ECL (F)	69.7 (E)	ECL (F)
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	32.0 (C)	34.1 (C)	35.7 (D)	35.8 (D)	41.5 (D)	38.7 (D)	44.0 (D)	39.7 (D)	61.7 (E)	41.9 (D)
32	I-5 NB Ramps & Palm Ave (SR-75)	11.2 (B)	8.7 (A)	11.4 (B)	8.9 (A)	11.8 (B)	9.0 (A)	11.9 (B)	9.1 (A)	12.2 (B)	9.3 (A)
33	Silver Strand Blvd & YMCA Dwy	8.5 (A)	8.6 (A)	8.5 (A)	8.6 (A)	8.7 (A)	9.6 (A)	8.7 (A)	10.0 (B)	8.8 (A)	10.6 (B)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction.
The signal improvement at intersection 17 include an exclusive southbound right-turn lane and extension of the existing northbound right-turn lane.

Table 7-4a. “Construction North, Operations South” Construction Scenario - Alternative 1 Intersection Traffic Analysis Summary with 2 CVNs (cont.)

INTERSECTION		2020		2021		2022		2023	
		AM	PM	AM	PM	AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	62.5 (F)	20.0 (C)	63.2 (F)	20.0 (C)	64.2 (F)	20.1 (C)	64.6 (F)	20.2 (C)
2	Fourth St (SR-75) & Pomona Ave	27.1 (D)	ECL (F)	27.2 (D)	ECL (F)	27.2 (D)	ECL (F)	27.3 (D)	ECL (F)
3	Orange Ave (SR-75) & Third St (SR-75)	48.1 (D)	44.1 (D)	49 (D)	45.5 (D)	50.5 (D)	47.6 (D)	51.5 (D)	48.7 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	38.3 (D)	105.7 (F)	38.5 (D)	105.6 (F)	38.7 (D)	105.5 (F)	38.8 (D)	105.6 (F)
5	Silver Strand Blvd (SR-75)/Orange Ave & Pomona Ave	13.9 (B)	15.3 (B)	14.3 (B)	15.5 (B)	16.2 (B)	15.9 (B)	16.8 (B)	16.1 (B)
6	Silver Strand Blvd (SR-75) & Avenida de las Arenas	12.4 (B)	18.5 (B)	12.6 (B)	18.9 (B)	12.7 (B)	19.4 (B)	12.9 (B)	19.7 (B)
7	Silver Strand Blvd (SR-75) & Rendova Rd	17.2 (B)	11.9 (B)	17.3 (B)	12.1 (B)	17.3 (B)	12.2 (B)	17.5 (B)	12.5 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	48.7 (D)	65.6 (E)	49.5 (D)	67.7 (E)	50.1 (D)	70.2 (E)	50.8 (D)	72.5 (E)
9	Strand Wy & Guadalcanal Rd	11.2 (B)	32.8 (D)	11.6 (B)	35.3 (E)	12 (B)	40.1 (E)	12.2 (B)	44.0 (E)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	3.4 (A)	68.8 (E)	3.6 (A)	71.7 (E)	3.7 (A)	74.6 (E)	3.8 (A)	77.2 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	26.6 (D)	22.5 (C)	27 (D)	23.8 (C)	27.4 (D)	25.6 (D)	27.8 (D)	25.5 (D)
12	Silver Strand Blvd (SR-75) & Leyte Rd	28.3 (C)	8.6 (A)	29.7 (C)	8.7 (A)	31.1 (C)	8.9 (A)	32.8 (C)	9 (A)
13	Silver Strand Blvd (SR-75) & Attu Ave	27 (D)	10.3 (B)	27.4 (D)	10.5 (B)	27.9 (D)	10.7 (B)	28.6 (D)	10.8 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	6.2 (A)	3.4 (A)	6.3 (A)	3.5 (A)	6.3 (A)	3.5 (A)	6.5 (A)	3.5 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	23.4 (C)	10.3 (B)	24.5 (C)	10.2 (B)	25.9 (C)	10.1 (B)	27.3 (C)	10.1 (B)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction.

Table 7-4a. “Construction North, Operations South” Construction Scenario - Alternative 1 Intersection Traffic Analysis Summary with 2 CVNs (cont.)

INTERSECTION		2020		2021		2022		2023	
		AM	PM	AM	PM	AM	PM	AM	PM
17	Silver Strand Blvd (SR-75) & Hooper Blvd	10.6 (B)	ECL (F)	10 (B)	ECL (F)	8.6 (A)	ECL (F)	0.0 (A)	0.0 (A)
	with signal improvement	15.5 (B)	30.2 (C)	7.9 (A)	18.3 (B)	5.3 (A)	5.2 (A)	7.4 (A)	14.9 (B)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	99.2 (F)	97.2 (F)	80.9 (F)	81.7 (F)	37.4 (D)	38.4 (D)	65.9 (E)	57.4 (E)
19	7th St & Silver Strand Blvd (SR-75)	116.4 (F)	77.9 (E)	106.1 (F)	70.8 (E)	98.9 (F)	64.2 (E)	100.1 (F)	65.7 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	9.3 (A)	18.0 (B)	10.2 (B)	15.2 (B)	12.2 (B)	11.3 (B)	8.8 (A)	13.5 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	17.9 (C)	ECL (F)	20.8 (C)	ECL (F)	26.8 (D)	ECL (F)	16.3 (C)	ECL (F)
22	3rd St & Palm Ave	30.7 (D)	145.8 (F)	64.8 (F)	ECL (F)	136.1 (F)	ECL (F)	19 (C)	95.6 (F)
23	Palm Ave & Rainbow Dr	105.4 (F)	117.6 (F)	165.5 (F)	ECL (F)	ECL (F)	ECL (F)	76.1 (F)	69.8 (F)
24	7th St & Palm Ave	8.8 (A)	5.7 (A)	9 (A)	5.7 (A)	9.4 (A)	6.8 (A)	8.7 (A)	5.7 (A)
25	Delaware St & Palm Ave	12.2 (B)	36.0 (E)	12.3 (B)	34.4 (D)	12.5 (B)	25.3 (D)	12.1 (B)	25.3 (D)
26	9th St & Palm Ave (SR-75)	110.6 (F)	94.1 (F)	107.3 (F)	91.4 (F)	77.6 (E)	82.6 (F)	73.7 (E)	65.7 (E)
27	Florida St & Palm Ave (SR-75)	8.6 (A)	9.5 (A)	8.6 (A)	9.3 (A)	8.3 (A)	8.1 (A)	8.2 (A)	8.2 (A)
28	13th St & Palm Ave (SR-75)	61.0 (E)	84.7 (F)	58.9 (E)	85.8 (F)	45.8 (D)	76.9 (E)	44.8 (D)	64.4 (E)
29	16th St & Palm Ave (SR-75)	31.1 (C)	61.7 (E)	29.1 (C)	59.0 (E)	19.2 (B)	38.6 (D)	18.6 (B)	36.1 (D)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	93.7 (F)	ECL (F)	92.6 (F)	ECL (F)	76.6 (E)	ECL (F)	69.7 (E)	ECL (F)
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	96.1 (F)	44.5 (D)	93.3 (F)	47.9 (D)	66.4 (E)	52.4 (D)	61.7 (E)	41.9 (D)
32	I-5 NB Ramps & Palm Ave (SR-75)	12.8 (B)	9.3 (A)	12.8 (B)	9.4 (A)	12.5 (B)	9.5 (A)	12.2 (B)	9.3 (A)
33	Silver Strand Blvd & YMCA Dwy	8.9 (A)	11.6 (B)	9.1 (A)	13.3 (B)	9.3 (A)	16.4 (C)	8.8 (A)	10.6 (B)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction. The temporary measures at intersection 17 include an exclusive southbound right-turn lane and extension of the existing northbound right-turn lane.

Table 7-4b. “Construction North, Operations South” Construction Scenario – Alternative 2 Intersection Traffic Analysis Summary with 2 CVNs

INTERSECTION		2016		2017	
		AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	60.6 (F)	19.8 (C)	61.3 (F)	19.9 (C)
2	Fourth St (SR-75) & Pomona Ave	26.7 (D)	ECL (F)	26.8 (D)	ECL (F)
3	Orange Ave (SR-75) & Third St (SR-75)	45.3 (D)	41.1 (D)	46.2 (D)	42.1 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	38 (D)	105.8 (F)	38.1 (D)	105.8 (F)
5	Silver Strand Blvd (SR-75)/Orange Ave & Pomona Ave	12.9 (B)	14.4 (B)	13.2 (B)	14.6 (B)
6	Silver Strand Blvd (SR-75) & Avenida de las Arenas	11.9 (B)	17.5 (B)	12.1 (B)	17.7 (B)
7	Silver Strand Blvd (SR-75) & Rendova Rd	17 (B)	11.3 (B)	16.9 (B)	11.4 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	46.9 (D)	58.6 (E)	47.4 (D)	60.2 (E)
9	Strand Wy & Guadalcanal Rd	10.5 (B)	18.4 (C)	10.8 (B)	19.6 (C)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	2.8 (A)	59.0 (E)	3 (A)	61.8 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	24.9 (C)	19.2 (C)	25.5 (D)	20.3 (C)
12	Silver Strand Blvd (SR-75) & Leyte Rd	24.8 (C)	8.2 (A)	25.3 (C)	8.4 (A)
13	Silver Strand Blvd (SR-75) & Attu Ave	25.3 (D)	9.9 (A)	25.7 (D)	10 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	5.9 (A)	3.3 (A)	6 (A)	3.3 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.7 (A)	7.7 (A)	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	20.1 (C)	10.5 (B)	20.7 (C)	10.4 (B)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction.

Table 7-b. “Construction North, Operations South” Construction Scenario – Alternative 2 Construction Year Analysis Summary with 2 CVNs (cont.)

INTERSECTION		2016		2017	
		AM	PM	AM	PM
17	Silver Strand Blvd (SR-75) & Hooper Blvd	8.3 (A)	ECL (F)	8.5 (A)	ECL (F)
	with signal improvement	6.3 (A)	8.1 (A)	7 (A)	8.7 (A)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	38.6 (D)	25.8 (C)	42.5 (D)	31.4 (C)
19	7th St & Silver Strand Blvd (SR-75)	94.7 (F)	62.1 (E)	95.2 (F)	62.4 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	7.4 (A)	10.8 (B)	8.2 (A)	11.2 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	13.1 (B)	20.1 (C)	14.6 (B)	59.0 (F)
22	3rd St & Palm Ave	10.9 (B)	19.5 (C)	13.4 (B)	45.1 (E)
23	Palm Ave & Rainbow Dr	32.7 (D)	25.6 (D)	45.3 (E)	38.9 (E)
24	7th St & Palm Ave	8.4 (A)	5.8 (A)	8.5 (A)	5.7 (A)
25	Delaware St & Palm Ave	11.9 (B)	16.6 (C)	12 (B)	18.9 (C)
26	9th St & Palm Ave (SR-75)	42.7 (D)	48.3 (D)	48.2 (D)	51.2 (D)
27	Florida St & Palm Ave (SR-75)	7.7 (A)	8.2 (A)	7.9 (A)	8.0 (A)
28	13th St & Palm Ave (SR-75)	38.3 (D)	49.1 (D)	39.7 (D)	52.2 (D)
29	16th St & Palm Ave (SR-75)	14.4 (B)	20 (C)	15.2 (B)	22.4 (C)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	48.3 (D)	ECL (F)	53.5 (D)	ECL (F)
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	35.3 (D)	35 (D)	40.8 (D)	37.8 (D)
32	I-5 NB Ramps & Palm Ave (SR-75)	11.4 (B)	8.8 (A)	11.7 (B)	9 (A)
33	Silver Strand Blvd & YMCA Dwy	8.5 (A)	8.6 (A)	8.7 (A)	9.6 (A)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction. The temporary measures at intersection 17 include an exclusive southbound right-turn lane and extension of the existing northbound right-turn lane. All other years would be equal to Alternative 1 results.

Table 7-4c. “Construction North, Operations South” Construction Scenario – Alternative 3 Intersection Traffic Analysis Summary with 2 CVNs

INTERSECTION		2021		2022		2023	
		AM	PM	AM	PM	AM	PM
1	Glorietta Blvd & Fourth St (SR-75)	66.1 (F)	20 (C)	67.1 (F)	20.1 (C)	64.6 (F)	20.2 (C)
2	Fourth St (SR-75) & Pomona Ave	27.2 (D)	ECL (F)	27.2 (D)	ECL (F)	27.3 (D)	ECL (F)
3	Orange Ave (SR-75) & Third St (SR-75)	53.6 (D)	45.5 (D)	54.9 (D)	47.6 (D)	51.5 (D)	49.8 (D)
4	Orange Ave (SR-75) & Fourth St (SR-75)	39 (D)	105.6 (F)	39.3 (D)	105.5 (F)	38.8 (D)	105.6 (F)
5	Silver Strand Blvd (SR-75)/Orange Ave & Pomona Ave	15.7 (B)	15.5 (B)	16 (B)	15.9 (B)	16.8 (B)	16.3 (B)
6	Silver Strand Blvd (SR-75) & Avenida de las Arenas	12.8 (B)	18.9 (B)	13 (B)	19.4 (B)	12.9 (B)	19.9 (B)
7	Silver Strand Blvd (SR-75) & Rendova Rd	16.9 (B)	12.1 (B)	17 (B)	12.2 (B)	17.5 (B)	12.6 (B)
8	Silver Strand Blvd (SR-75) & Tarawa Rd	59.8 (E)	67.7 (E)	60.4 (E)	70.2 (E)	50.8 (D)	72.8 (E)
9	Strand Wy & Guadalcanal Rd	12.9 (B)	35.3 (E)	13.5 (B)	40.1 (E)	12.2 (B)	45.3 (E)
10	Silver Strand Blvd (SR-75) & Tulagi Rd	3.6 (A)	71.7 (E)	3.7 (A)	74.6 (E)	3.8 (A)	77.5 (E)
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy	27.6 (D)	23.8 (C)	28.1 (D)	25.6 (D)	27.8 (D)	26.4 (D)
12	Silver Strand Blvd (SR-75) & Leyte Rd	32.5 (C)	8.7 (A)	34 (C)	8.9 (A)	32.8 (C)	9.1 (A)
13	Silver Strand Blvd (SR-75) & Attu Ave	28.2 (D)	10.5 (B)	28.7 (D)	10.7 (B)	28.6 (D)	10.9 (B)
14	Silver Strand Blvd (SR-75) & Coronado Bay Rd	6.5 (A)	3.5 (A)	6.5 (A)	3.5 (A)	6.5 (A)	3.5 (A)
15	SB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)	7.8 (A)
16	NB Silver Strand Blvd (SR-75) & Coronado Cays Blvd	26.5 (C)	10.2 (B)	28.2 (C)	10.1 (B)	27.3 (C)	10.1 (B)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction.

Table 7-4c. “Construction North, Operations South” Construction Scenario - Alternative Intersection Traffic Analysis Summary with 2 CVNs (cont.)

INTERSECTION		2021		2022		2023	
		AM	PM	AM	PM	AM	PM
17	Silver Strand Blvd (SR-75) & Hooper Blvd	11 (B)	ECL (F)	9.1 (A)	ECL (F)	0.0 (A)	0.0 (A)
	with signal improvement	8.5 (A)	29.0 (C)	7.5 (A)	9.0 (A)	2.4 (A)	2.1 (A)
18	Silver Strand Blvd (SR-75) & Rainbow Dr	108.7 (F)	133.1 (F)	56.0 (E)	76.6 (E)	29.3 (C)	39.5 (D)
19	7th St & Silver Strand Blvd (SR-75)	123.6 (F)	97.3 (F)	99.7 (F)	68.4 (E)	103.8 (F)	63.6 (E)
20	Silver Strand Blvd (SR-75) & Delaware St	10 (B)	29.7 (C)	11.7 (B)	13.9 (B)	13.4 (B)	11.5 (B)
21	Dwy/Silver Strand Blvd & Palm Ave	20.8 (C)	ECL (F)	26.8 (D)	ECL (F)	31.9 (D)	ECL (F)
22	3rd St & Palm Ave	64.8 (F)	ECL (F)	136.1 (F)	ECL (F)	178.6 (F)	ECL (F)
23	Palm Ave & Rainbow Dr	166.9 (F)	ECL (F)	ECL (F)	ECL (F)	ECL (F)	ECL (F)
24	7th St & Palm Ave	9 (A)	5.7 (A)	9.4 (A)	6.8 (A)	9.7 (A)	7 (A)
25	Delaware St & Palm Ave	12.3 (B)	51.6 (F)	12.5 (B)	36.5 (E)	12.6 (B)	27.9 (D)
26	9th St & Palm Ave (SR-75)	130.6 (F)	124.4 (F)	99.7 (F)	115.3 (F)	68.6 (E)	92 (F)
27	Florida St & Palm Ave (SR-75)	8.9 (A)	11.2 (B)	8.5 (A)	9.6 (A)	8.3 (A)	8.4 (A)
28	13th St & Palm Ave (SR-75)	74.1 (E)	107.6 (F)	54.7 (D)	97.0 (F)	43.5 (D)	86.6 (F)
29	16th St & Palm Ave (SR-75)	42.5 (D)	88.4 (F)	25.5 (C)	64.5 (E)	17.8 (B)	45.4 (D)
30	Saturn Blvd/19th St & Palm Ave (SR-75)	107.6 (F)	ECL (F)	90.0 (F)	ECL (F)	72.2 (E)	ECL (F)
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	115.5 (F)	47.9 (D)	86.0 (F)	52.4 (D)	59.7 (E)	59.5 (E)
32	I-5 NB Ramps & Palm Ave (SR-75)	13.3 (B)	9.4 (A)	13 (B)	9.5 (A)	12.6 (B)	9.6 (A)
33	Silver Strand Blvd & YMCA Dwy	9.1 (A)	13.3 (B)	9.3 (A)	16.4 (C)	9.4 (A)	20.8 (C)

Notes: Table reflects intersection Delay (LOS). **Bold and shaded** cells indicate locations where the project has a temporary impact during construction. The temporary measures at intersection 17 include an exclusive southbound right-turn lane and extension of the existing northbound right-turn lane.

As shown in the tables, construction traffic will have impacts to the roadway network immediately at six locations along SR-75. Impacts continue to add on as the development intensity increases and buildings are opened for use. Year 2017 is when the intersections through Imperial Beach have impacts and represents an oversaturation of the existing roadway network in Imperial Beach for the “Construction North, Operations South” scenario.

At Hooper Boulevard and Silver Strand Boulevard (SR-75), the PM peak fails by Year 2015 as vehicles making the eastbound right-turn out of SSTC-South have excessive delay trying to find a gap in southbound through traffic. This situation is fixed with implementation of a traffic signal as the signal provides eastbound traffic protected time to enter SR-75 while southbound traffic is stopped with a red light. Few other improvements would provide relief for eastbound traffic. Planned turn lane improvements do not help with the delay for this particular movement as they do not affect the eastbound right-turn nor southbound through movements. A temporary traffic signal or a flagger controlling traffic would essentially function the same as a permanent traffic signal, just on a temporary basis. A signal is warranted in 2015 based on the peak hour volumes. Signal warrant analysis information is provided in **Appendix J**. The AM peak hour at this location would operate at acceptable levels since northbound left-turn traffic is able to find gaps in the low volumes of southbound traffic during the AM peak hour. However, extension of the northbound left-turn pocket should be considered to provide storage area for more than the existing 50 feet, which is about equal to the length of two passenger car vehicles or one heavy construction truck.

Regardless of the selected Alternative, some impact avoidance and minimization measures to consider for construction include:

- Construct the new ECP on Silver Strand Boulevard (SR-75) early in the construction schedule or provide temporary access at the ultimate new ECP location to minimize construction traffic in the residential neighborhoods of Imperial Beach;
- Install a traffic signal and make turn lane improvements at the intersection of Hooper Boulevard and Silver Strand Boulevard (SR-75) to support construction activity;
- Include construction management in the design aspect of the NBC Coastal Campus
- Coordinate construction activity with NBC representatives to monitor daily activity levels at each installation and minimize interruptions to operations;
- Schedule heavy vehicle activity during non-peak hours;
- Encourage carpooling and staggered work hours for construction workers; and
- Notify public stakeholders of times where abnormal construction activity would occur (i.e. bunker removal).

Detailed information on construction and operational traffic generation and analysis worksheets are provided in **Appendix K**.

Non-Peak Hour Trips

The peak hour analyses are helpful in identifying locations that operate poorly and identifying mitigation measures to help alleviate congestion. Non-peak hour traffic can also be important to consider if there are abnormal traffic patterns throughout the day. NBC includes multiple facilities that are closely related in operations and require daily interactions. As a result, there are currently non-peak hour trips occurring between facilities within NBC. By collocating facilities that are currently spread out, Alternatives 1 and 2 may actually reduce off-peak hour trips on the study roadway network. Under Alternative 3 Conditions, non-peak hour project-related trips would still occur similar to what occurs today as the facilities are spread between the NAB Coronado, SSTC, and NASNI locations.

Heavy Vehicles

Vehicles on a traffic network all have different characteristics that affect operations. One of the major considerations on a network is the number of heavy vehicles – trucks, buses, and other vehicles larger than typical passenger cars. Heavy vehicles are longer and wider than the average passenger car and also have slower acceleration, slower speeds, and wider turn radius requirements. For these reasons, areas that have a high volume of heavy vehicles experience congestion quicker than areas that are primarily passenger cars. Typical roadway networks have approximately two-percent of its vehicle population fall in the heavy vehicle category. The Proposed Action includes facilities and operations that attract and require heavy vehicles. Understanding the amount of heavy vehicles is important when evaluating the traffic impacts on the external roadway network as well as providing an adequately designed internal street network that can accommodate heavy vehicles. This section discusses the heavy vehicles associated with the Proposed Action and what it means to the adjacent roadway network.

Adjacent Roadway Network Data

Caltrans publishes information on annual average daily truck traffic for their facilities. For each segment that data is collected on, Caltrans provides a percent of which its vehicle population is considered trucks, and provides a summary of heavy vehicle counts sorted by the number of axles. The most recent data available at the time of this study was 2011. **Table 7-5** summarizes the truck volumes provided by Caltrans for key roadway segments in the study area.

Table 7-5. Heavy Vehicle Volumes on Adjacent Roadway Network

Route	Post Mile	Location	Vehicle Total	Truck Total	% Trucks
SR-75	9	Junction with I-5, near Imperial Beach	64,000	1,920	3.0%
SR-75	18.47	Coronado, Pomona Avenue	21,500	409	1.9%
SR-75	19.586	Junction with SR-282 at 4 th Street/ Orange Avenue	21,900	745	3.4%
SR-75	22.261	Junction with I-5, near Coronado	73,000	2004	2.8%
SR-282	0	Junction with SR-75	32,000	960	3.0%

Source: 2011 Annual Average Daily Truck Traffic on the California State highway System, Caltrans.

NBC Truck Generation Data

Traffic counts were obtained in July 2003 as part of the *City Wide Major Traffic Study*, March 15, 2005, that included information on heavy vehicles at several locations throughout the study area and NBC facilities. **Table 7-6** illustrates the percentage of trucks at key locations within the study area. Although this information is ten years old it provides some insight to the percent of trucks that use the NBC facilities and adjacent street network. As shown in the table, the locations with the highest percentage of trucks were near the NASNI First Street gate and NAB Coronado Tarawa Road gate, with approximately two-percent of the vehicles entering being trucks. At the other military gates, the truck percentages were extremely low with less than a percent of the vehicles being trucks.

Table 7-6. Coronado Vehicle Classification Summary

LOCATION	AUTOS	VANS AND BUSES	SEMI TRUCKS	TOTAL	PERCENT HEAVY VEHICLES
NASNI First St Gate	11,164	404	220	11,788	1.9%
NAB Coronado Tarawa Rd Gate	174	11	3	188	1.6%
NAB Coronado Tulagi Rd	415	4	4	423	0.9%
SR-75 at Bridge Toll Plaza	48,404	673	446	49,523	0.9%
Silver Strand Blvd (SR-75) south of Tulagi Rd	19,405	469	101	19,975	0.5%
NAB Coronado Main Gate south of Tarawa Rd	7,308	171	33	7,512	0.4%
NASNI Ocean Blvd Gate	3,829	26	9	3,864	0.2%
NASNI Main Gate (Fourth St)	21,671	247	37	21,955	0.2%
Hotel Del Coronado Dwy	1,940	25	2	1,967	0.1%
Strand Way at Rendova Rd	811	0	0	811	0.0%

Notes:

Traffic counts were performed on a weekday from 5:30 a.m. to 5:30 p.m. in July 2003.

Source: Coronado *City-Wide Major Traffic Study*, dated March 15, 2005.

Proposed Action Heavy Vehicles

Trucks of varying size are common on military bases and are an important consideration in planning a new Campus. Internal roadways need to be sized to accommodate the maneuvering of trucks (turning radius) and the weight of loaded trucks (pavement structural strength). Access to a base needs to consider truck inspection facilities that are separated from passenger inspection lanes. Additionally, routing needs to be established to assign truck traffic to streets and highways that have been designed to accommodate these vehicles. **Figure 7-3** depicts the truck routes that serve the four NBC installations that have regular truck interactions. Supplies and deliveries would enter installations at the designated truck entry gate using approved truck routes. In general the truck facilities serving NBC use the following facilities:

- SR-75 (Palm Avenue, Silver Strand Boulevard, Orange Avenue) is the primary truck route that serves all of NBC. The military does not route large trucks on the San Diego Coronado Bridge. Access to NAB Coronado and future access to the Coastal Campus are from SR-75.
- SR-282 (Third and Fourth Streets) is the primary truck route to access NASNI, with a truck inspection facility just beyond the terminus of Third Street.
- 13th Street in Imperial Beach provides truck access to NOLF-IB.

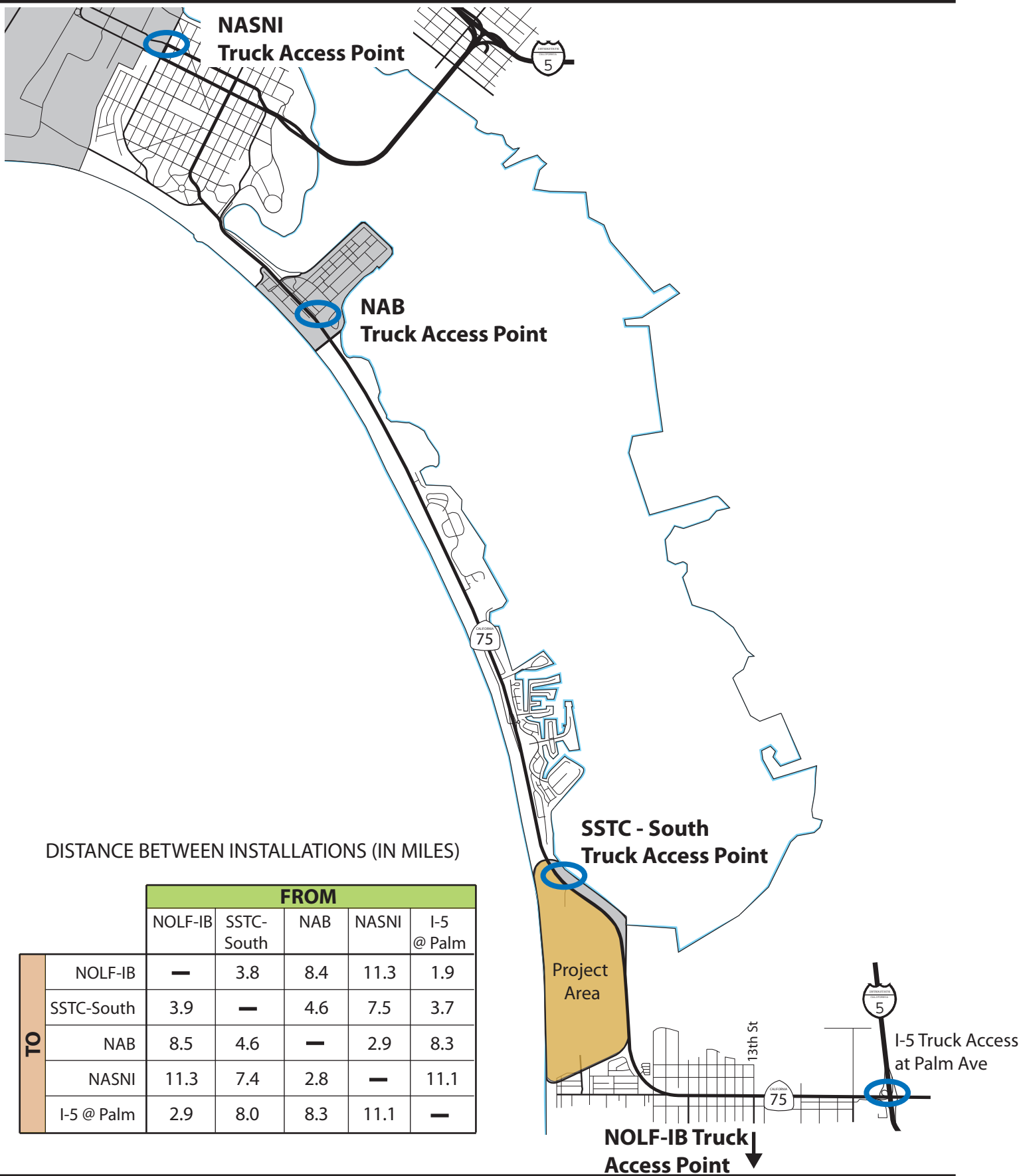
Due to space limitations, the fleet of larger trucks and trailers serving NBC are currently stored at NOLF-IB. These vehicles are checked out to work units when needed for a deployment or relocation of equipment. With implementation of the Proposed Action the truck traffic traversing between NOLF-IB and NAB Coronado is expected to continue, with somewhat lesser impacts than the current arrangement. Trips would follow the same general route, but would be shorter in length and could be reduced in frequency since there will be more storage and laydown space at the new NBC Coastal Campus area in SSTC-South than there currently is at NAB Coronado. There should be a decrease in the amount of traffic, including small trucks and other military vehicles, on Silver Strand Boulevard (SR-75) between SSTC-South and NAB Coronado with implementation of the Proposed Action. Presently personnel stationed at NAB Coronado use SSTC-South for certain training activities. By moving NSW personnel to one primary location, this amount of travel between sites would be reduced.

There would be an increase in the normal amount of truck activity prior to and after a deployment. During these times, there may be as much as three or four extra truck trips per hour in each direction. These increases would occur infrequently and at random times. Several sizes of trucks are used to transport gear and supplies.

As a result of the discussions with NSW and the historical data collected, the industry standard of two-percent was used for the heavy vehicles assigned on the roadway. This results in the following number of heavy vehicles for the Proposed Action:

- 15 truck trips during the morning peak (13 in, 2 out)
- 16 truck trips during the afternoon peak (3 in, 13 out)
- 178 truck trips daily (89 in / 89 out)

Within the new Coastal Campus, internal roadways are being designed to accommodate heavy truck traffic. Truck loading docks, laydown space and loading equipment will be provided to optimize logistical efficiency. To the degree practicable, truck routing on base will be separated from primary pedestrian corridors and vehicular access.



Transit Facilities

Transit facilities provide an alternative mode of transportation that helps reduce traffic demand on the streets, benefits to the environment, and cost savings for commuters. This section discusses the transit system available to the City of Coronado, City of Imperial Beach, and NBC. Transit service routes, frequencies, and ridership are discussed.

The Metropolitan Transit System (MTS) operates two bus routes in the study area, Route 901 and Route 904. Route 901 is the only transit route directly serving SSTC-South. Route 901 runs from Downtown San Diego, across the San Diego-Coronado Bridge, through the City of Coronado to the City of Imperial Beach and the Otay Mesa Community of the City of San Diego. The route travels along both SR-75 and SR-282, and currently provides a transit stop at the NASNI Visitor Center, just west of Alameda Boulevard. The stop is located near the visitor check-in center prior to the stationed guards and does not require security processing. Passengers riding the bus destined for NASNI must walk on base through the guard station. The route provides daily service every 15 minutes on weekdays during peak periods (approximately 5:00 a.m. to 8:00 a.m. and 2:00 p.m. to 4:00 p.m.), and every 30 minutes on weekdays during non-peak periods and weekends. Route 901 is one of the MTS top ten routes for high ridership. **Figure 7-4** shows the routes and stops of Route 901.

Currently there are no stops within reasonable walking distance of SSTC-South. Since more Navy personnel would be destined for SSTC-South with completion of the Proposed Action, regardless of the Alternative, the Proposed Action would need to provide new bus stops to incorporate into Route 901 near SSTC-South to continue encouraging use of transit facilities. The location of the proposed stop(s) should be by the new ECP, as shown in the figure. It is not anticipated that buses would be allowed to enter SSTC-South, but a bus stop along SR-75 or prior to the ECP should be implemented. The new stop would be approximately one-half mile from the center of the new NBC Coastal Campus.

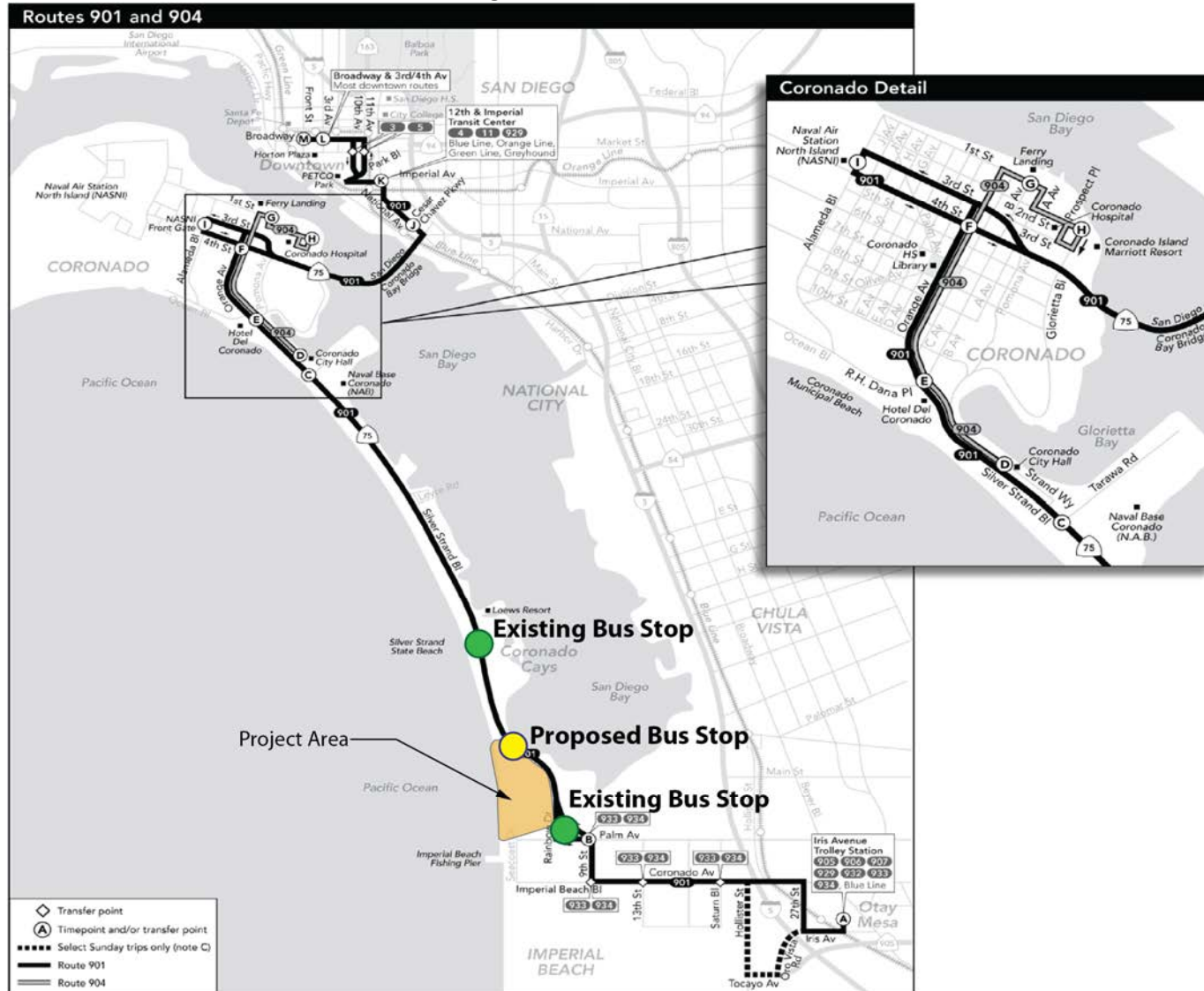
Route 904 provides service within the City of Coronado between the intersection of Third Street and Glorietta Boulevard and the intersection of Silver Strand Boulevard (SR-75) and Avenida de las Arenas. The route travels primarily on Orange Avenue and Silver Strand Boulevard and does not provide direct access to any NBC facility and would not be a reasonable transit option for personnel commuting to SSTC-South.

MTS also operates the San Diego Trolley system, and the Coaster is operated by North County Transit District. These are part of a rail transit network that serves most cities throughout San Diego County. Although the trolley and Coaster systems do not pass through Coronado or Imperial Beach, many commuters to and from the cities and NBC facilities use the trolley in combination with bus or ferry routes. The Blue trolley line serves Downtown San Diego, with stops at major transit centers, including the Santa Fe Depot near the Broadway ferry dock. **Figure 7-5** depicts the Blue Line trolley route and stops closest to SSTC-South. Route 901 provides a bus connection to the trolley system.

Passenger ferry service is available between the City of Coronado and Downtown San Diego. Daily sailings depart every one hour between approximately 9 a.m. to 10 p.m. A commuter ferry runs during peak periods between the Broadway Pier and Coronado Landing Marketplace. These sailings depart every 45 minutes to one hour between approximately 5:30 a.m. to 8:30 a.m. and 2 p.m. to 5 p.m. on Mondays through Fridays. The ferry is operated by the private company Harbor Excursions.

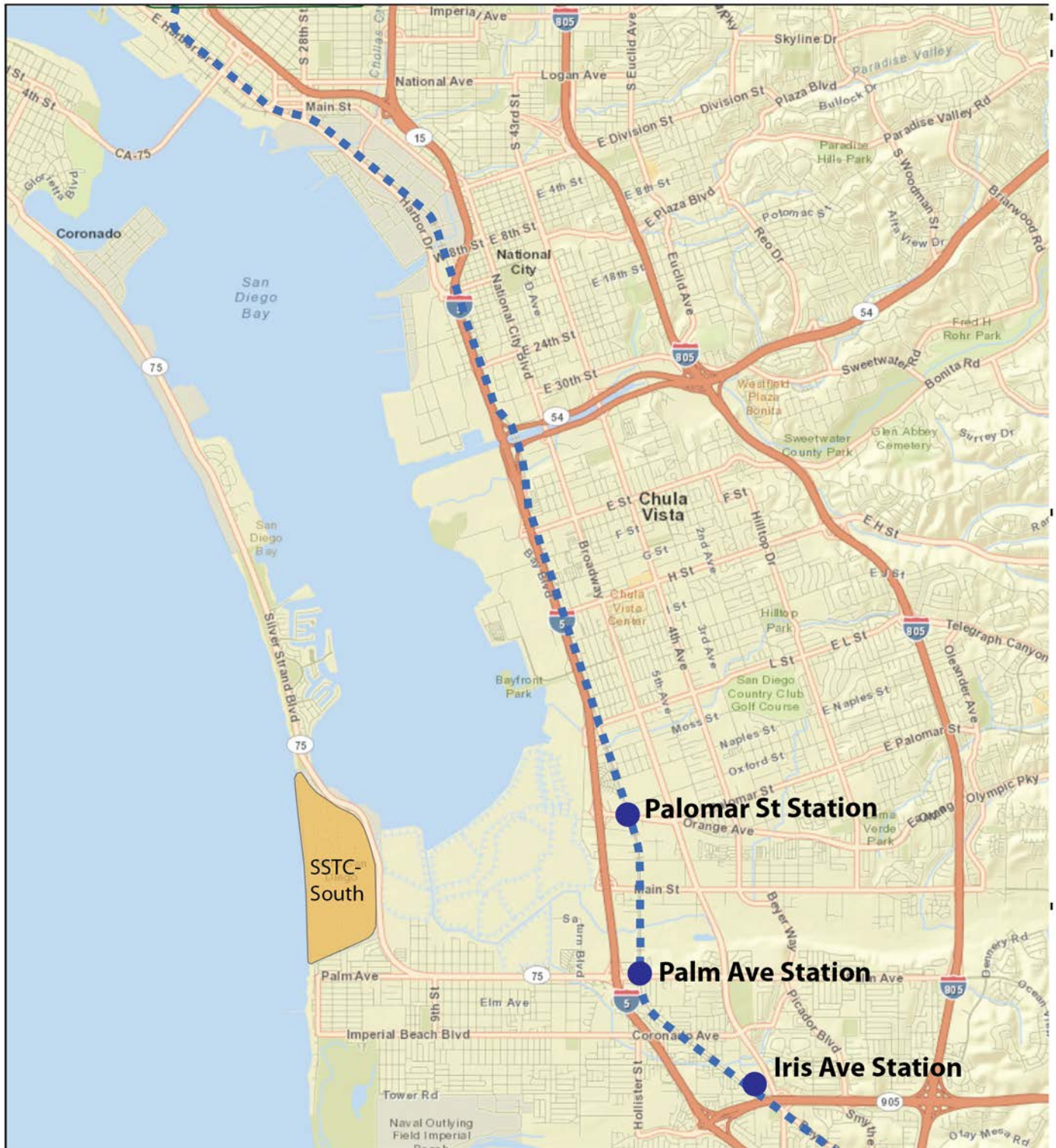
The Department of the Navy (DON) estimates that 1,400 to 1,500 civilian and military personnel commute to and from NASNI daily via MTS transit, the ferry, or a vanpool. This is approximately six-percent of the military personnel and DON civilian employees.

Figure 7-4 MTS Route 901



Source: MTS Route Map, dated July 18, 2013

Figure 7-5 Blue Line Trolley Route



Source: MTS Route Map, dated July 18, 2013

Alternative Transportation Subsidy

The DON provides a transit subsidy program to help offset some of the costs for employees commuting with the use of mass transit and vanpools. The Transportation Incentive Program (TIP) outlines the details of the program. Each user of this program will receive up to \$110 per month in tax free assistance. In general, the six forms of public transportation eligible for TIP are the following:

- COASTER
- San Diego Trolley
- MTS Buses
- San Diego Bay Ferry
- Vanpool Services, Inc. (VPSI) Vanpool
- Ridesharing

According to the TIP, each vanpool must have at least six people (not including the driver) and be at least half filled on each trip in order to qualify for the subsidy program. At NASNI, the current vanpool program consists of groups of 7 to 14 riders together to and from NASNI in privately owned vans. These riders often come from areas outside the County of San Diego. Based on the latest estimates, 80 vanpools are operated with 762 members.

Bicycle Facilities

A Class I facility is a bike path that has its own right-of-way (ROW) and is exclusively used for bicyclists. A Class II facility is a bike lane that is used exclusively or semi-exclusively for bicyclists and is usually provided on an existing roadway and separated from through traffic by striping or other pavement markings. A Class III facility is a bike route that shares ROW designated by signs or pavement markings.

Creating bicycle facility connections to SSTC-South will be important with completion of the Proposed Action, regardless of the Alternative. Silver Strand Boulevard (SR-75) hosts one of San Diego's most extensive bicycle facilities, the Bayshore Bikeway. **Figure 7-6** illustrates the Bayshore Bikeway route, which includes paths through San Diego, National City, Chula Vista, Imperial Beach, and Coronado; utilizing the ferry to connect between Coronado and San Diego. With implementation of P947, the new signalized intersection along SR-75 serving a new ECP for SSTC-South along SR-75, the Proposed Action would be able to connect to the Bayshore Bikeway by providing a bicycle crossing at the new traffic signal. The new traffic signal would provide a designated and controlled place for bicyclists to cross Silver Strand Boulevard (SR-75) and access SSTC-South from Bayshore Bikeway. This connection provides a regional attractiveness to bicycling from users throughout the surrounding cities. The Bayshore Bikeway could also be used to travel from the Palomar Avenue Trolley station to SSTC-South. This ride is about five miles in length and could be made in less than 30 minutes. Secure bicycle lockers are available for a nominal fee at all trolley stations. Design of the new ECP at SR-75 should include bicycle presence detection so that the traffic signal can accommodate safe crossing of this high speed route.

If P947 was not completed, bicyclists would have to enter through the existing ECP in Imperial Beach and would be forced to traverse along Class II and III facilities to gain access to SSTC-South. The regional attraction of bicycling to access SSTC-South would not be nearly as attractive without P947 in place. There would remain some attraction for bicyclists that lived in Imperial Beach.

Bicyclist facilities in Coronado and around NBC facilities other than SSTC-South would not be affected by the Proposed Action.

Figure 7-6 Bayshore Bikeway Route



Source: SANDAG, July 2013

Internal to the NBC Coastal Campus, the compact development pattern does not require using passenger vehicles to get around the campus once the vehicle is initially parked. The campus is designed to be pedestrian- and bicycle-friendly, with parking around the perimeter and narrower streets with sidewalks and low volumes of vehicles in the central portions of campus. Providing this environment further encourages bicyclists to commute to and from work, as vehicles are not needed to get between facilities throughout the day. Further, a shared bicycle system internal to the campus could be established to allow people with further commutes to use bicycles once they arrive on campus.

Pedestrian Facilities

A walkability analysis was performed to determine the attractiveness of walking to the new NBC Coastal Campus from the surrounding communities. The location of SSTC-South and the setback of the NBC Coastal Campus from access points make commuting by walking unreasonable for most. The distance from a central point within the NBC Coastal Campus at SSTC-South to the security gate is about one-quarter of a mile. The security gate is another one-quarter mile from Silver Strand Boulevard (SR-75). It would be at least a two mile walk to reach the residential area to the north. The most attractive areas to see pedestrian traffic would be the northern portions of Imperial Beach near the existing ECP; however, between the ECP and the core of campus it is still over a mile walk, assuming the existing gate remains open. Although the Bayshore Bikeway provides great regional connectivity, SSTC-South is isolated enough where it would require multiple miles of walking to commute to and from the NBC Coastal Campus. Pedestrian commuting is not reasonable to assume, but pedestrian facilities internal to the site are vital to the design of the campus.

Internal to the NBC Coastal Campus, the environment encourages not using passenger car vehicles to get around the campus once the vehicle is initially parked. The campus is designed to be pedestrian- and bicycle-friendly, with parking around the perimeter and narrower streets with sidewalks and low volumes of vehicles in the central portions of campus. Care should be taken in the site design to separate heavy pedestrian corridors from truck routes and streets with higher traffic volumes. Providing this environment encourages pedestrian activity throughout the campus and it is essential that adequate facilities are provided.

On-Site Parking

Although transit and bicycle facilities provide alternative mode of travel options, it is still expected that over 90% of users to SSTC-South will be using a personal vehicle to commute every day. Thus, the design strives to provide adequate on-site parking to accommodate the vehicles. During the development of the Proposed Action, NSW representatives that would be using the new facilities provided input on the number of personnel and parking spaces that they expect they need. Input from various representatives as combined to estimate the vehicle demand and then parking lots were incorporated into the design of the campus as best as possible given the many constraints and limited space.

On-Site Circulation

The campus is designed to minimize the need for vehicles to circulate on-site. However, some of the operations require vehicles to access buildings throughout the campus and streets must be provided to accommodate these vehicles. Further, many of the vehicles that need to drive internal to the site are heavy vehicles that are wider and longer than the average passenger car and require more room to maneuver. The final design of the on-site circulation should take into consideration the largest vehicle that is expected to use the facilities and make sure the streets, driveways, and turns are able to accommodate that vehicle.

8.0 FINDINGS AND CONCLUSIONS

This traffic study has evaluated the traffic operations with the addition of the NBC Coastal Campus. Project Alternatives 1, 2, and 3 were each evaluated and compared to a baseline No-Action Alternative for Year 2024 and Year 2040 conditions with one, two, and three CVNs in port at NASNI to determine potential traffic impact locations. Additional analysis was performed to determine the traffic impacts if a new ECP was not implemented as part of the Proposed Action. Additional impacts were found with exclusion of P947, the new ECP MILCON project. Based on the findings of all the various analysis scenarios, potential improvements were identified.

It is recommended that improvements are implemented at seven of the twelve locations identified to have an impact. A total of nine locations would have an impact without construction of P947. One location has an impact only under Year 2040 with 2 CVN Conditions and no mitigation is recommended. One location has an impact that only occurs for Alternative 3 with 2 CVN Conditions and no mitigation is identified. The following paragraphs summarize the key findings and conclusions of the analyses.

Summary of Intersection Analyses

Table 8-1 has been prepared to summarize the locations at which impacts were found and during which scenarios those impacts were found to occur. As shown in the table, Alternatives 1 and 2 would have six impacts by Year 2024 and an additional two impacts by Year 2040. Alternative 3 would also have six impacts by Year 2024 and an additional two impacts by Year 2040, but with slightly different locations than Alternative 1.

Without P947, three additional impacts were determined for Alternatives 1, 2, and 3; all along Palm Avenue in the City of Imperial Beach.

Summary of Intersection Lane Vehicle Analyses

Table 8-2 has been prepared to summarize the ILV analysis results for the Palm Avenue and I-5 interchange. Both signalized intersections were found to be either below capacity (<1200) or approaching capacity (<1500) for all scenarios.

Potential Improvements

This study identified twelve improvements that could be made to the study area intersections to address inadequate operations with implementation of the NBC Coastal Campus. Eight of the improvements would apply to Alternatives 1, 2, or 3 as long as MILCON P947 is implemented. One of those eight improvements only occurs in Year 2040 with 2 CVNs and is not recommended for implementation as a result of this project. The four other improvements would only apply if P947 is not implemented.

The following seven improvements are recommended as mitigation measures for the NBC Coastal Campus. These improvements were developed with input from Caltrans. Prior to implementation, the proposed improvements should be confirmed with Caltrans and the respective City to ensure they are still necessary and are consistent with other planned improvements not known at the time of this study.

M7. Intersection #10, Silver Strand Boulevard (SR-75) & Tulagi Road

The significant impact at this intersection during the PM peak-hour can be mitigated by modifying the traffic signal timing by extending the green time on Silver Strand Boulevard (SR-75) by ten seconds to reflect a different traffic pattern that would be in place with the addition of the Proposed Action. The traffic signal is uncoordinated and the cycle length would be adjusted

to include this additional ten seconds. No changes to the existing right-of-way and pavement width would be required.

M8. Intersection #18, Silver Strand Boulevard (SR-75) & Rainbow Drive

The significant impact at this intersection during the AM peak-hour can be mitigated by modifying the lane configuration on the eastbound Rainbow Drive approach. Changing the existing through-right lane into a left-through-right lane and extending the existing turn pocket to the intersection of Bonito Avenue increases capacity and queue area for this approach. The extension of the turn pocket would result in a loss of two 2-hour limit parking spaces. No changes to the existing right-of-way and pavement width would be required.

M9. Intersection #26, 9th Street & Palm Avenue (SR-75)

The significant impact at this intersection during the PM peak-hour can be mitigated by restriping the northbound and southbound approaches to have exclusive left-turn lanes and a shared through-right lane. The signal operations could then be changed from split phasing to protected left-turn phasing for these approaches. The intersection is currently split-phase for northbound and southbound movements and requires a significant amount of time for pedestrians to cross Palm Avenue twice: once with the southbound movements and once with the northbound movements. By changing the phasing, it allows the northbound and southbound through movements and pedestrian crossings to occur simultaneously, ultimately reducing the amount of time needed for 9th Street and providing more green time for Palm Avenue (SR-75).

M10. Intersection #28, 13th Street & Palm Avenue (SR-75)

The significant impact at this intersection during the PM peak-hour can be mitigated by removing the pedestrian crossing on the east leg of the intersection and shortening the corresponding northbound split time. The intersection is currently split-phase for northbound and southbound movements and requires a significant amount of time for pedestrians to cross Palm Avenue twice: once with the southbound movements and once with the northbound movements. By providing just a single crosswalk, it allows more green time to be assigned to the heavy movements on Palm Avenue (SR-75).

M11. Intersection #30, Saturn Boulevard/19th Street & Palm Avenue (SR-75)

The significant impact at this intersection during the PM peak-hour can be mitigated with the addition of a second westbound left-turn lane. There is currently a single westbound left-turn lane adjacent to an eight-foot wide raised median. To fit in a second left-turn lane within the existing curb width, the median would need to be reduced to four-feet wide and the eastbound through lane widths would need to be narrowed slightly. The bike lane would operate similar to its current layout.

M12. Intersection #19, 7th Street and Silver Strand Boulevard (SR-75)

The significant impact at this intersection could be mitigated by striping the southbound approach to include a left-turn pocket and through-right lane. This would require removing some parking along 7th Street to make room for the additional lane, estimated to be two parking spaces.

M13. Intersection #31, I-5 SB Exit Ramp and Palm Avenue (SR-75)

The significant impact for Year 2040 at this intersection can be partially mitigated by extending the southbound right-turn storage pockets on the exit ramp. This would require widening of the ramp.

The following improvement is not recommended as mitigation measures for the NBC Coastal Campus. The City of Coronado has requested that this intersection is evaluated under separate environmental review at a later date to determine when, if, and what type of traffic control safety measures are necessary at this location.

M14. Intersection #11, Fidler's Cove Driveway and Silver Strand Boulevard (SR-75)

The impact at the intersection of Silver Strand Boulevard (SR-75) and Fiddler's Cove Driveway was only identified for Alternatives 1 and 2 when two CVNs are in port and is a result of cumulative traffic along Silver Strand Boulevard (SR-75) preventing gaps in traffic from occurring for vehicles attempting to turn left out of Fiddler's Cove driveway. It can be mitigated by restricting outbound left turns from the driveway.

For several reasons identified in this study, it is recommended that P947 is implemented as early as possible in the Proposed Action development. P947 is necessary to prevent traffic in Imperial Beach from becoming excessive and providing appropriate capacity and security facilities to process the increasing number of vehicles accessing SSTC-South. It is assumed that P947 is included in the Proposed Action and no additional mitigation measures are required; however, if P947 is not implemented, additional mitigation measures identified in this study would apply:

M10. Intersection #21, Silver Strand Boulevard and Palm Avenue

The significant impact at this intersection would require widening of Silver Strand Boulevard from two lanes to four lanes and installation of a traffic signal at the intersection. Even with these improvements the intersection would still operate at LOS E during the PM peak hour.

M11. Intersection #22, 3rd Street and Palm Avenue

The significant impact at this intersection during the AM and PM peak-hours can be mitigated with the installation of a traffic signal.

M12. Intersection #23, Palm Avenue and Rainbow Drive

The significant impact at this intersection during the AM and PM peak-hours can be mitigated by restricting southbound left-turn movements. Vehicles that want to head eastbound on Palm Avenue from Rainbow Drive could utilize the intersection of Rainbow Drive and Silver Strand Boulevard (SR-75), approximately 700 feet north of this intersection to head eastbound.

M11. Intersection #31, I-5 SB Exit Ramp and Palm Avenue (SR-75)

The significant impact for Year 2024 at this intersection during the PM peak-hour can be mitigated by adjusting the signal timing at the intersection. The length of the eastbound, westbound, and southbound signal splits would need to be increased by 5 seconds (for a total cycle increase of 10 seconds).

The following impact location was identified to not have reasonable or feasible mitigations for the NBC Coastal Campus:

The intersection of Orange Avenue (SR-75) and Fourth Street (SR-75) is considered an impact because it worsens an existing LOS F condition by more than 1 second. The increase in delay for the Alternative 3 scenario when two CVNs are in port is 1.1 seconds. There was no reasonable mitigation found for this location. This impact was identified for Alternative 3 scenarios with 2 CVNs in. It would be considered a significant and unavoidable impact for Alternative 3.

Implementation of Potential Improvements

Several improvements involve signal retiming or modifications along SR-75. It is suggested that the DON discuss the funding of improvements with Caltrans and other stakeholders to develop a joint funding approach. It is also suggested that the DON pursue funding opportunities for early implementation of MILCON project P947 to prevent traffic congestion in Imperial Beach and establish an ECP with adequate capacity and appropriate security requirements.

Table 8-1. Peak-Hour Intersection Analysis Impact Summary

YEAR 2024									
Intersection		Alternative 1/2		Alternative 3		Alternative 1/2 without P947		Alternative 3 without P947	
		1 CVN	2 CVNs	1 CVN	2 CVNs	1 CVN	2 CVNs	1 CVN	2 CVNs
4	Orange Ave (SR-75) & Fourth St (SR-75)				●				●
10	Silver Strand Blvd (SR-75) & Tulagi Road	●	●	●	●	●	●	●	●
18	Silver Strand Blvd (SR-75) & Rainbow Dr	●	●	●	●				
19	7 th Street & Silver Strand Blvd (SR-75)		●			●	●	●	●
21	Silver Strand Blvd & Palm Ave					●	●	●	●
22	3 rd Street & Palm Ave					●	●	●	●
23	Palm Ave & Rainbow Dr					●	●	●	●
26	9 th Street & Palm Ave (SR-75)	●	●	●	●	●	●	●	●
28	13 th Street & Palm Ave (SR-75)	●	●	●	●	●	●	●	●
30	Saturn Blvd/19 th St & Palm Ave (SR-75)	●	●	●	●	●	●	●	●
31	I-5 SB Exit Ramp & Palm Ave (SR-75)					●	●		

Table 8-2. ILV Analysis Impact Summary

YEAR 2024										
Intersection		Peak Hour	Alternative 1/2		Alternative 3		Alternative 1/2 without P947		Alternative 3 without P947	
			1 CVN	2 CVNs	1 CVN	2 CVNs	1 CVN	2 CVNs	1 CVN	2 CVNs
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	AM	<1500	<1500	<1500	<1500	<1500	<1500	<1500	<1500
		PM	<1500	<1500	<1500	<1500	<1500	<1500	<1500	<1500
32	I-5 NB Ramps & Palm Avenue (SR-75)	AM	<1200	<1200	<1200	<1200	<1200	<1200	<1200	<1200
		PM	<1200	<1200	<1200	<1200	<1200	<1200	<1200	<1200

Table 8-1 Peak-Hour Intersection Analysis Impact Summary (cont.)

YEAR 2040									
Intersection		Alternative 1/2		Alternative 3		Alternative 1/2 without P947		Alternative 3 without P947	
		1 CVN	2 CVNs	1 CVN	2 CVNs	1 CVN	2 CVNs	1 CVN	2 CVNs
4	Orange Ave (SR-75) & Fourth St (SR-75)				●				●
10	Silver Strand Blvd (SR-75) & Tulagi Road	●	●	●	●	●	●	●	●
11	Silver Strand Blvd (SR-75) & Fiddler's Cove Dwy		●						
18	Silver Strand Blvd (SR-75) & Rainbow Dr	●	●	●	●				
19	7 th Street & Silver Strand Blvd (SR-75)	●	●	●	●	●	●	●	●
21	Silver Strand Blvd & Palm Ave					●	●	●	●
22	3 rd Street & Palm Ave					●	●	●	●
23	Palm Ave & Rainbow Dr					●	●	●	●
26	9 th Street & Palm Ave (SR-75)	●	●	●	●	●	●	●	●
28	13 th Street & Palm Ave (SR-75)	●	●	●	●	●	●	●	●
30	Saturn Blvd/19 th St & Palm Ave (SR-75)	●	●	●	●	●	●	●	●
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	●	●	●	●	●	●	●	●

Table 8-2 ILV Analysis Impact Summary (cont.)

YEAR 2040										
Intersection		Peak Hour	Alternative 1/2		Alternative 3		Alternative 1/2 without P947		Alternative 3 without P947	
			1 CVN	2 CVNs	1 CVN	2 CVNs	1 CVN	2 CVNs	1 CVN	2 CVNs
31	I-5 SB Exit Ramp & Palm Ave (SR-75)	AM	<1500	<1500	<1500	<1500	<1500	<1500	<1500	<1500
		PM	<1500	<1500	<1500	<1500	<1500	<1500	<1500	<1500
32	I-5 NB Ramps & Palm Avenue (SR-75)	AM	<1200	<1200	<1200	<1200	<1200	<1200	<1200	<1200
		PM	<1200	<1200	<1200	<1200	<1200	<1200	<1200	<1200

Additional Impact Minimization Measures

In addition to the physical improvements noted in this study that mitigate potential traffic impacts, the Navy should also consider implementing the following impact minimization measures:

- Establish and implement measures to reduce construction traffic to the extent practicable.
- Work with Caltrans to establish appropriate traffic control management at the interim gate at the Hooper Boulevard entrance until the proposed Entry Control Point is fully constructed.
- Monitor traffic at the existing entrance to SSTC-South located in Imperial Beach and incorporate measures as necessary to maintain traffic volumes less than or equal to the existing volume.
- Commit to providing MTS bus stops at the new Entry Control Point intersection.
- Form an internal Traffic Advisory Committee to address traffic concerns.
- Prepare a Transportation Demand Management (TDM) Plan for Naval Base Coronado. This TDM Plan would consider the following topics:
 - Military Transportation Incentive Program (TIP)
 - SANDAG's iCommute program
 - Transit Network
 - Bicycle Network
 - Bikes sharing programs
 - Pedestrian
 - Carpool/Vanpool
 - Intra-Base shuttle system
 - Car sharing programs
 - Parking supply limitations
 - Parking fees
 - Ferry service
 - Entry Control Point staffing
 - Signal timings
 - Work hours
- Continue to implement the goals of the 2014 Memorandum of Agreement between the Navy and SANDAG to reduce drive-alone work trips.
- Continue to coordinate with SANDAG to understand and apply region-wide transportation demand management tools, such as the following SANDAG documents noted provided during the EIS comment period²:
 - Designing for Smart Growth, Creating Great Places in the San Diego Region
 - Planning and Designing for Pedestrians, Model Guidelines for the San Diego Region
 - Trip Generation for Smart Growth
 - Parking Strategies for Smart Growth
 - Regional Multimodal Transportation Analysis: Alternative Approaches for Preparing Multimodal Transportation Analysis in EIRs
 - Integrating Transportation Demand Management into the Planning and Development Process – A Reference for Cities
 - Riding to 2050, the San Diego Regional Bike Plan
 - Healthy Communities Atlas

Implementation of these measures would be beyond what is required of the Navy to mitigate their impacts but would further improve traffic conditions through Imperial Beach and Coronado and is encouraged.

² Comment number 9.52, Chapter 10, Final Naval Base Coronado Coastal Campus Environmental Impact Study.

APPENDICES

APPENDIX A

- Trends and Historical Data

Appendix A – Trends and Historical Data

The following section summarizes various traffic trends that have occurred over the past two decades. The trend analysis includes traffic volumes, intersection operations, truck traffic, bus and ferry ridership, and travel times. This data helps to show historical changes to travel patterns in the area and provide an understanding of the ongoing traffic issues.

Traffic Volumes

Historical traffic volumes at the following locations have been compiled from Caltrans data:

- SR-75 (San Diego-Coronado Bridge)
- SR-75 (Silver Strand Boulevard)
- Third Street/Fourth Street Couplet
- Orange Avenue between First Street and Pomona Avenue

At the time of this study the latest published data by Caltrans was the Year 2011 traffic data.

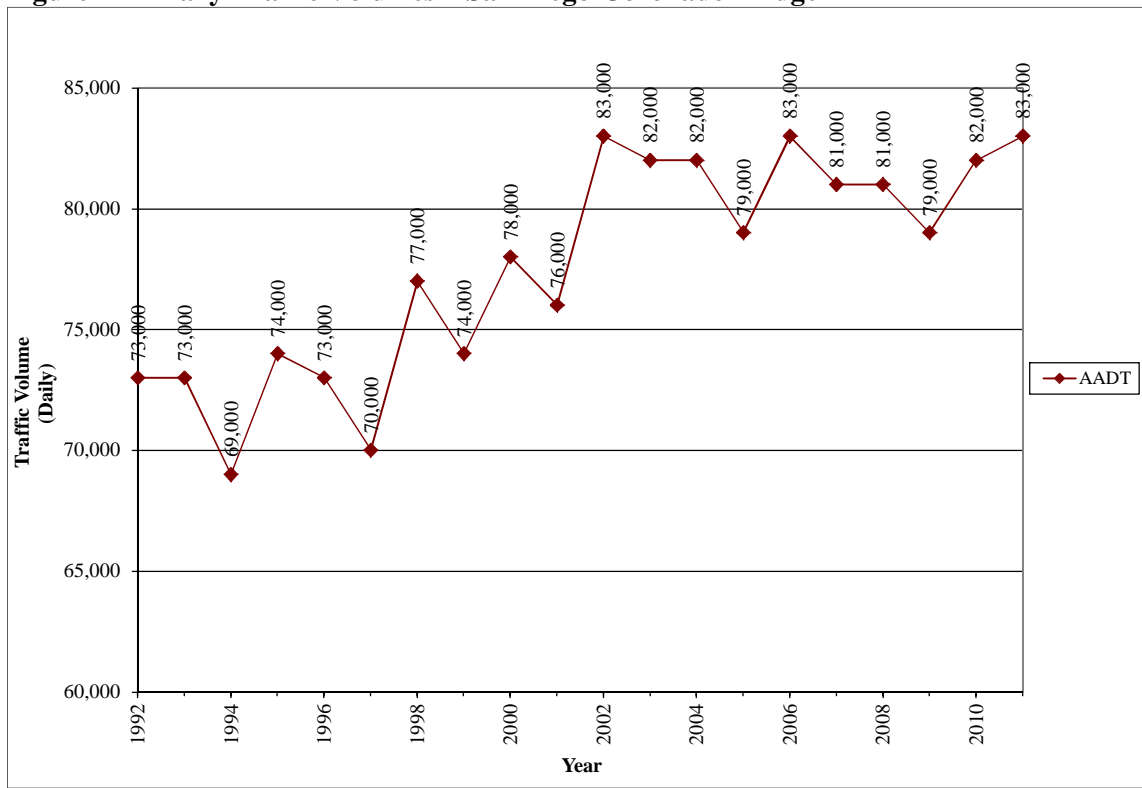
San Diego-Coronado Bridge

Figure A-1 illustrates the annual average daily traffic (AADT) volumes at post mile (PM) 20.284 along SR-75, which is the location of the toll booths at the west end of the San Diego-Coronado Bridge. With the removal of the toll in 2002, the data indicated a large increase in traffic volumes (76,000 in 2001 to 83,000 in 2002). Prior to the toll removal, the data indicated an average AADT of less than 80,000 daily vehicles. Following that initial surge in traffic volumes immediately following the toll removal, traffic volumes remained relatively constant in excess of 80,000 daily vehicles and growth in traffic has been nominal. It should be noted that the data provided by Caltrans represents the highest month of data collected during its respective year.

Figure A-2 illustrates the peak-hour volumes (for both directions) at PM 20.284 along SR-75. As shown in the figure, traffic volumes have remained generally constant at approximately 7,000 vehicles during the peak-hour, except in the years 1996, 1997, and 2002. However, it is unclear if the peak-hour data represents the a.m. peak or the p.m. peak and could vary from year to year. Data is collected on an hourly basis and the highest hour of traffic is selected for the peak-hour, disregarding the time of day. It could be concluded that the peak-hour traffic volumes are almost at or at its capacity at this location given the five lanes of traffic (three westbound and two eastbound during the morning peak and vice versa during the afternoon peak).

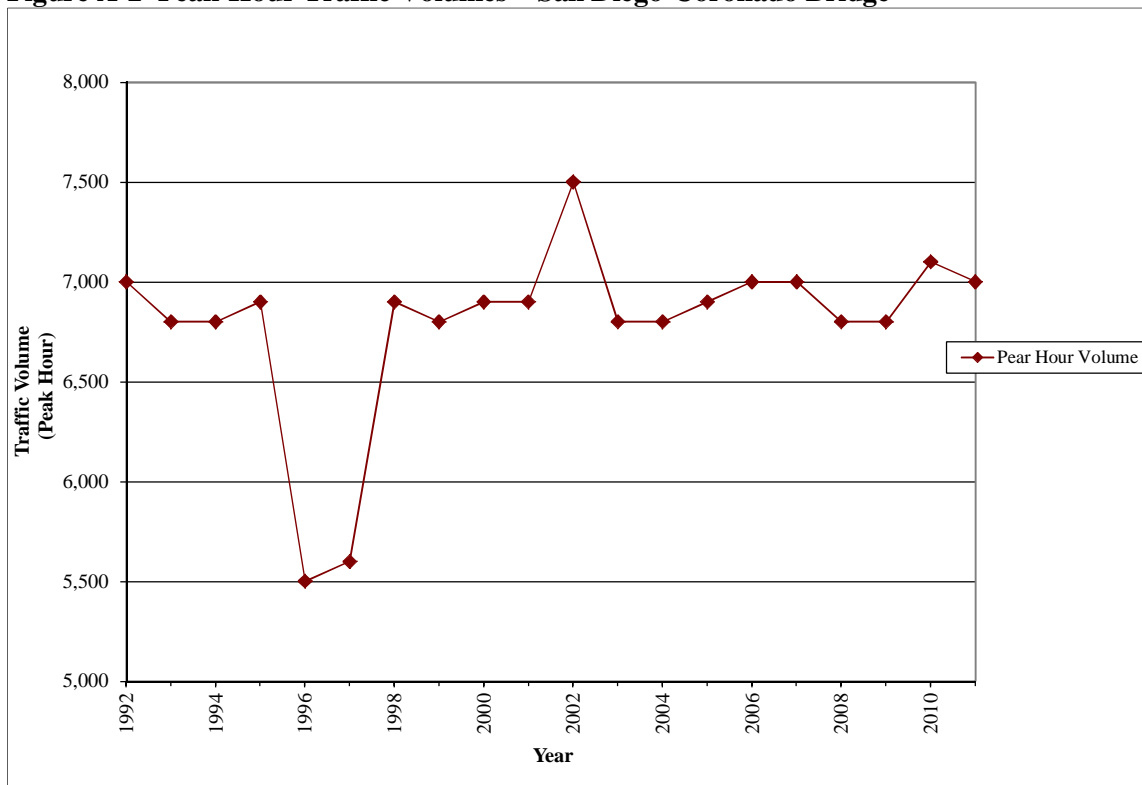
Figure A-3 illustrates the monthly AADT volumes at PM 22.261 along SR-75 (near I-5) along with the average of all months. Traffic data was obtained for the Year 2006. As shown in the figure, the average traffic volume for 2006 was approximately 73,600 vehicles. January resulted in the lowest daily traffic volumes with approximately 67,400 vehicles. July resulted in the highest daily traffic volumes with approximately 83,100 vehicles. Traffic volumes between the months of June and September were higher than the average. Although the data represents 2006, the monthly variation in traffic still applies today. The peaks in the summer account for tourism traffic and an increase in recreational activity trips.

Figure A-1 Daily Traffic Volumes – San Diego-Coronado Bridge



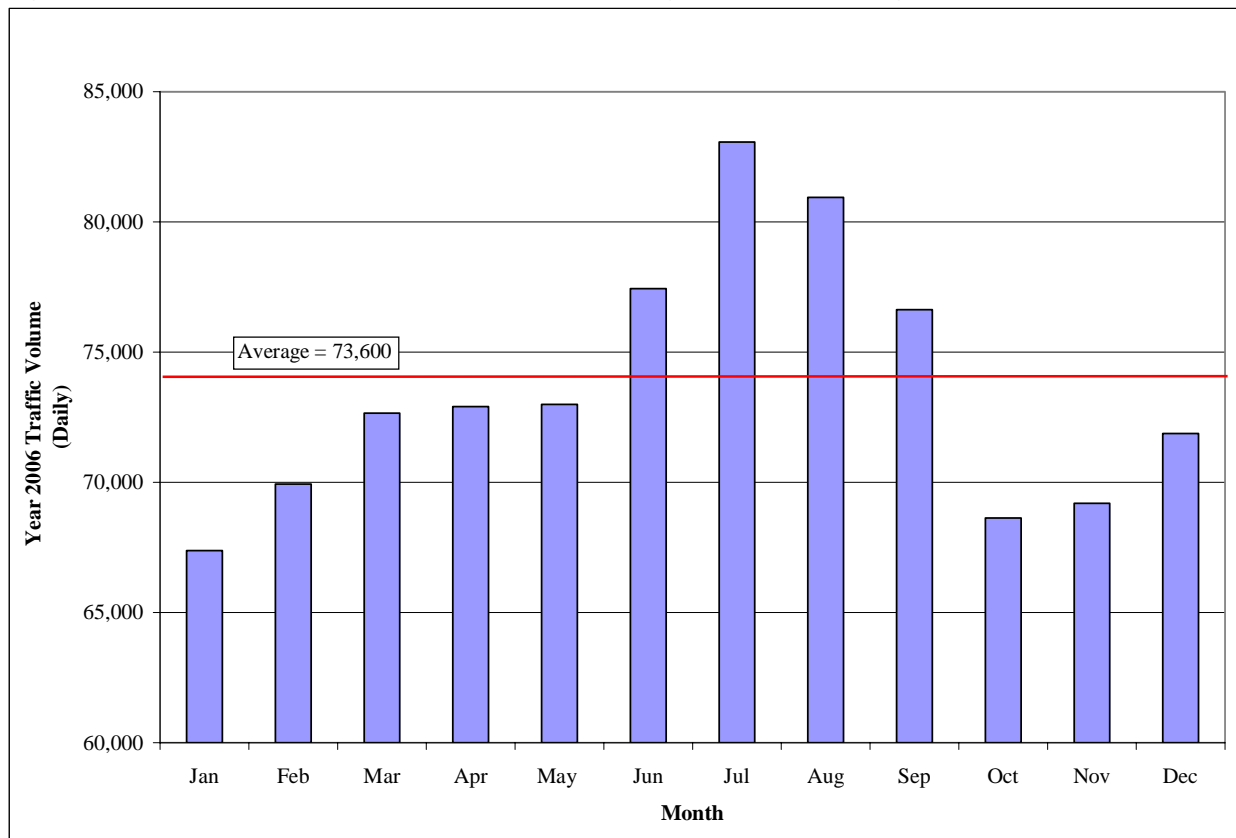
Source: Caltrans Traffic and Vehicle Data Systems Unit. Data represents peak month for each respective year.

Figure A-2 Peak-Hour Traffic Volumes – San Diego-Coronado Bridge



Source: Caltrans Traffic and Vehicle Data Systems Unit. Data represents peak month for each respective year.

Figure A-3 2006 Monthly Traffic Volumes – San Diego-Coronado Bridge



Source: Caltrans Traffic and Vehicle Data Systems Unit

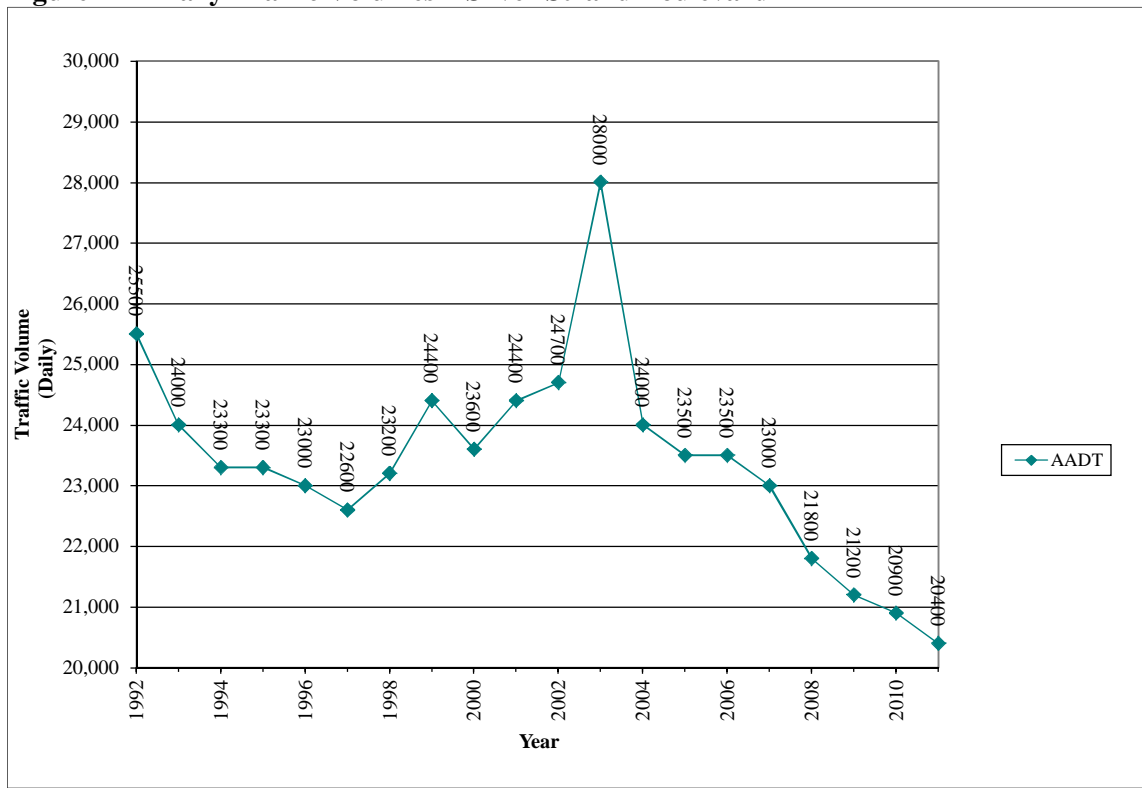
Silver Strand Boulevard

Figure A-4 illustrates the AADT volumes at PM 13.973 along SR-75 or Silver Strand Boulevard, which is located near the Silver Strand State Park entrance. As shown in the figure, traffic volumes generally ranged between 23,000 and 25,000 AADT between 1992 and 2006 with an outlier in 2003. From 1992 to 1997, the traffic data indicated a decreasing trend in traffic volumes. From 1997 to 2003, traffic volumes generally experienced an increasing trend. From 2004 to present, the traffic data shows a steady decreasing trend in volumes. In general, the traffic volumes experienced on Silver Strand Boulevard are approximately one-fourth of the volumes experienced on the San Diego-Coronado Bridge.

Figure A-5 illustrates the peak-hour volumes (for both directions) at PM 13.973 along SR-75 or Silver Strand Boulevard, which is located near the Silver Strand State Park entrance. As shown in the figure, traffic volumes generally ranged between 2,300 and 3,200 vehicles during the peak period. Similar to the AADT data, the peak-hour traffic data indicates a decreasing trend in traffic volumes from 1992 to 1997, then an increase trend until 2003, and then a steady decline in traffic volumes from 2003 to 2011.

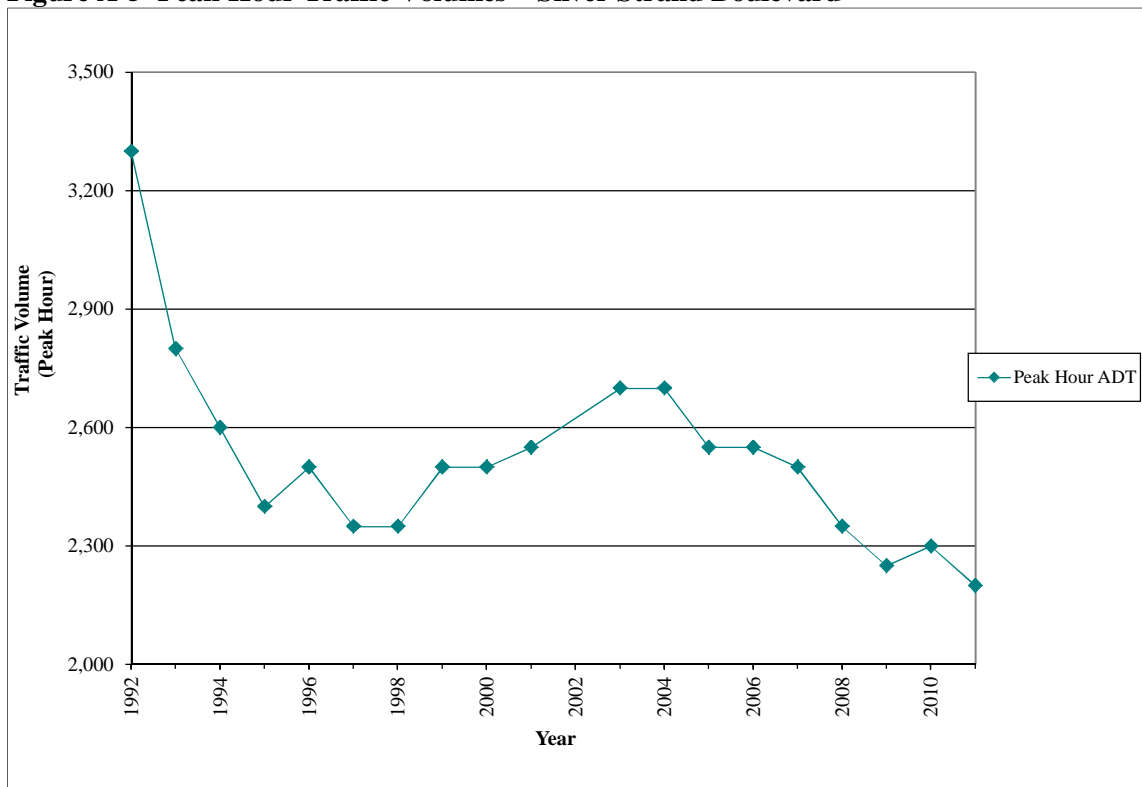
Figure A-6 illustrates the monthly AADT volumes at PM 10.990 along SR-75 (near Rainbow Boulevard, which is south of the Silver Strand State Park) along with the average of all months. Traffic data was obtained for the Year 2006. It should be noted that the traffic data was missing for the months of September and November. As shown in the figure, the average traffic volume for 2006 was approximately 19,700 vehicles. December resulted in the lowest daily traffic volumes with approximately 18,000 vehicles. July resulted in the highest daily traffic volumes with approximately 22,000 vehicles. Traffic volumes between the months of June and August were higher than the average. Although the data represents 2006, the monthly variation in traffic still applies today. The peaks in the summer account for tourism traffic and an increase in recreational activity trips.

Figure A-4 Daily Traffic Volumes – Silver Strand Boulevard



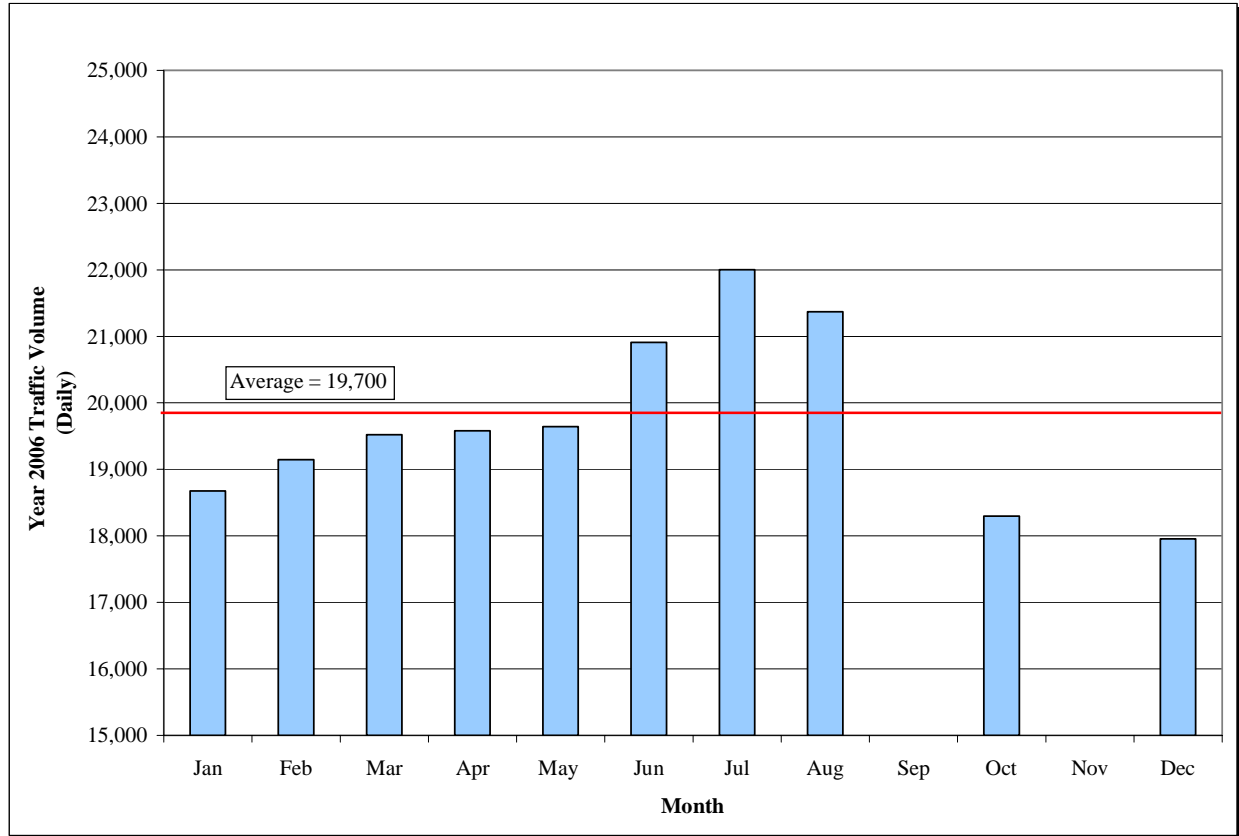
Source: Caltrans Traffic and Vehicle Data Systems Unit. Data represents peak month for each respective year.

Figure A-5 Peak-Hour Traffic Volumes – Silver Strand Boulevard



Source: Caltrans Traffic and Vehicle Data Systems Unit. Data represents peak month for each respective year.

Figure A-6 2006 Monthly Traffic Volumes – Silver Strand Boulevard

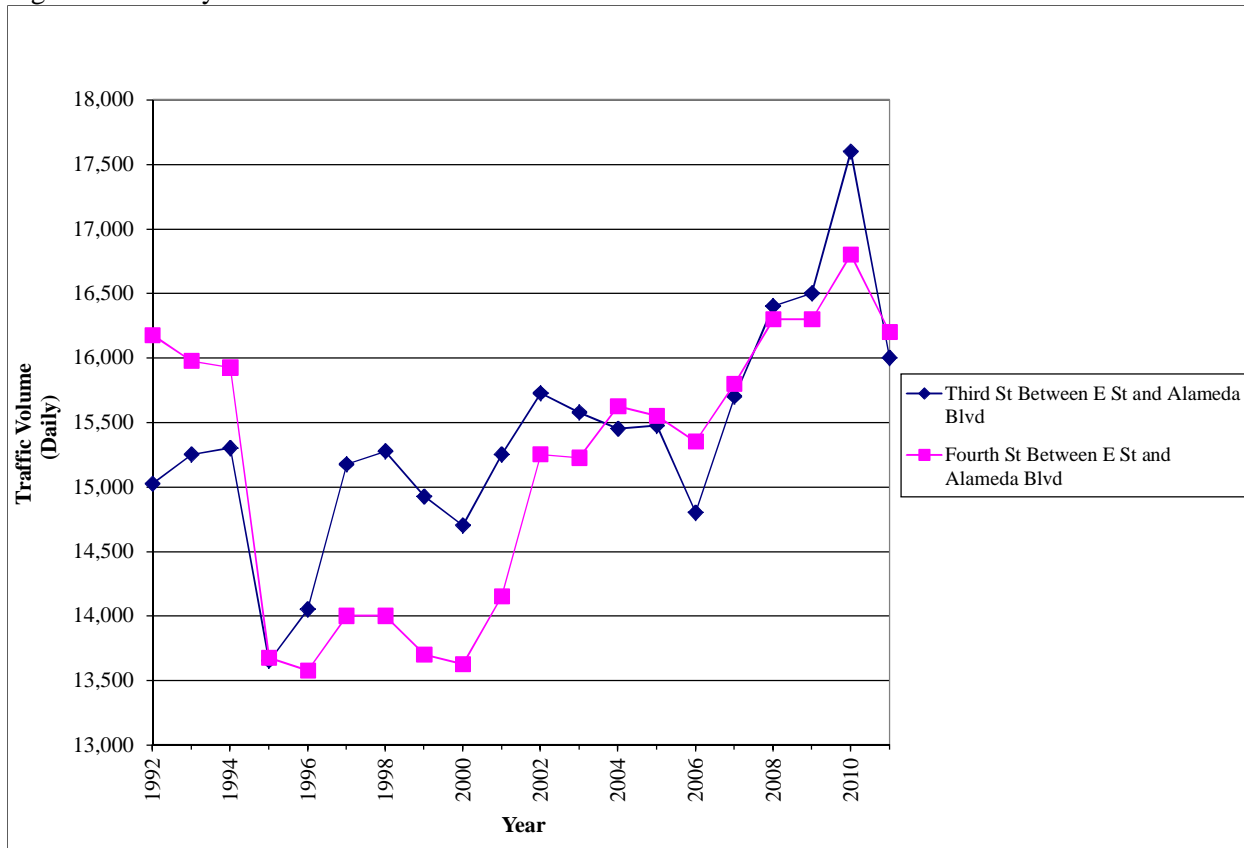


Source: Caltrans Traffic and Vehicle Data Systems Unit

SR-282 – Third Street/Fourth Street Couplet

Figure A-7 illustrates the averaged AADT volumes between PM 0.000 and 0.581 along SR-282, which represents portions of the Third Street/Fourth Street Couplet. Traffic data was averaged for four locations along the Third Street/Fourth Street couplet, which include E Avenue, H Avenue, J Avenue, and Alameda Boulevard. As shown in the figure, traffic volumes along Third Street and Fourth Street generally showed a decrease in traffic volumes from 1992 to 1995 and increasing traffic volumes from 2000 to 2010. Traffic volumes appear to have peaked in 2010 and declined in 2011. Traffic volumes on Third Street were higher than Fourth Street from 1995 until 2004, at which point volumes began to even out.

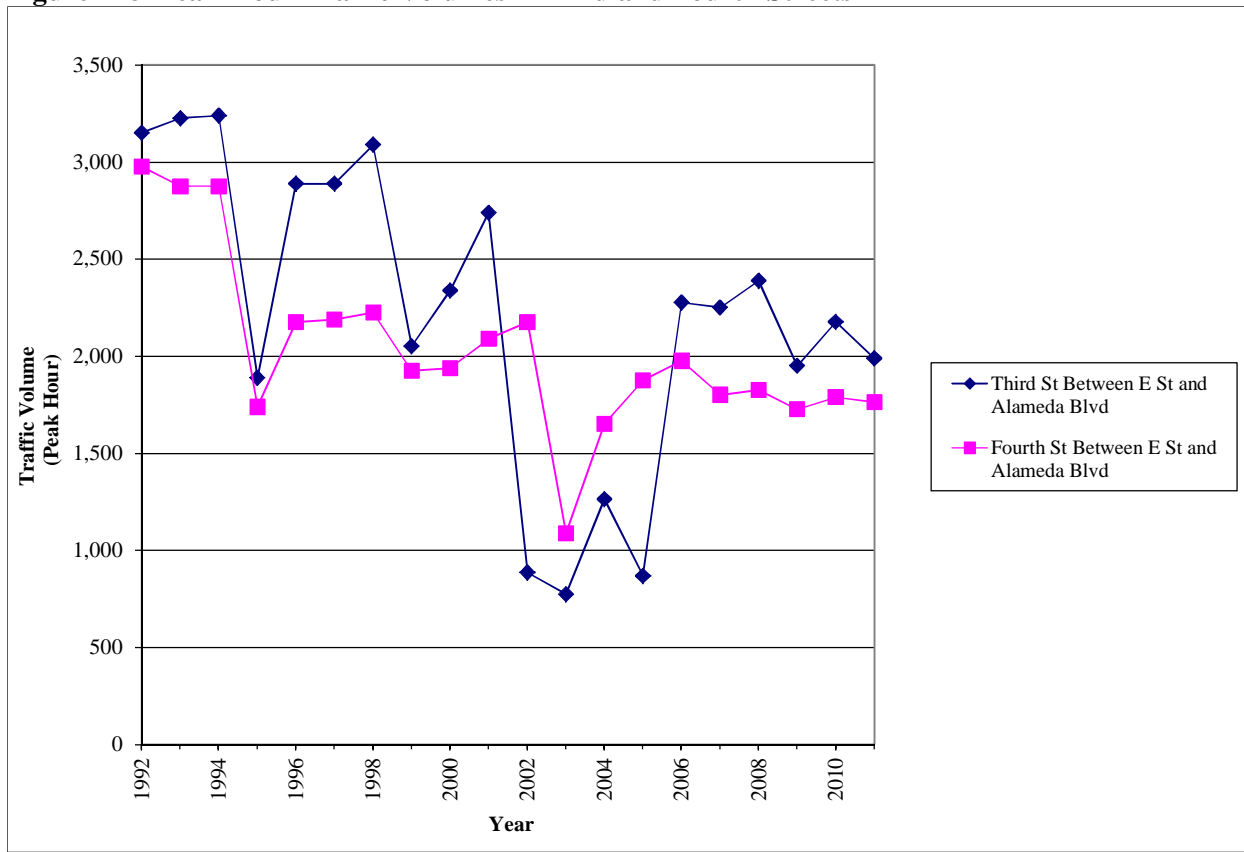
Figure A-7 Daily Traffic Volumes – Third and Fourth Streets



Source: Caltrans Traffic and Vehicle Data Systems Unit. Data represents peak month for each respective year.

Figure A-8 illustrates the peak-hour volumes between PM 0.000 and 0.581 along SR-282. As shown in the figure, traffic volumes along Third Street and Fourth Street generally trend a decrease in traffic volumes from 1992 to 2011. The peak hour volumes have fluctuated year-to-year over the past twenty years, especially on Third Street. Unlike the average daily traffic volumes along these segments, peak hour traffic volumes have stayed fairly consistent since 2006. The most recent data available shows traffic volumes along the Third Street/Fourth Street couplet during the peak period are approximately 2,000 vehicles.

Figure A-8 Peak-Hour Traffic Volumes – Third and Fourth Streets

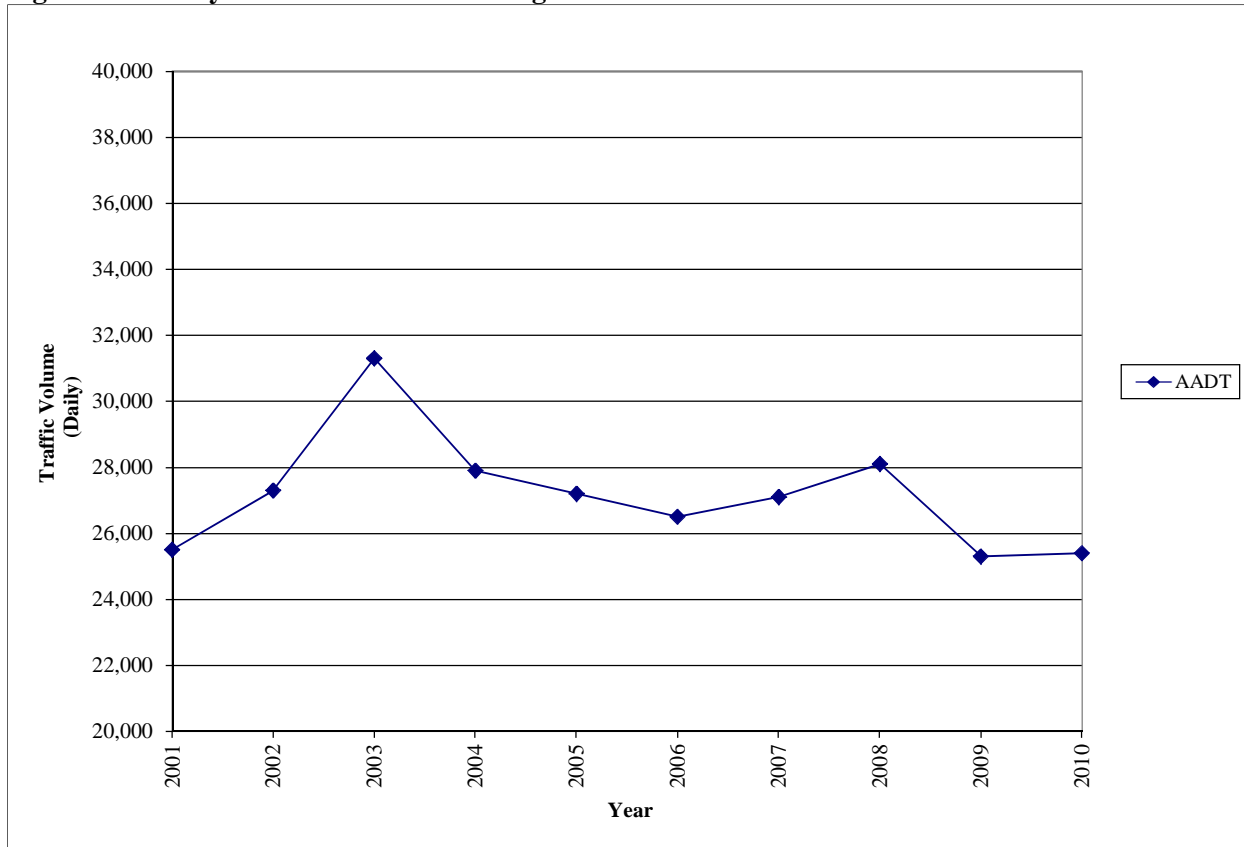


Source: Caltrans Traffic and Vehicle Data Systems Unit. Data represents peak month for each respective year.

Orange Avenue

Figure A-9 illustrates the averaged AADT volumes between PM 18.470 and 19.696 along Orange Avenue. Traffic data was averaged for six locations along Orange Avenue, which include Third Street, Fourth Street, Sixth Street, Eighth Street, Ninth Street, Tenth Street, and Pomona Avenue. As shown in the figure, traffic volumes peaked in 2003 with approximately 32,000 daily vehicles before dropping back down to 26,500 in 2006. Volumes increased to a secondary peak of about 28,000 in 2008 and then decreased and leveled off at just under 26,000 vehicles in current years.

Figure A-9 Daily Traffic Volumes – Orange Avenue



Source: Caltrans Traffic and Vehicle Data Systems Unit. Data represents peak month for each respective year.

Historical Coronado Roadway Segment Data

Table A-1 summarizes the traffic counts performed in nine different traffic studies performed between 1986 and 2007 that included roadway segment counts at various locations throughout Coronado. As shown in the table, traffic has generally shown some small increases since 1995. It should be noted that roadway counts can vary depending on the exact location of the count, day of count, time of year, and variations in activity such as CVNs. Some key notes from the data are:

- Although limited data is available from 1986, it is shown that volumes on the San Diego-Coronado Bridge have increased significantly while volumes on Silver Strand Boulevard south of NAB have had more modest increases. This is consistent with the idea that removal of the tolls on the San Diego-Coronado Bridge, first eastbound in 1986 and then westbound in 2002, lead to a direct increase in traffic volumes.
- Volumes along Third Street, Fourth Street, and Orange Avenue have remained fairly constant over the past ten years. First Street and Second Street both had noticeable increases in traffic in the early 2000s.
- Alameda Boulevard had a reduction in traffic with the reconfiguration of the main entry control point at NASNI. It should be noted that the counts in the table represent varying CVNs in port which accounts for some of the discrepancy in volumes.

Table A-1 Historical Data for Roadway Segments

ROADWAY SEGMENT	SAN DIEGO-CORONADO BRIDGE REPORT (1986) (a)	FIRST CVN EIS (1995) (b)	THIRD STREET GATE TIA (1997) (c)	SECOND CVN EIS (1999) (d)	TOLL REMOVAL EIS (2001) (e)	SR-75 CONCEPT REPORT (2003) (f)	CITY-WIDE TRAFFIC STUDY (2005) (g)	SR 75/282 CORRIDOR PROJECT (2007) (g)	CVN SEIS TRAFFIC STUDY (2007) (h)
Glorietta Blvd									
Second St to Third St			5,000		4,600		4,870	4,870	
First St									
Alameda Blvd to J Ave		3,950	3,660	6,300	7,600		6,702	6,702	5,833
Orange Ave to C Ave					7,500		9,554	9,554	
Second St									
Orange Ave to C Ave					5,900		8,320	8,320	
Third St (SR-75/SR-282)									
Alameda Blvd to J Ave		12,830	16,370	16,400	18,000		16,330	16,330	15,577
D Ave to Orange Ave		19,710	18,230	18,200			17,360	17,360	16,605
Orange Ave to C Ave		29,200	27,000	26,600	35,100		38,980	38,980	35,960
SR-75									
San Diego-Coronado Bridge	49,000		79,980	71,000	75,700	76,500			85,092
Glorietta Blvd to B Ave						71,000	67,066	67,066	
Fourth St (SR-75/SR-282)									
Alameda Blvd to J Ave		14,910	17,370	17,400	18,000		14,894	14,894	13,774
D Ave to Orange Ave		16,030	18,220	18,200			18,274	18,274	15,029
Orange Ave to C Ave		24,000	33,000	33,500	35,100		32,750	32,750	28,877
Ocean Blvd									
Marina Ave to G Ave		7,820	7,800				6,915	6,915	7,601
Flora Ave to Loma Ave		11,140	11,100				11,360	11,360	10,277
Notes: (a) Taken from the <i>San Diego-Coronado Bridge Report to the California Transportation Commission</i> , dated June 1986. Counts were calculated using Caltrans data. (b) Taken from <i>Final Environmental Impact Statement for the Development of Facilities in San Diego/Coronado to Support the Homeporting of One NIMITZ Class Aircraft Carrier</i> , dated November 1995. Counts were calculated using inputs from the City of Coronado, and Caltrans. (c) Taken from the <i>Final Traffic Impact Analysis NASNI Third Street Gate Coronado, California</i> , dated February 1997. Counts for the state roads were calculated using Caltrans data. Other counts were collected, August 1996, with two CVN's in port. (d) Taken from the <i>Final Environment Impact Statement for Developing Home Port Facilities for Three NIMITZ-Class Aircraft Carriers in Support of the U.S. Pacific Fleet</i> , dated July 1999. Counts were calculated in 1998 using inputs from Caltrans, SANDAG, and the City of Coronado. (e) Taken from the <i>Final Environmental Impact Report (FEIR) for the San Diego-Coronado Bridge Toll Removal</i> , dated October 2001. Counts were collected in 2000, with two CVN's in port. (f) Taken from the <i>SR-75 Transportation Concept Report</i> , dated January 2004. Counts were calculated using Caltrans data. (g) Taken from the <i>Coronado City-Wide Major Traffic Study</i> , dated March 2005. Counts were collected July-August 2003, with two CVN's in port. (h) Taken from traffic counts provided by National Data & Surveying Services, dated July 2007. One CVN was in port at the time the counts were collected.									

Table A-1 Historical Data for Roadway Segments (cont.)

ROADWAY SEGMENT	SAN DIEGO-CORONADO BRIDGE REPORT (1986) (a)	FIRST CVN EIS (1995) (b)	THIRD STREET GATE TIA (1997) (c)	SECOND CVN EIS (1999) (d)	TOLL REMOVAL EIS (2001) (e)	SR-75 CONCEPT REPORT (2003) (f)	CITY-WIDE TRAFFIC STUDY (2005) (g)	SR 75/282 CORRIDOR PROJECT (2007) (g)	CVN SEIS TRAFFIC STUDY (2007) (h)
Alameda Blvd									
First St to Third St		3,940	3,660	3,940	8,200				3,650
Third St to Fourth St		20,700	17,620	20,000	17,500		16,527	16,527	4,542
Fourth St to Fifth St		9,490	9,340	9,490			9,657	9,657	7,812
Eighth St to Ninth St		4,650		4,650			6,589	6,589	5,390
Orange Ave (SR-75)									
Second St to Third St		11,020	10,300	11,020	11,100		17,253	17,253	10,755
Third St to Fourth St		30,900		30,000	30,800		37,104	37,104	22,764
Fourth St to Fifth St		31,390	28,530		29,900	28,500	32,623	32,623	30,819
Sixth St to Seventh St				35,500	27,800	28,500	33,261	33,261	32,064
Eighth St to Ninth St				28,500	26,500		32,955	32,955	32,064
Loma Ave to C Ave		27,800				25,200	27,153	27,153	27,913
Glorietta Blvd to Pomona Ave	26,500			31,000	25,300	25,200	35,526	35,526	34,620
Silver Strand Blvd (SR-75)									
Avenida del Sol to Avenida de las Arenas		31,000		38,000	35,200		38,558	38,558	38,573
South of Tarawa Rd	23,400				25,300	25,700			29,847
B Ave									
Second St to Third St					5,900		1,149	1,149	
Pomona Ave									
Fourth St to Fifth St					11,100		3,942	3,942	6,107
Seventh St to Eighth St					11,100		7,451	7,451	6,107
Glorietta Blvd to Ynez Pl					13,800		10,717	10,717	12,786
<p>Notes:</p> <p>(a) Taken from the <i>San Diego-Coronado Bridge Report to the California Transportation Commission</i>, dated June 1986. Counts were calculated using Caltrans data.</p> <p>(b) Taken from <i>Final Environmental Impact Statement for the Development of Facilities in San Diego/Coronado to Support the Homeporting of One NIMITZ Class Aircraft Carrier</i>, dated November 1995.</p> <p>(c) Taken from the <i>Final Traffic Impact Analysis NASNI Third Street Gate Coronado, California</i>, dated February 1997. Counts for the state roads were calculated using Caltrans data. Other counts were collected, August 1996, with two CVN's in port.</p> <p>(d) Taken from the <i>Final Environment Impact Statement for Developing Home Port Facilities for Three NIMITZ-Class Aircraft Carriers in Support of the U.S. Pacific Fleet</i>, dated July 1999. Counts were calculated in 1998 using inputs from Caltrans, SANDAG, and the City of Coronado.</p> <p>(e) Taken from the <i>Final Environmental Impact Report (FEIR) for the San Diego-Coronado Bridge Toll Removal</i>, dated October 2001. Counts were collected in 2000, with two CVN's in port.</p> <p>(f) Taken from the <i>SR-75 Transportation Concept Report</i>, dated January 2004. Counts were calculated using Caltrans data.</p> <p>(g) Taken from the <i>Coronado City-Wide Major Traffic Study</i>, dated March 2005. Counts were collected July-August 2003, with two CVN's in port.</p> <p>(h) Taken from traffic counts provided by National Data & Surveying Services, dated July 2007. One CVN was in port at the time the counts were collected.</p>									

Historical Coronado Intersection Operations Data

Table A-2 summarizes the analyses performed in six different traffic studies conducted between 1995 and 2007 at several intersections within the City of Coronado. As shown in the table, intersection analyses have generally provided similar LOS for the studies conducted between 1995 and 2005. Many of the intersections reported at LOS E or F in 2005 were performing similarly in 1995 and 1997. Improvements to a few intersections along Alameda Boulevard were documented in 2007, as well as a decrease in operations at R.H. Dana place and Orange Avenue.

Like roadways segments, intersection turning movement counts can vary depending on the exact location of the count, day of count, and time of year. Also, the HCM methodology for intersection analysis was modified with the HCM update in 1997, changing to report a different kind of delay then before. There continues to be small updates to methodology with every updated version of the HCM.

Table A-2 Historical Data for Intersection LOS

INTERSECTION	PEAK HOUR	FIRST CVN EIS (1995) (a)	THIRD STREET GATE TIA (1997) (b)	SECOND CVN EIS (1999) (c)	TOLL REMOVAL EIS (2001) (d)	CITY-WIDE TRAFFIC STUDY (2005) (e)	CVN SEIS TRAFFIC STUDY (2007) (f)
First St & Alameda Blvd	AM	C			NC	F	F
	PM	C			C	F	D
First St & Orange Ave	AM	B	B	B	C	A	A
	PM	B	B	B	B	A	C
Third St & Alameda Blvd	AM	F	F	D	NC	F	B
	PM	F	F	C	NC	F	F
Third St & H Ave	AM		F			F	
	PM		C			C	
Third St & Orange Ave	AM	E	D	D	E	C	C
	PM	C	C	C	D	C	C
Third St & C Ave	AM		F			C	
	PM		F			F	
Third St & B Ave	AM		F			F	
	PM		F			F	
Fourth St & Alameda Blvd	AM	E	D	D	D	B	A
	PM	E	D	D	NC	E	C
Fourth St & H Ave	AM		B			B	
	PM		F			F	
Fourth St & Orange Ave	AM	C	C	C	C	B	B
	PM	E	F	F	F	E	E
Fourth St & C Ave	AM		E			C	
	PM		F			F	
Fourth St & B Ave	AM		F			C	
	PM		F			F	
Fourth St & Pomona Ave	AM		B			C	C
	PM		F			F	F
Fourth St & Glorietta Blvd	AM		D			E	F
	PM		F			C	C
Sixth St & Orange Ave	AM		D		C	A	A
	PM		D		B	A	B
R.H. Dana Pl & Orange Ave	AM	D		D	C	C	F
	PM	D		D	C	C	D
Pomona Ave & Silver Strand Blvd	AM				B	A	C
	PM				B	B	C
Tarawa Rd & Silver Strand Blvd	AM				F	E	F
	PM				F	E	F

Notes:
Bold values indicate intersections operating at LOS E or F.
NC = not calculable. Study reports that LOS is not calculable but the intersection should be operating acceptably.
(a) Taken from *Final Environmental Impact Statement for the Development of Facilities in San Diego/Coronado to Support the Homeporting of One NIMITZ Class Aircraft Carrier*, dated November 1995. Counts were collected in 1992 & 1993, with two CVN's in port.
(b) Taken from the *Final Traffic Impact Analysis NASNI Third Street Gate Coronado, California*, dated February 1997. Counts were collected August 1996, with two CVN's in port.
(c) Taken from the *Final Environment Impact Statement for Developing Home Port Facilities for Three NIMITZ-Class Aircraft Carriers in Support of the U.S. Pacific Fleet*, dated July 1999. Counts were calculated in 1998 using inputs from Caltrans, SANDAG, and the City of Coronado.
(d) Taken from the *Final Environmental Impact Report for the San Diego-Coronado Bridge Toll Removal*, dated October 2001. Counts were collected in 2000, with two CVN's in port.
(e) Taken from the *Coronado City-Wide Major Traffic Study*, dated March 2005. Counts were collected July - August 2003, with two CVN's in port.
(f) Taken from the *Supplemental Environmental Impact Statement for Developing Home Port Facilities for Three NIMITZ-Class Aircraft Carriers in Support of the U.S. Pacific Fleet*, dated May 2008. Counts were collected July 2007, with one CVN in port.

Blank cells indicate that intersections were not studied for the respective report.

NASNI Traffic

Table A-3 summarizes the historical trends for entering traffic at the NASNI gates from 1983 to 2007. A reconfiguration of the Main gate was performed between 2005 and 2007. As shown in the table, there are considerable variations in traffic entering NASNI in each respective year. For the traffic data between 1983 and 2005, the Main Gate at Fourth Street resulted in approximately 50 percent of the inbound traffic to NASNI. The First Street Gate resulted in approximately 25 percent of the inbound traffic and the Second Street and Ocean Boulevard Gates resulted in the remaining 25 percent of the inbound traffic. It should be noted that the data collected in 2002 had one, two, and three carriers in port. The increase in entering traffic with each additional carrier in port was approximately 2,350 ADT. Assuming that the exiting traffic was the same as the entering traffic, this resulted in 4,700 ADT ($2,350 \times 2$) for the total traffic entering and exiting NASNI, which correlates to the trip generation of a carrier in port. After the gate reconfiguration, traffic counts from 2007 indicate approximately 75 percent of the traffic enter NASNI at the Main Gate at Third Street. The First Street and Ocean Boulevard Gates resulted in the remaining 25 percent of the inbound traffic with the First Street Gate receiving a slightly higher amount of traffic. The traffic entering NASNI was approximately 20,000 ADT, which is generally consistent with the data collected in May 2002 with one carrier in port.

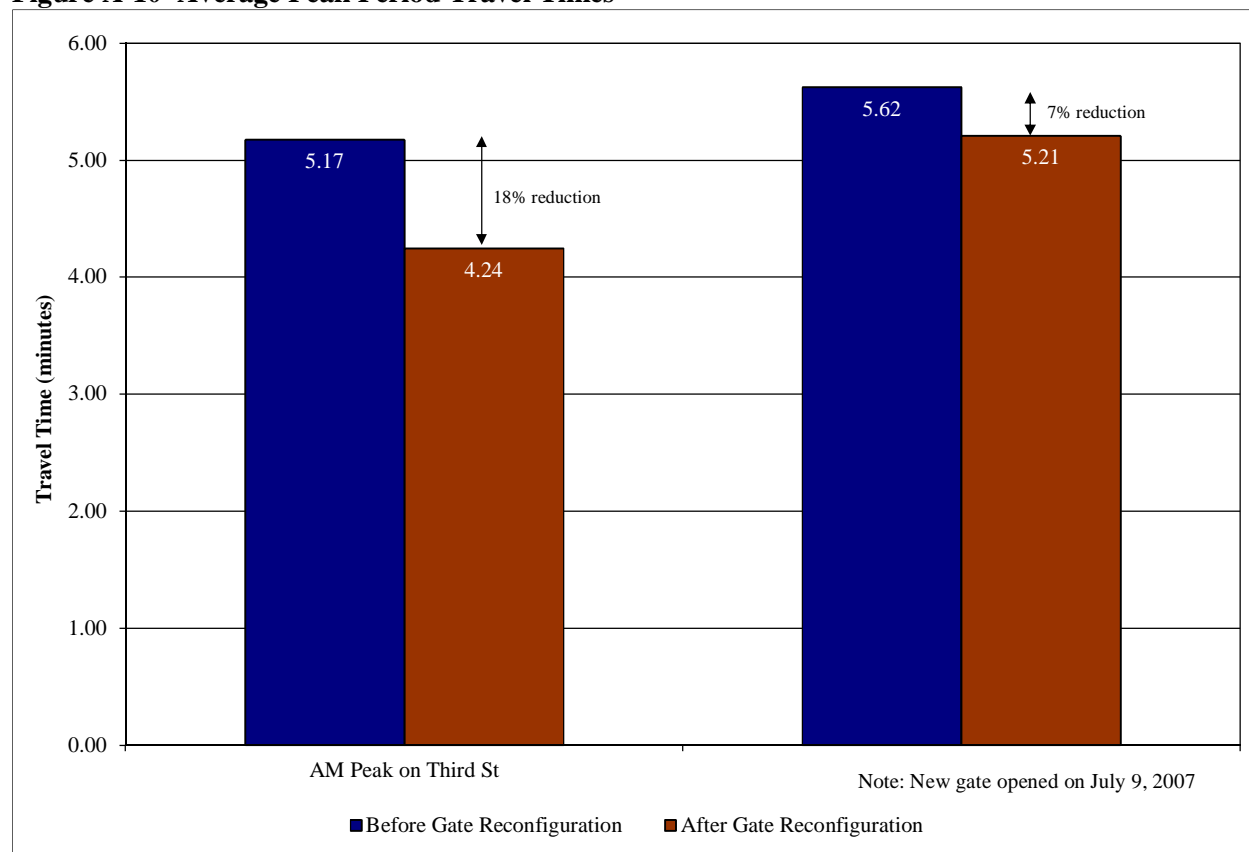
Table A-3 Historical Count Data for Entering Traffic at NASNI

GATE	INBOUND ADT											
	1983 (d)	Jul 1988 (d)	Feb 1989 (d)	Jan 1990 (d)	Jul 1993 (d)	Aug 1995 (d)	Feb 1999 (d)	May 2002 (a)	May 2002 (b)	Aug 2002 (c)	Nov 2005 (d)	Jul 2007 (a)
First St (Gate 2)	4,600	6,553	7,432	5,220	3,480	5,100	3,481	3,961	5,332	7,133	7,143	3,350
Second St (Gate 3)	2,250	6,777	6,396	2,845	2,499	2,000	4,924	--	--	--	--	--
Fourth St (Main Gate)	15,800	11,787	14,315	9,134	7,485	10,347	13,482	15,170	16,149	15,208	14,049	14,234
Ocean Blvd (Gate 5)	3,150	2,385	2,846	465	2,494	1,675	681	--	--	1,507	--	2,424
Total Inbound	25,800	27,502	30,989	17,664	15,958	19,122	22,568	19,131	21,481	23,848	21,192	20,008
<p>Notes:</p> <p>(a) Counts were performed with one carrier in port.</p> <p>(b) Counts were performed with two carriers in port.</p> <p>(c) Counts were performed with three carriers in port.</p> <p>(d) Counts were performed with an unknown amount of carriers in port.</p> <p>1983 counts taken from the <i>Traffic Engineering-Planning Study</i>, dated May, 1983.</p> <p>1988 through 1993 counts taken from the <i>Final Environmental Impact Statement for the Development of Facilities in San Diego/Coronado to Support the Homeporting of One NIMITZ Class Aircraft Carrier</i>, dated November 1995. Counts were provided by the NASNI Security Department in 1994.</p> <p>1995 and 1999 counts taken from NASNI information compiled in June 2000 and provided to Kimley-Horn and Associates in July 2007.</p> <p>2002 counts taken from NASNI studies associated with an Environmental Impact Statement Record of Decision, which indicated that traffic would be monitored with one, two, and three carriers in port.</p> <p>2005 counts taken from the Third Street Gate Signal Warrant Study. Counts were collected in November 2005.</p> <p>July 2007 counts taken between July 22, 2007 and July 28, 2007 by National Data & Surveying Services.</p>												

Travel Times between NASNI and San Diego-Coronado Bridge

Figure A-10 illustrates the average travel times between the San Diego-Coronado Bridge and the NASNI gates during the peak periods. Travel time runs during the morning and afternoon peak periods were conducted by Navy staff between the toll booths at the San Diego-Coronado Bridge and the entrance to NASNI. The travel times during the morning peak represent the time it takes a vehicle to get from the toll booth at the San Diego-Coronado Bridge to the NASNI gates. In the afternoon peak, the travel time represents the time a vehicle takes to get from the NASNI gate to the toll booth at the San Diego-Coronado Bridge. A minimum of seven travel time runs in each direction were made during the peak periods. Data was collected from June 5, 2007 to July 6, 2007 for the travel time runs with the entrance to NASNI located at Fourth Street, prior to the reconfiguration. Data was collected from July 10, 2007 to August 23, 2007 for the travel time runs with the modified entrance to NASNI at Third Street.

Figure A-10 Average Peak Period Travel Times

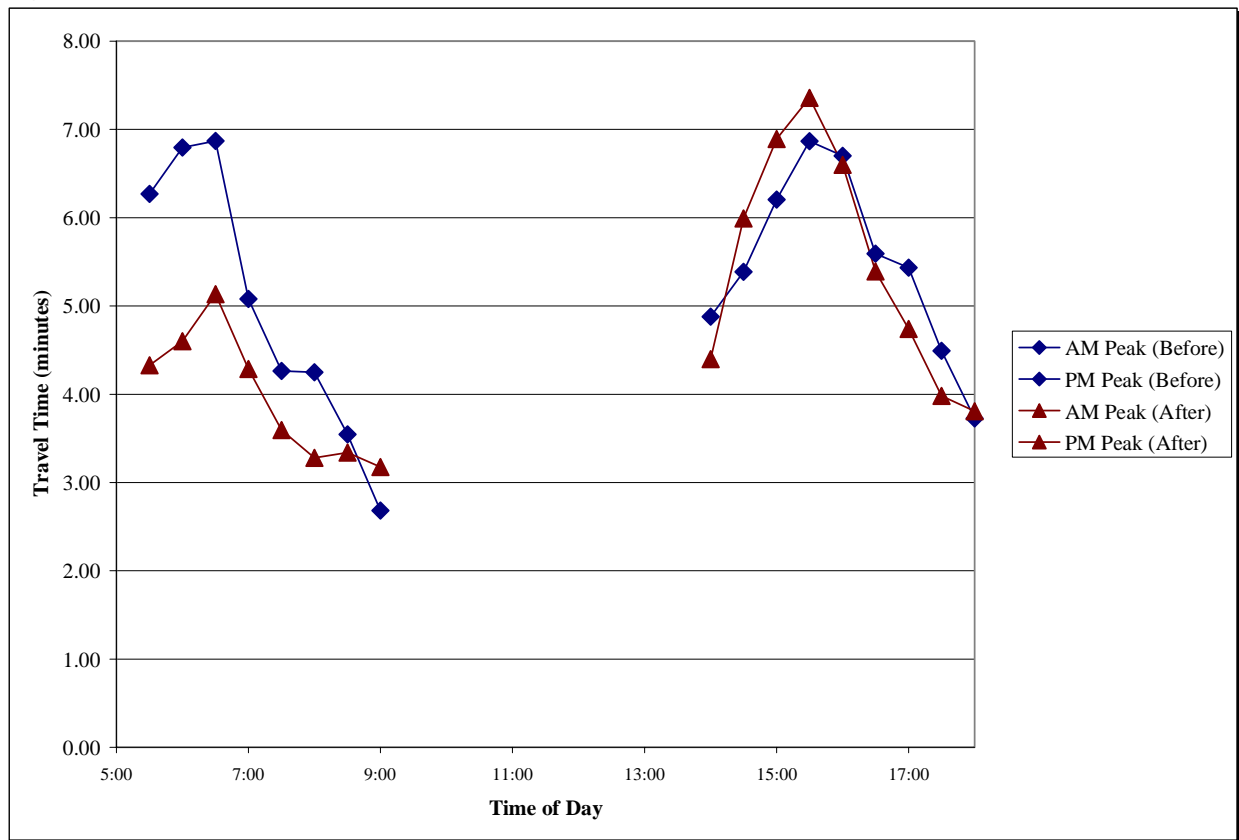


Source: Department of Navy

As shown in the figure, there was an immediate travel time savings with the new gate on Third Street. During the morning peak, a commuter would experience a travel time savings of 18 percent, equal to about one minute. During the afternoon peak, a commuter would experience a travel time savings of seven percent, or just under thirty seconds. The morning peak experiences the most benefits from the new gate configuration since inbound traffic no longer needs to use Alameda Boulevard to enter the base.

Figure A-11 illustrates the average travel times between the San Diego-Coronado Bridge and the NASNI gates during the peak periods in 30-minute increments. The same data collected for Figure B-10 was used in this analysis.

Figure A-11 Incremental Peak Period Travel Times



Source: Department of Navy

As shown in the figure, the peak travel times occurred around 6:30 a.m. for entering vehicles and around 2:30 p.m. for exiting vehicles. With the reconfigured gate, the travel times during the morning peak period decreased significantly. During the afternoon peak the travel times for certain time periods increase, but the average travel time during the entire peak period decreases.

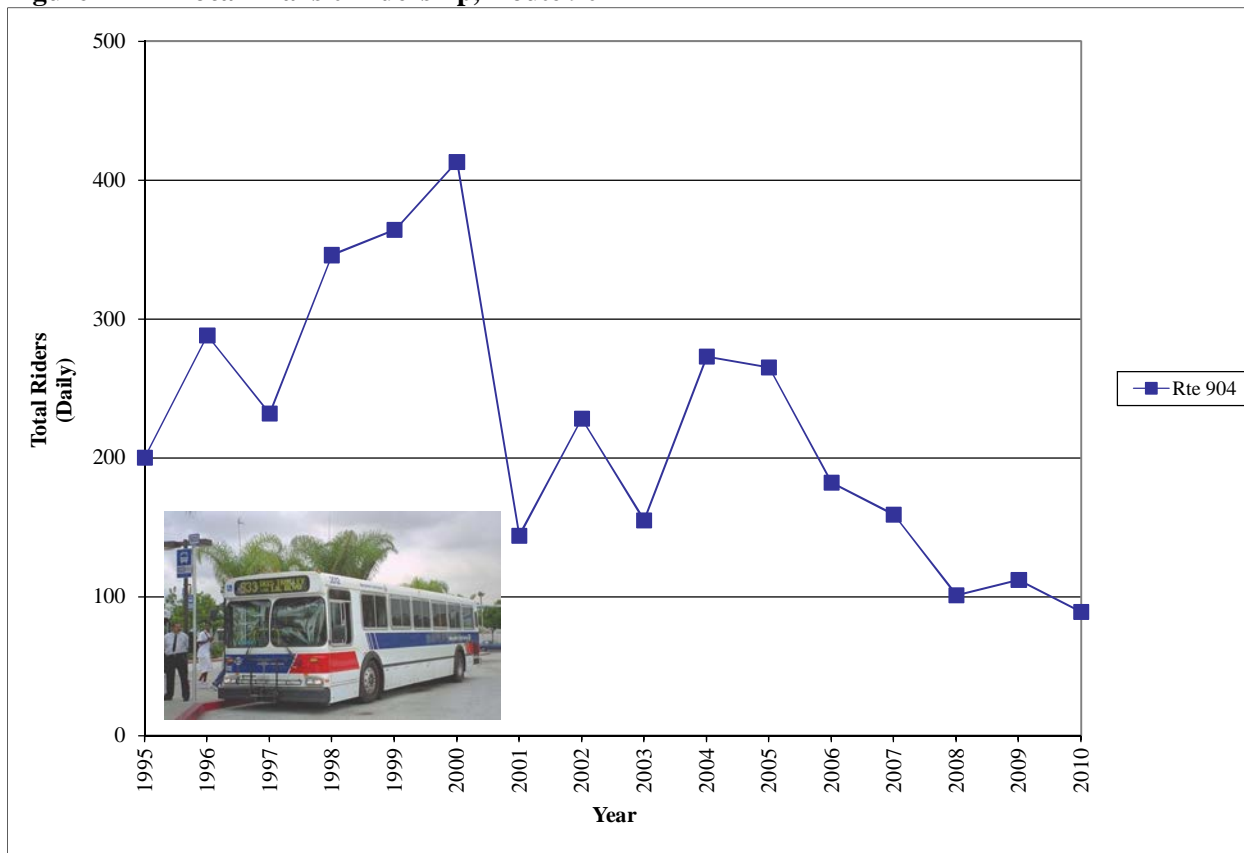
Transit Ridership

Historical transit ridership for the following routes serving the City of Coronado has been compiled from MTS data and captures ridership from 1995 to 2010:

- Route 901: Provides regional service between the cities of Imperial Beach, Coronado, and San Diego. Service is provided to NASNI at a bus stop located near the Third Street/I Avenue intersection.
- Route 904: Provides local service between the Coronado Island Marriot Resort and the City Hall with stops at the Ferry Landing and Hotel del Coronado.

Figure A-12 illustrates the local transit ridership data for Route 904. As shown in the figure, the ridership level fluctuates on a yearly basis. Route 904 ridership generally increased from 1995 to 2000, with a large decline in ridership from the Year 2000 to 2001. Ridership experienced a moderate increase in 2004 and then a steady decline from 2004 to present. The daily ridership totals range between just under 100 to just over 400 riders.

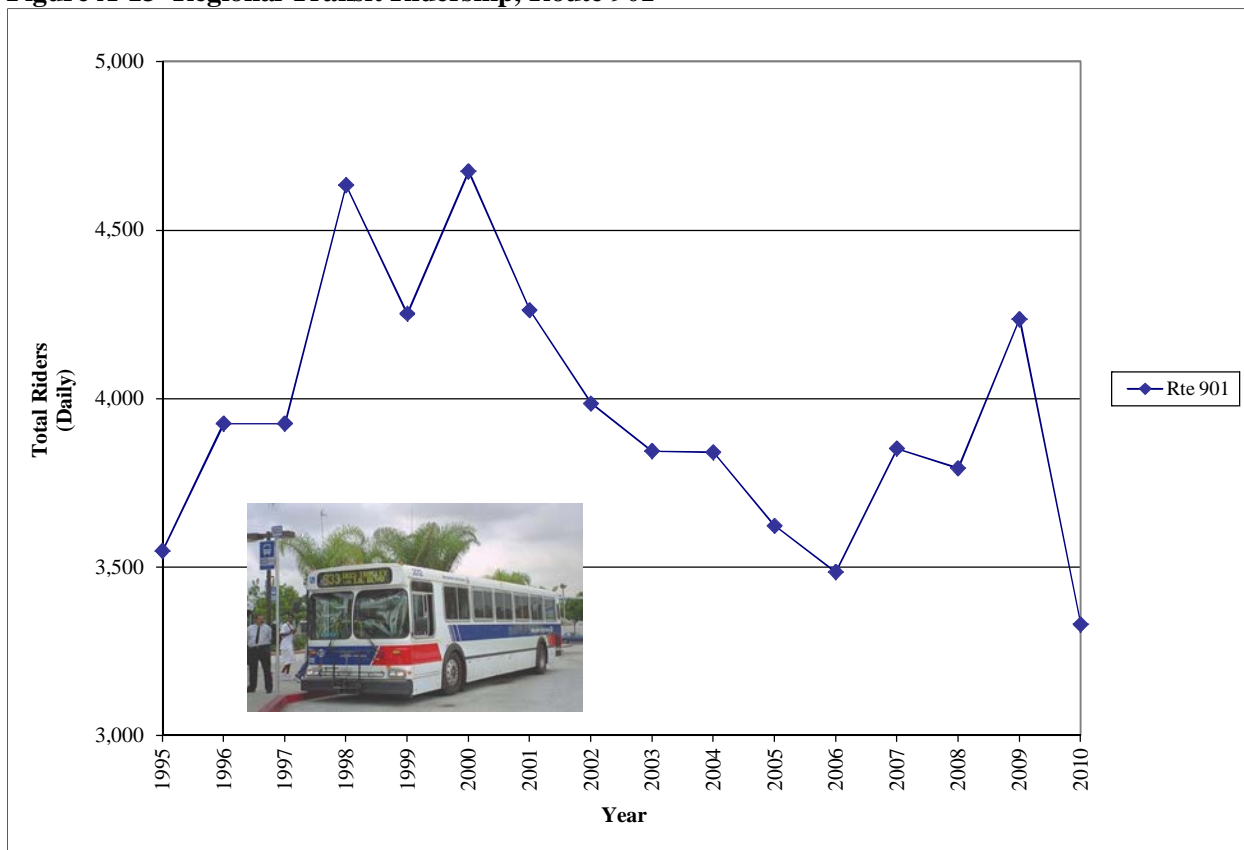
Figure A-12 Local Transit Ridership, Route 904



Source: Caltrans Traffic and Vehicle Data Systems Unit. Data represents peak month for each respective year.

Figure A-13 illustrates the regional transit ridership data for Route 901. As shown in the figure, the ridership level fluctuates on a yearly basis. From 1995 to 1998 Route 901 ridership generally increased; from 2000 to 2006 ridership generally declined. Between 2006 and 2009 ridership experienced another general increase, but from 2009 to 2010 Route 901 ridership had a sharp decline. Currently, the average ridership is approximately 3,500 on a daily basis. The peak ridership occurred in 2000 with approximately 4,700 daily riders. The large decrease after the year 2000 could have been caused by the tolls being removed in 2002 and more civilians working at NASNI have decided to drive to/from work instead of riding transit. In addition, bus ridership could have decreased due to heightened security after the 9/11 tragedy. The moderate increase in transit ridership could correspond to the recent collapse in the economy, with the large decrease in ridership from 2009 to 2010 possibly reflecting early economic recovery and increased driving.

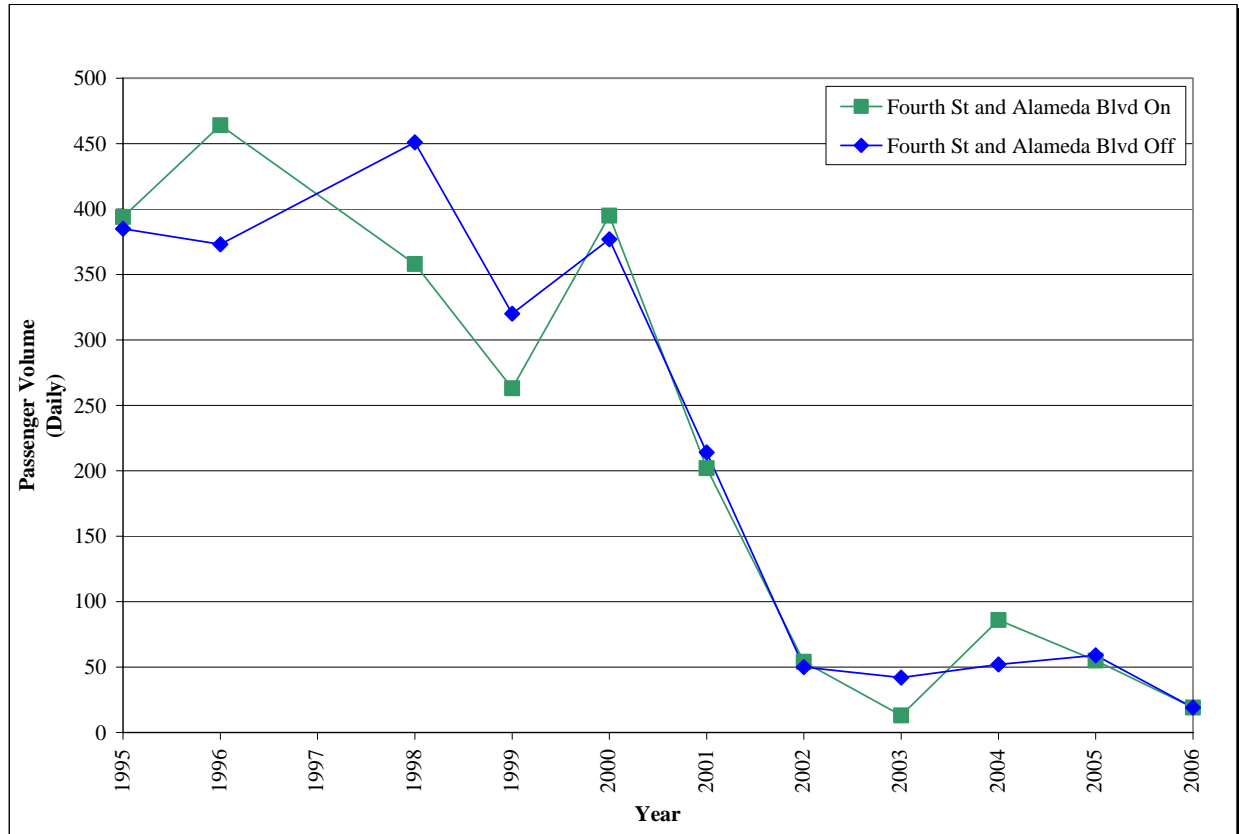
Figure A-13 Regional Transit Ridership, Route 901



Source: Caltrans Traffic and Vehicle Data Systems Unit. Data represents peak month for each respective year.

Figure A-14 illustrates historical boarding and alighting at the NASNI bus stop near the intersection of Fourth Street/Alameda Boulevard for Route 901. The data represents 1995 to 2006, when Route 901 dropped the Fourth Street and Alameda Boulevard stop in 2006. As shown in the figure, the number of boarding and alighting at the NASNI bus stop prior to 2001 ranged between 250 and 450 passengers per day. However, between 2001 and 2002, the number of boarding and alighting significantly decreased to approximately 50 passengers per day and remained at that level through 2006. The large decrease could have been caused by the tolls being removed in 2002 and more civilians working at NASNI has decided to drive and/or vanpool to/from work instead of riding transit.

Figure A-14 Route 901 Boarding and Alighting Near NASNI

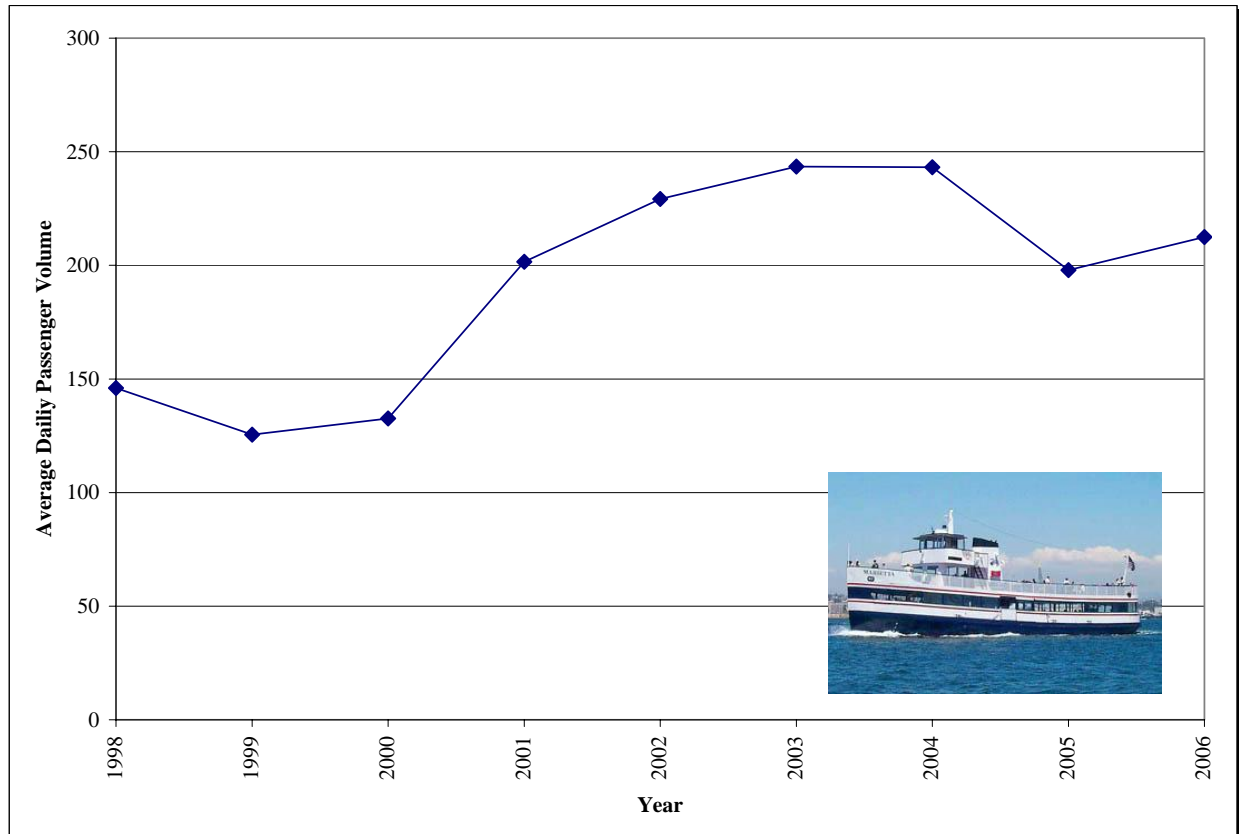


Source: Caltrans Traffic and Vehicle Data Systems Unit. Data represents peak month for each respective year.

Ferry Ridership

Figure A-15 illustrates the historical daily ferry ridership to NASNI between the years 1998 to 2006. The name of the commuter ferry is Marietta and has a capacity of 525 passengers. As shown in the figure, the average ridership ranged from a low of approximately 125 passengers in 1999 to a high of approximately 250 passengers in 2004. Since 2004, the average daily ridership has decreased by approximately 20 percent. At its peak, the ferry still was only 50 percent full and could hold another 275 passengers. The ferry no longer provides direct access to NASNI but continues to provide access between Coronado and San Diego.

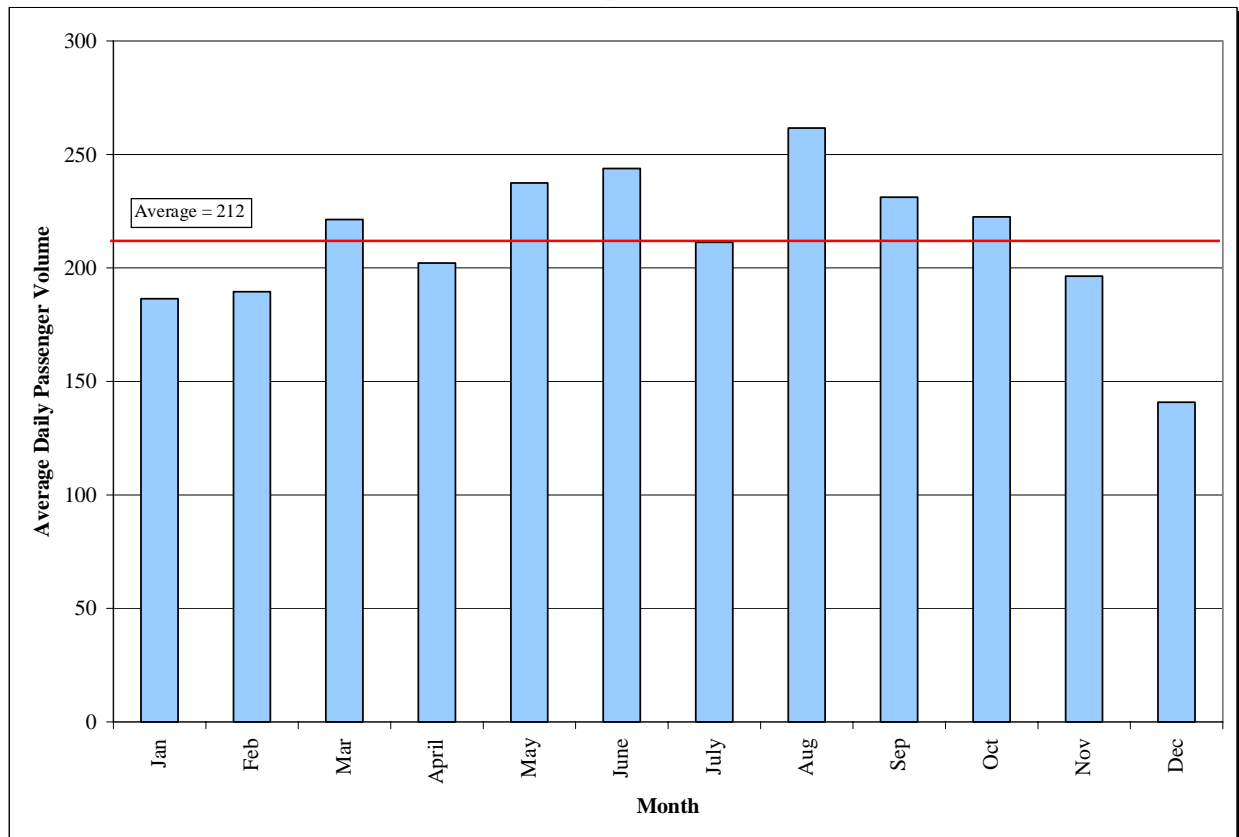
Figure A-15 Historical Daily Ferry Ridership



Source: Harbor Excursions, 2007

Figure A-16 illustrates the average daily ferry ridership to NASNI for each month in 2006. As shown in the figure, ridership was consistent throughout the year, with December being the only month significantly outside the average ridership. The daily average ranges from a low of 141 riders in December to a peak month average of 262 riders in August, with a yearly average of 212 riders per day.

Figure A-16 2006 Average Daily Ferry Ridership by Month



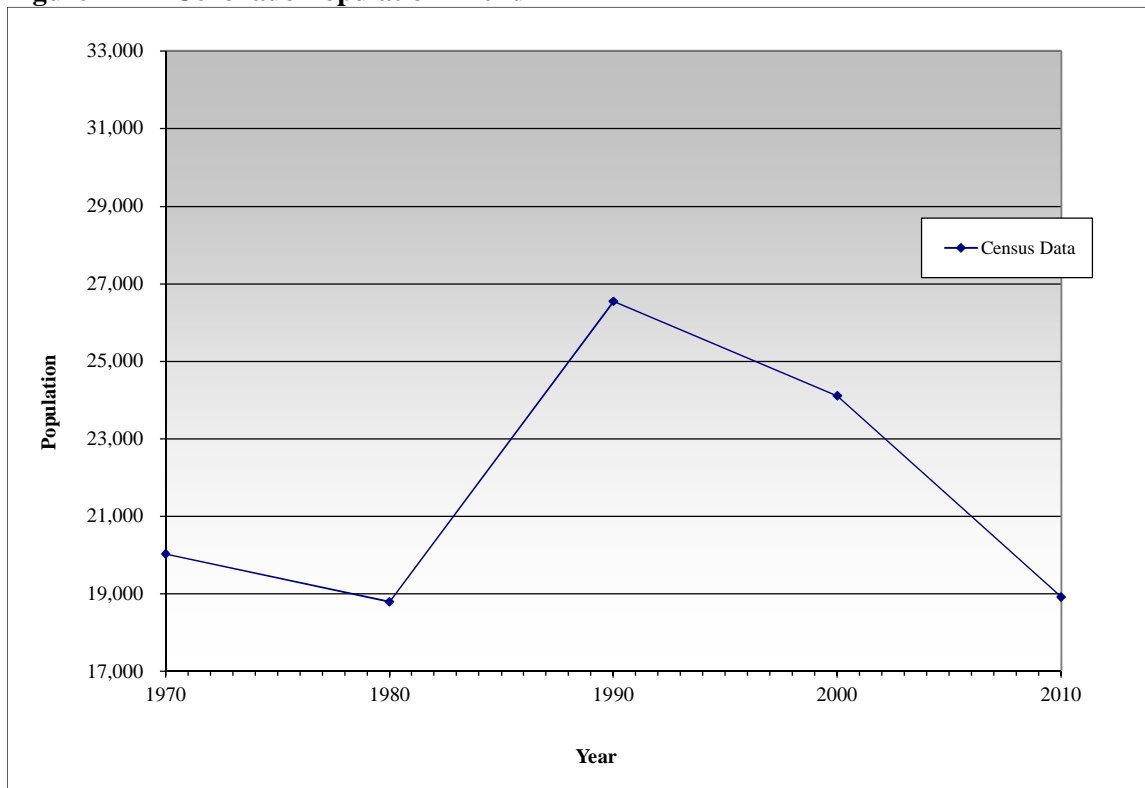
Source: Harbor Excursions, 2007

Population

The total population over the last 40 years in the City of Coronado was based on data provided by the US Census. **Figure A-17** illustrates the trends in population over the years. As shown in the figure, the population ranged from a low of 19,000 in 1980 to a high of 27,000 in 1990. In recent years, the population has seen a gradual decline, and was back to its low of 19,000 in 2010, the date of the last available Census report.

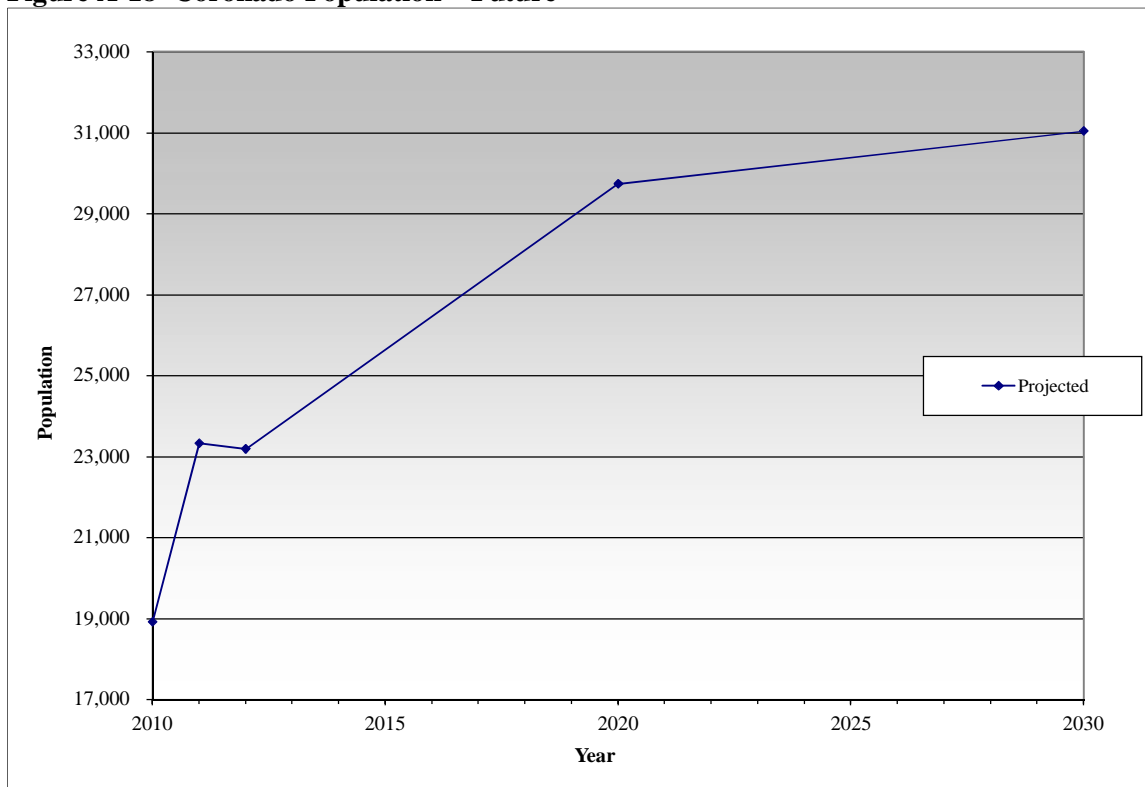
The future population over next 20 years in the City of Coronado was based on data provided by the US Census. **Figure A-18** illustrates the trends in for the future. As shown in the figure, the population is expected to increase to approximately 31,000 by the Year 2030. This would represent an increase of approximately 63 percent over the current population.

Figure A-17 Coronado Population Trend



Source: <http://factfinder.census.gov>

Figure A-18 Coronado Population – Future



Source: <http://datawarehouse.sandag.org>

Season Comparison

Traffic counts obtained at the intersections and roadway segments in the study area in July 2007 were compared to data collected in September 2007. At the intersections analyzed, the September 2007 traffic data generally remained the same as July 2007 levels during the morning peak, but experienced approximately a 10 percent decrease during the afternoon peak. Along the roadway segments in the study area, the September 2007 traffic data was approximately 13 percent lower than the July 2007 traffic data. Overall, the volumes and analysis results were similar between September and July, but July 2007 would represent a more conservative analysis.

APPENDIX B

- SANDAG Traffic Forecast Models

SANDAG
Series 12
2040

ADT Volume Plot

Functional Classifications

- Freeway
- Prime
- Major
- Collector
- Light Collector
- Rural Collector
- Local
- Freeway Ramp
- Local Ramp
- Zone Connector

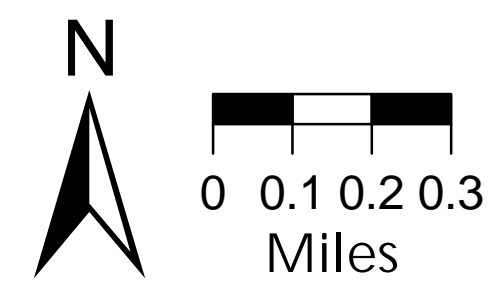
Traffic Analysis Zones

Unadjusted ADT(x1000)

Adjusted ADT(x1000)

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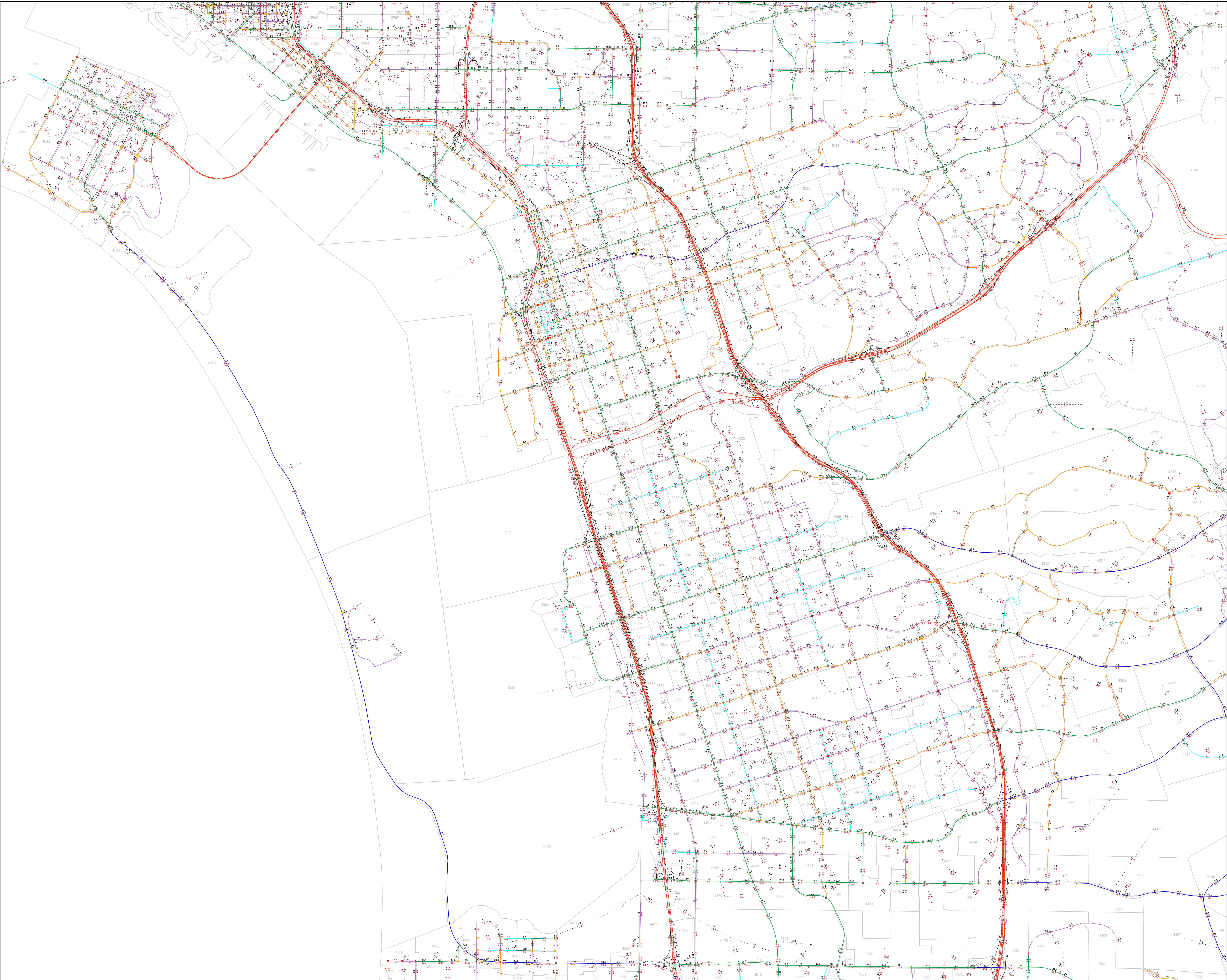
SAN DIEGO ASSOCIATION OF GOVERNMENTS
401 B STREET, SUITE 800
SAN DIEGO, CALIFORNIA 92101 USA
(619) 699-1900
E-mail: sandag@sandag.org
Web site: www.sandag.org



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January 31, 2012



SANDAG
Series 12 2040rc11
Select Zone Plot

TAZ 4121

Functional Classifications

- Freeway
- Prime
- Major
- Collector
- Light Collector
- Rural Collector
- Local
- Freeway Ramp
- Local Ramp
- Zone Connector

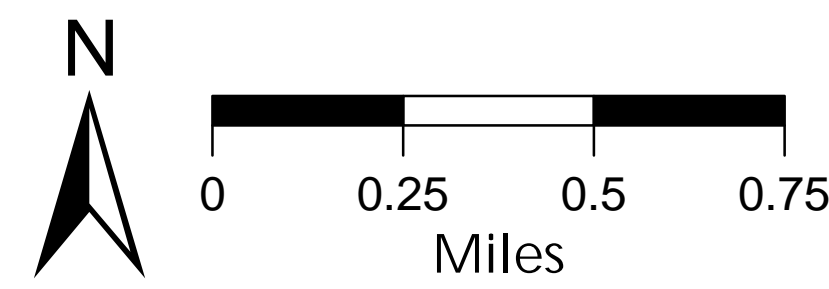
Traffic Analysis Zones

Selz Volumes & Percentage

Unadjusted ADT(x1000)

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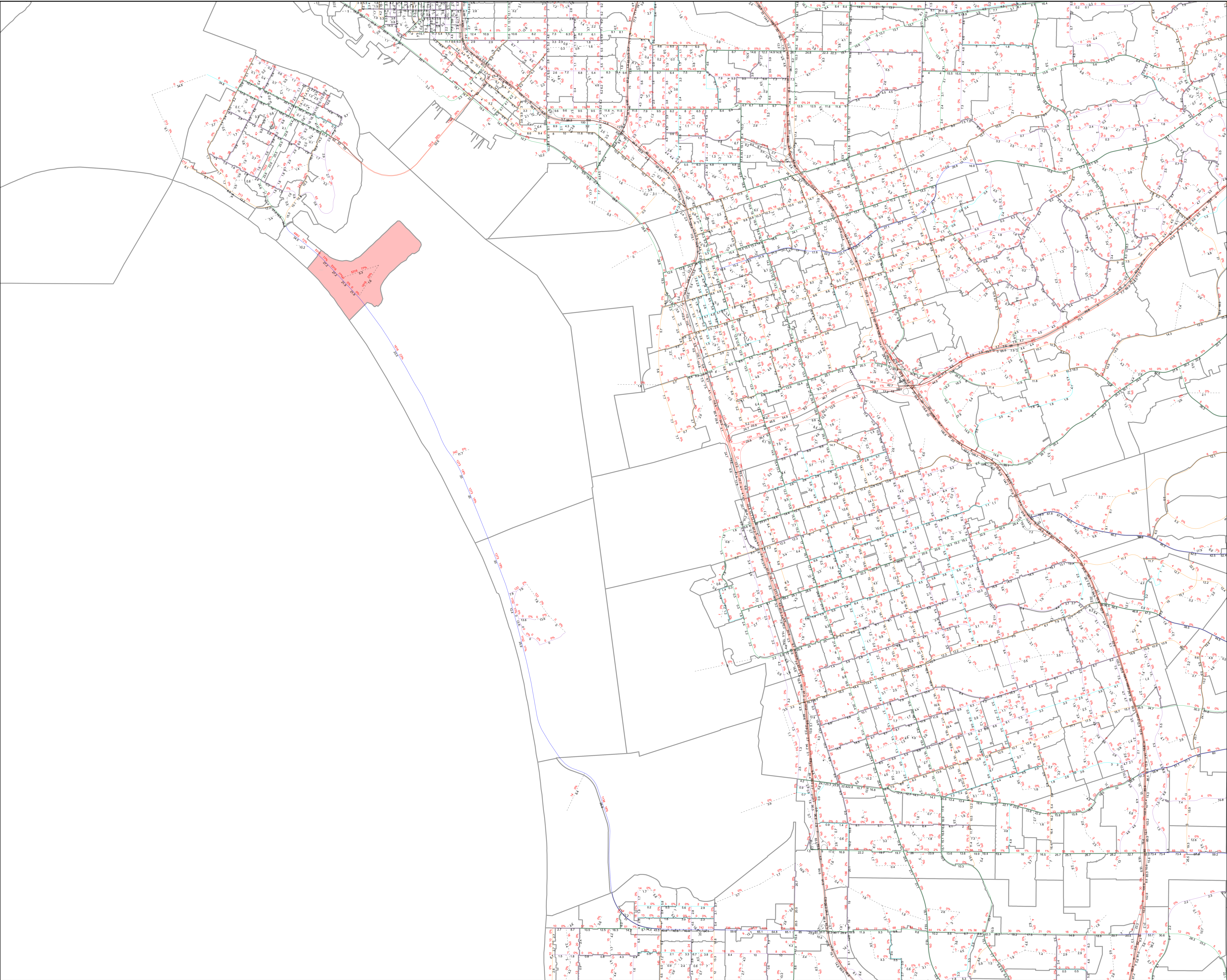
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Date: July 12, 2012



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Series 12 2040rc11
Select Zone Plot

TAZ 4683

Functional Classifications

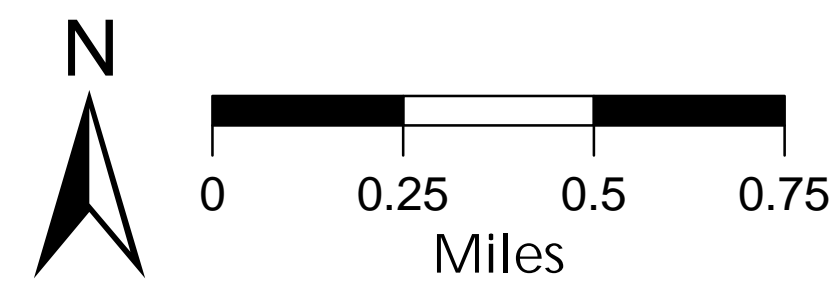
- Freeway
- Prime
- Major
- Collector
- Light Collector
- Rural Collector
- Local
- Freeway Ramp
- Local Ramp
- Zone Connector

Traffic Analysis Zones

- Selz Volumes & Percentage
- Unadjusted ADT(x1000)

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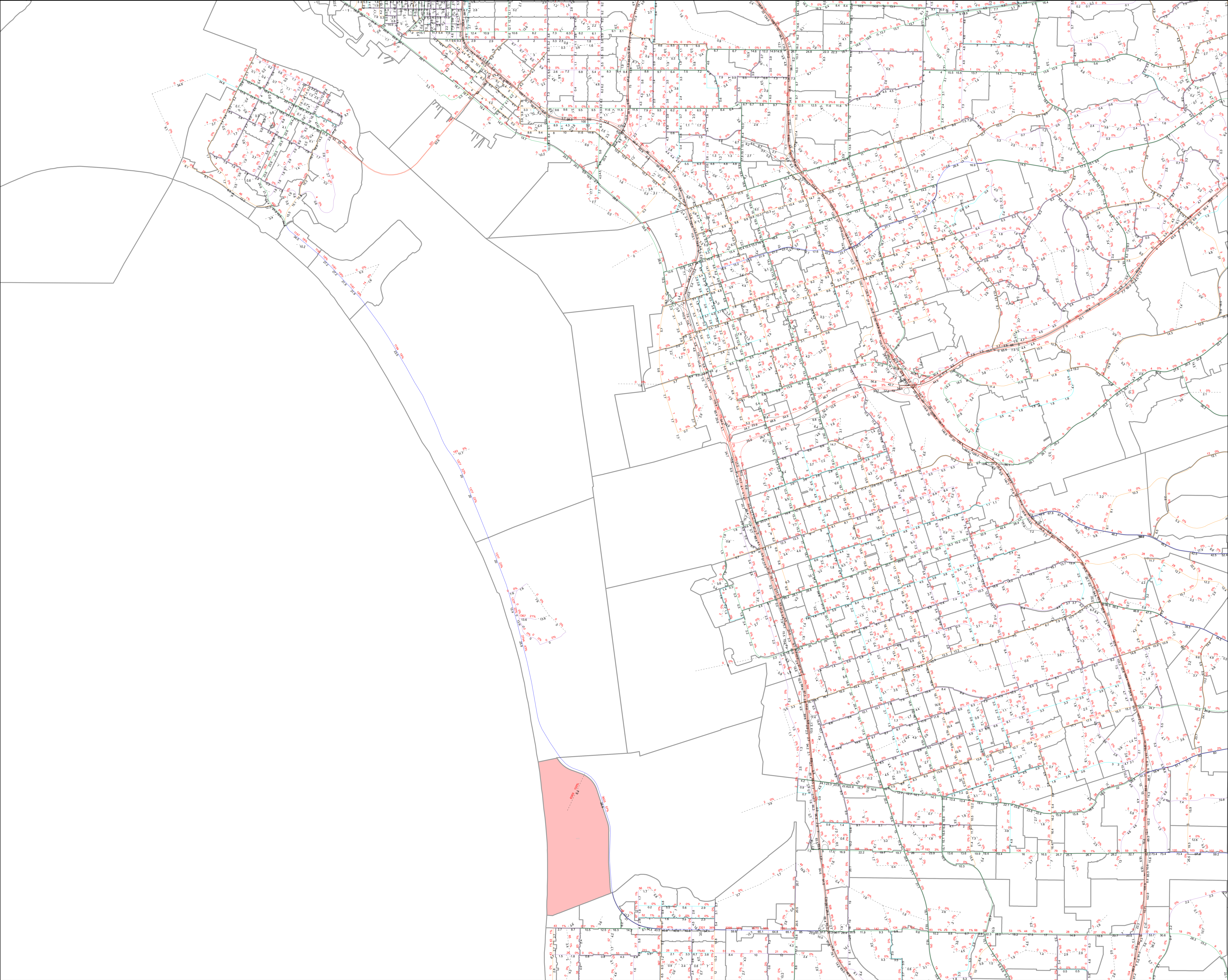
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Date: July 12, 2012



APPENDIX C

- CVN Traffic Forecast

Appendix C – CVN Traffic Forecast

The methodology for forecasting traffic during different CVN levels was extracted from the *Home Port Facilities for three Nimitz-Class Aircraft Carriers*¹ traffic study and is applicable in this study for scenarios analyzed where multiple CVNs are in port.

The daily trip generation for a CVN was primarily based on trip rates published in the *1999 FEIS* and subsequent studies conducted in 2002. The 2002 study identified traffic conditions at the NASNI gates with one, two, and three carriers in port. The difference in average daily traffic (ADT) between one and three carriers (47,158 ADT – 37,548 ADT) resulted in 9,610 ADT. This value was divided by 2 to determine the average ADT per carrier, which resulted in 4,805 ADT per carrier. With a population of 3,217 personnel for each CVN, this resulted in a trip rate of 1.49 trips per person. The *1999 FEIS* had used a similar, but slightly lower rate of 1.47 trips per person. The 2002 observed rate was used in this study as it more accurately reflects conditions at NASNI.

The peak-hour traffic for a carrier was estimated on the likely arrival and departure of workers assigned to a CVN. In general, the 3,217 personnel corresponding to a 100 percent manning level for a CVN was converted to a total of 1,392 vehicle trips during the peak periods.

Table A-1 summarizes the trip generation for the various CVNs in port, with and without staggered work hours. As shown in the table, three CVNs in port without staggered work hours would generate 14,279 daily trips, including 4,176 (3,795 in, 181 out) a.m. peak-hour trips and 4,176 (381 in, 3,795 out) p.m. peak-hour trips. With staggered work hours, three CVNs in port would generate the same 14,279 daily trips, including 1,679 (1,526 in, 153 out) a.m. peak-hour trips and 1,727 (157 in, 1,570 out). The Navy is required to have staggered work hours to minimize traffic impacts whenever three CVNs are in port. Staggering work hours has a dramatic reduction in the peak 1-hour period, but it extends peak-hour traffic to a 3-hour period.

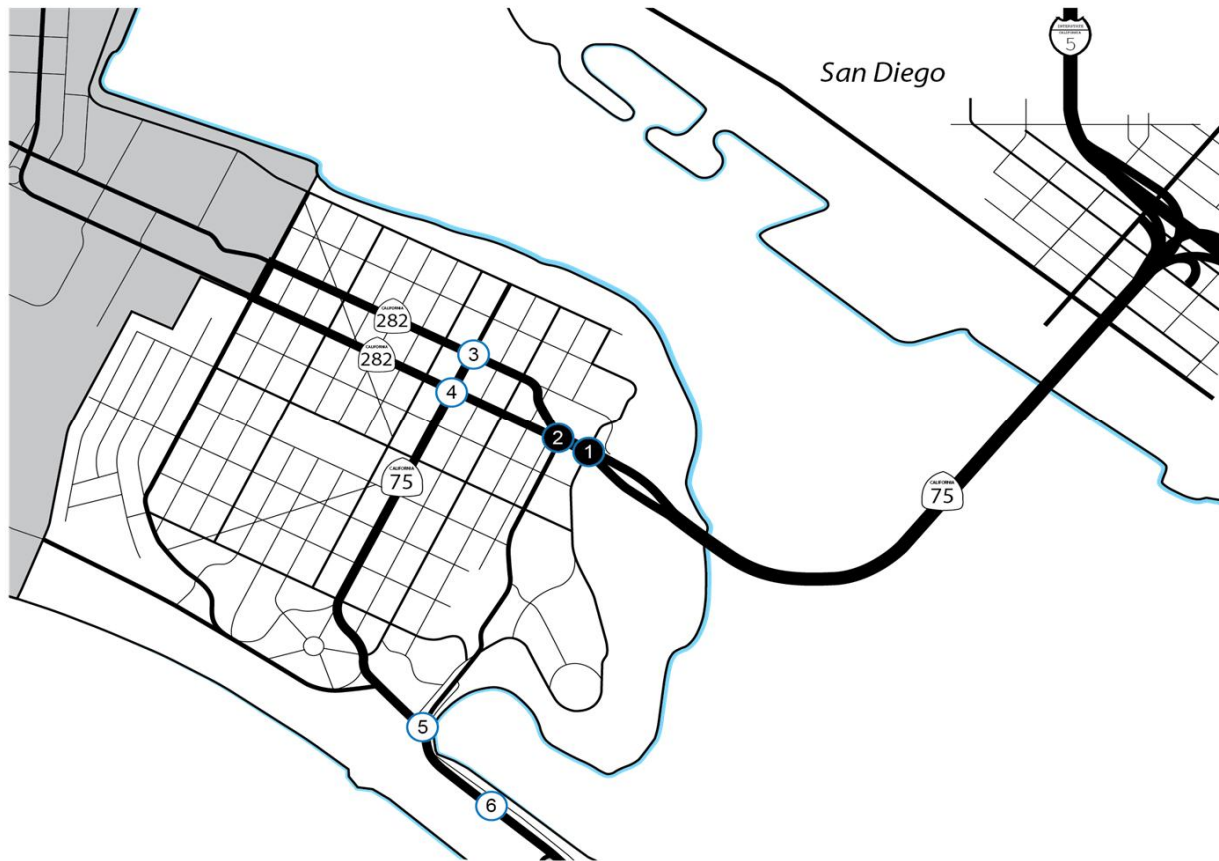
¹ Final Traffic Study for the Supplemental Environmental Impact Statement for Developing Home Port Facilities for three NIMITZ-Class Aircraft Carriers in Support of the U.S. Pacific Fleet (May 2008).

TABLE A-1
TRIP GENERATION SUMMARY

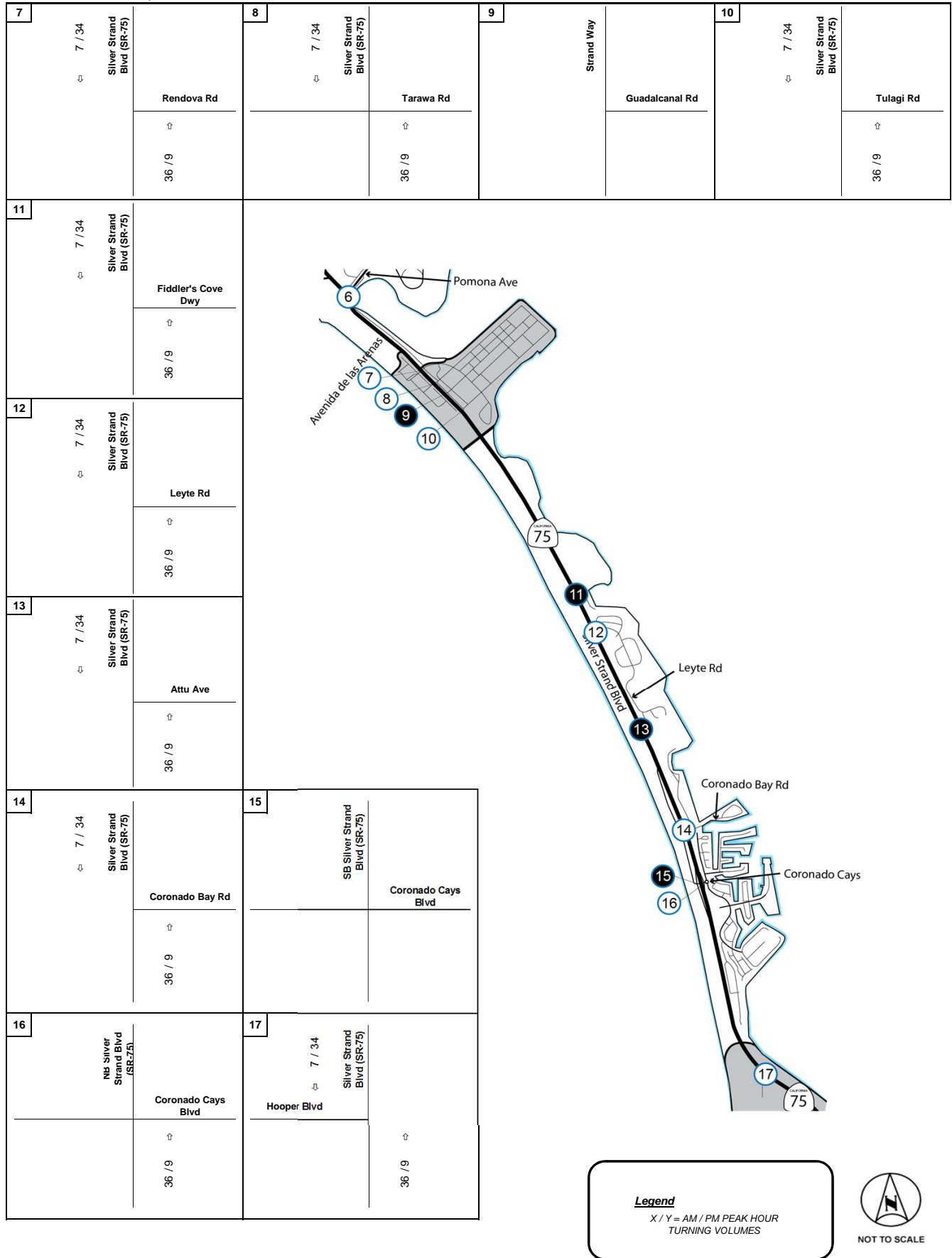
Land Use	Units	Trip Rate (a)	Daily Trips	AM Peak-Hour (b)	PM Peak-Hour (b)
1 CVN	3,217 Personnel	1.49/Personnel	4,793	1,392 (1,265 in, 127 out)	1,392 (127 in, 1,265 out)
2 CVNs	6,434 Personnel	1.49/Personnel	9,586	2,784 (2,530 in, 254 out)	2,784 (254 in, 2,530 out)
3 CVNs	9,651 Personnel	1.49/Personnel	14,379	4,176 (3,795 in, 381 out)	4,176 (381 in, 3,795 out)
3 CVNs (staggered work hours)	9,651 Personnel	1.49/Personnel	14,379	1,679 (1,526 in, 153 out)	1,727 (157 in, 1,570 out)
Note: (a) Trip rate primarily based on updated data contained in the September 4, 2002 Memorandum for the Record (Beaman 2002). (b) 29 percent of the daily trips occurred during both peak periods with a 90/10 split during the AM Peak-Hour and a 10/90 split during the PM Peak-Hour.					

NBC Coastal Campus

<div>1</div> <div>Glorietta Blvd</div> <div> <div> <div> <div>↕</div> <div>22 / 5</div> <div>535 / 129</div> </div> <div>↕</div> </div> <div>Fourth St (SR-75)</div> </div> <div> <div>106 / 524</div> <div>↕</div> </div> <div> <div>↕</div> <div>1 / 7</div> </div>	<div>2</div> <div></div> <div> <div> <div>↕</div> <div>535 / 129</div> </div> <div>Fourth St (SR-75)</div> </div> <div> <div>106 / 524</div> <div>↕</div> </div> <div>Pomona Ave</div>	<div>3</div> <div> <div> <div>↕</div> <div>7 / 2</div> <div>20 / 96</div> </div> <div>Orange Ave (SR-75)</div> </div> <div> <div> <div> <div>↕</div> <div>94 / 23</div> <div>412 / 99</div> <div>29 / 7</div> </div> <div>Third Street (SR-75)</div> </div> </div> <div> <div> <div>↕</div> <div>65 / 16</div> <div>9 / 9</div> </div> </div>	<div>4</div> <div> <div> <div> <div>↕</div> <div>30 / 14</div> <div>18 / 90</div> </div> <div>Orange Ave (SR-75)</div> </div> </div> <div>Fourth St (SR-75)</div> <div> <div> <div>↕</div> <div>1 / 7</div> <div>84 / 413</div> <div>13 / 62</div> </div> </div> <div> <div> <div>↕</div> <div>72 / 17</div> <div>4 / 21</div> </div> </div>
<div>5</div> <div> <div> <div> <div>↕</div> <div>7 / 34</div> </div> <div>Orange Ave (SR-75)</div> </div> </div> <div> <div> <div>↕</div> <div>36 / 9</div> </div> </div> <div>Pomona Ave</div> <div>Silver Strand Blvd (SR-75)</div>	<div>6</div> <div> <div> <div> <div>↕</div> <div>7 / 34</div> </div> <div>Silver Strand Blvd (SR-75)</div> </div> </div> <div>Avenidas De Las Arenas</div> <div> <div> <div>↕</div> <div>36 / 9</div> </div> </div>		

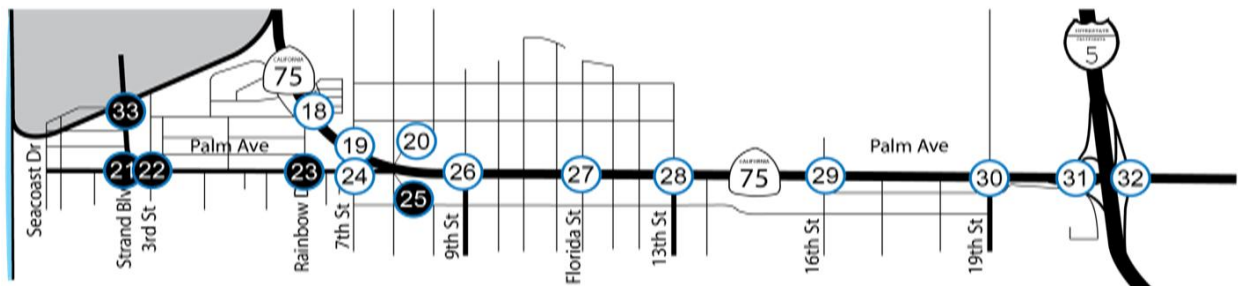


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18	7 / 34 Silver Strand Blvd (SR-75) Rainbow Dr 36 / 9	19	7th St 36 / 9 Silver Strand Blvd (SR-75) 7 / 34	20	Delaware St 36 / 9 Silver Strand Blvd (SR-75) 7 / 34	21	Silver Strand Blvd Dwy
22	3rd St	23	Rainbow Dr	24	7th St	25	Delaware St
26	36 / 9 Palm Ave (SR-75) 7 / 34 9th St	27	Florida St 36 / 9 Palm Ave (SR-75) 7 / 34	28	13th St 36 / 9 Palm Ave (SR-75) 7 / 34	29	16th St 36 / 9 Palm Ave (SR-75) 7 / 34
30	19th St 36 / 9 Palm Ave (SR-75) 7 / 34 Saturn Blvd	31	I-5 SB Exit Ramp 36 / 9 Palm Ave (SR-75)	32	I-5 NB Ramps Palm Ave (SR-75) 36 / 9	33	Silver Strand Blvd YMCA Dwy



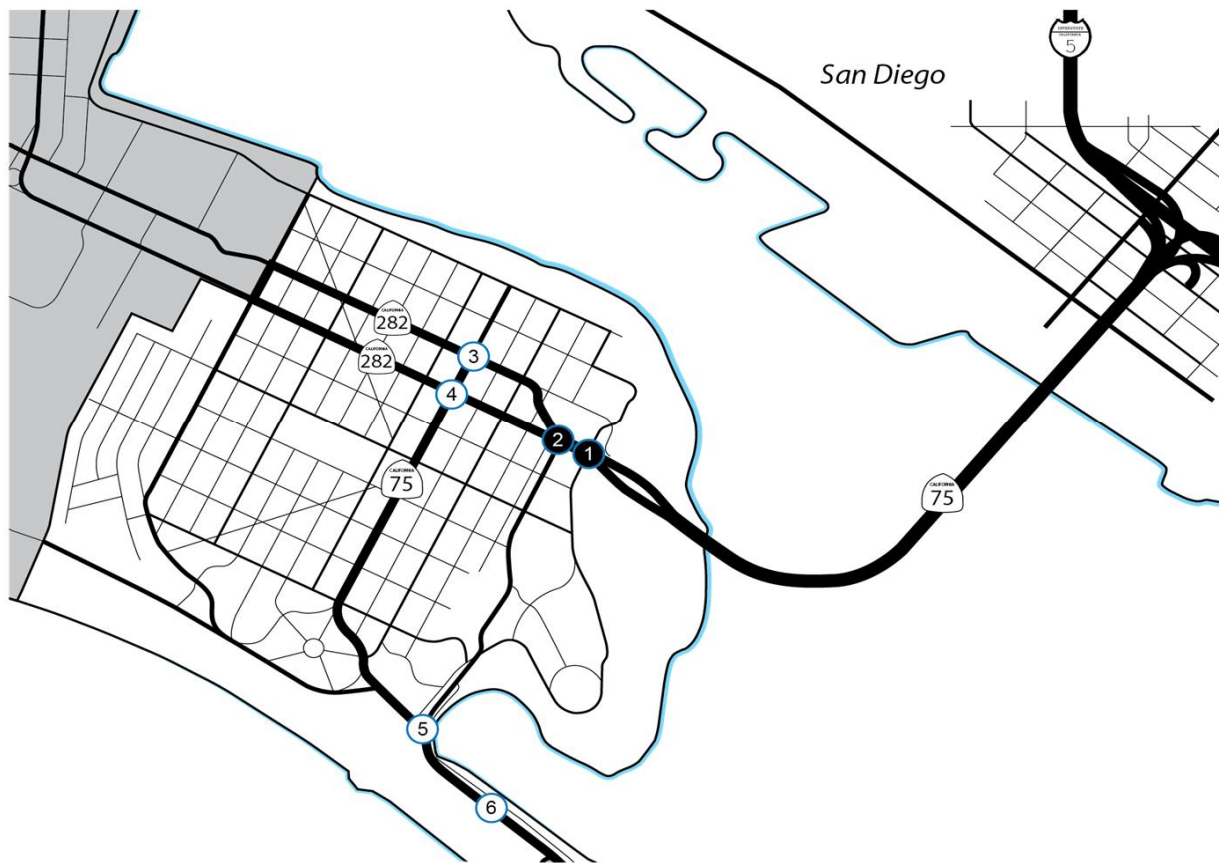
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NBC Coastal Campus

<div>1</div> <div>Glorietta Blvd</div> <div> <div> <div>8 / 1</div> <div>193 / 23</div> </div> <div>Fourth St (SR-75)</div> </div> <div> <div>20 / 231</div> <div>↓</div> </div>	<div>2</div> <div></div> <div> <div>193 / 23</div> <div>Fourth St (SR-75)</div> </div> <div> <div>20 / 231</div> <div>↓</div> <div>Pomona Ave</div> </div>	<div>3</div> <div> <div>3 / 0</div> <div>4 / 43</div> </div> <div>Orange Ave (SR-75)</div> <div> <div> <div>34 / 4</div> <div>149 / 17</div> <div>10 / 1</div> </div> <div>Third Street (SR-75)</div> </div> <div> <div>23 / 3</div> <div>3 / 3</div> </div>	<div>4</div> <div> <div>11 / 4</div> <div>3 / 40</div> </div> <div>Orange Ave (SR-75)</div> <div> <div> <div>0 / 3</div> <div>16 / 183</div> <div>2 / 27</div> </div> <div>Fourth St (SR-75)</div> </div> <div> <div>26 / 3</div> <div>1 / 9</div> </div>
<div>5</div> <div> <div>1 / 15</div> <div>Orange Ave (SR-75)</div> </div> <div> <div>13 / 2</div> <div>Pomona Ave</div> </div> <div> <div>Silver Strand Blvd (SR-75)</div> <div>↓</div> </div>	<div>6</div> <div> <div>1 / 15</div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>13 / 2</div> <div>Avenidas De Las Arenas</div> </div> <div> <div>↓</div> </div>		



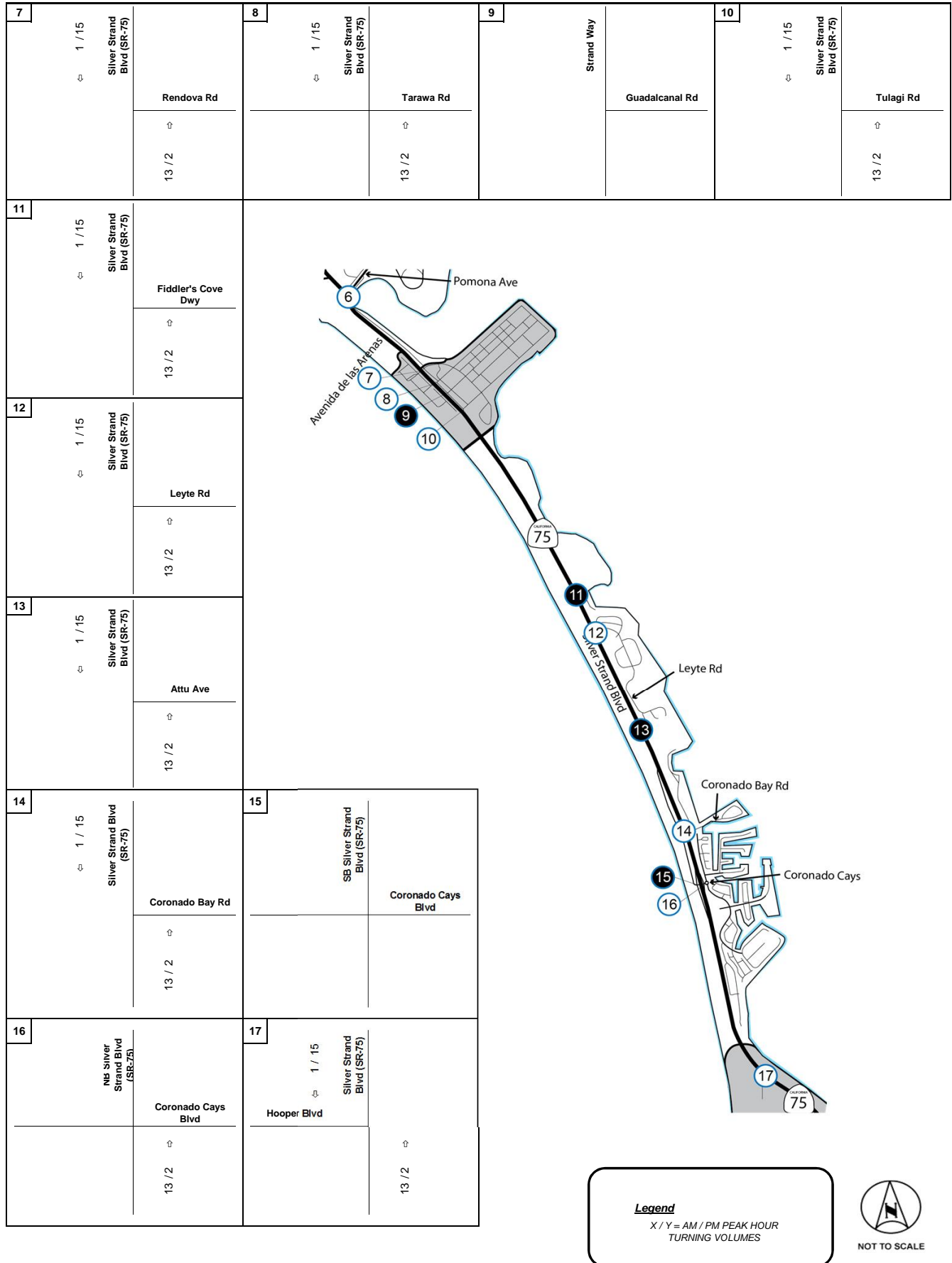
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus



NBC Coastal Campus

18	1 / 15 Silver Strand Blvd (SR-75) Rainbow Dr 13 / 2	19	7th St 13 / 2 Silver Strand Blvd (SR-75) 1 / 15	20	Delaware St 13 / 2 Silver Strand Blvd (SR-75) 1 / 15	21	Silver Strand Blvd Dwy
22	3rd St	23	Rainbow Dr	24	7th St	25	Delaware St
26	13 / 2 Palm Ave (SR-75) 1 / 15 9th St	27	Florida St 13 / 2 Palm Ave (SR-75) 1 / 15	28	13th St 13 / 2 Palm Ave (SR-75) 1 / 15	29	16th St 13 / 2 Palm Ave (SR-75) 1 / 15
30	19th St 13 / 2 Palm Ave (SR-75) 1 / 15 Saturn Blvd	31	I-5 SB Exit Ramp 13 / 2 Palm Ave (SR-75)	32	I-5 NB Ramps Palm Ave (SR-75) 13 / 2	33	Silver Strand Blvd YMCA Dwy



Legend

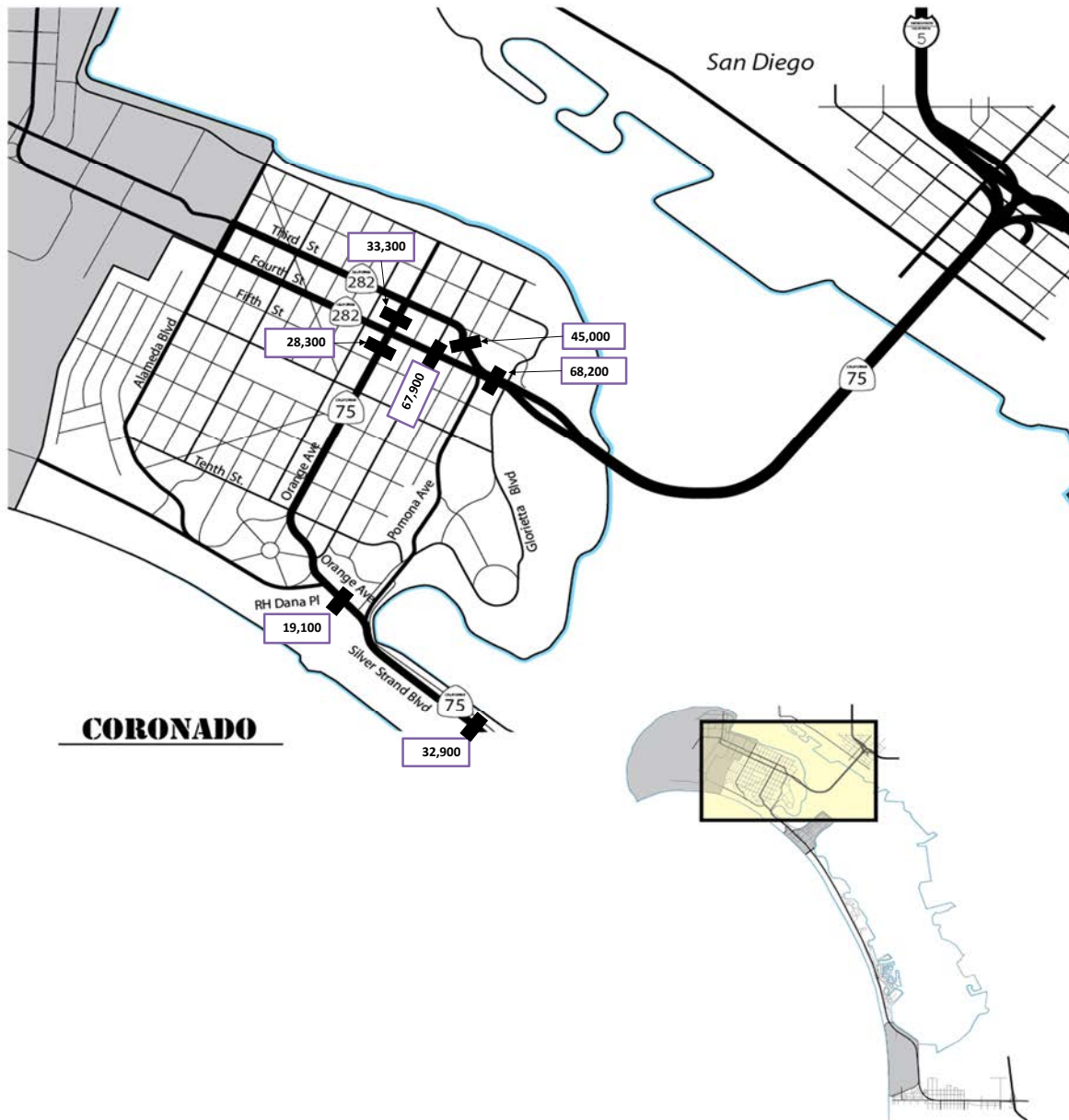
X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

APPENDIX D

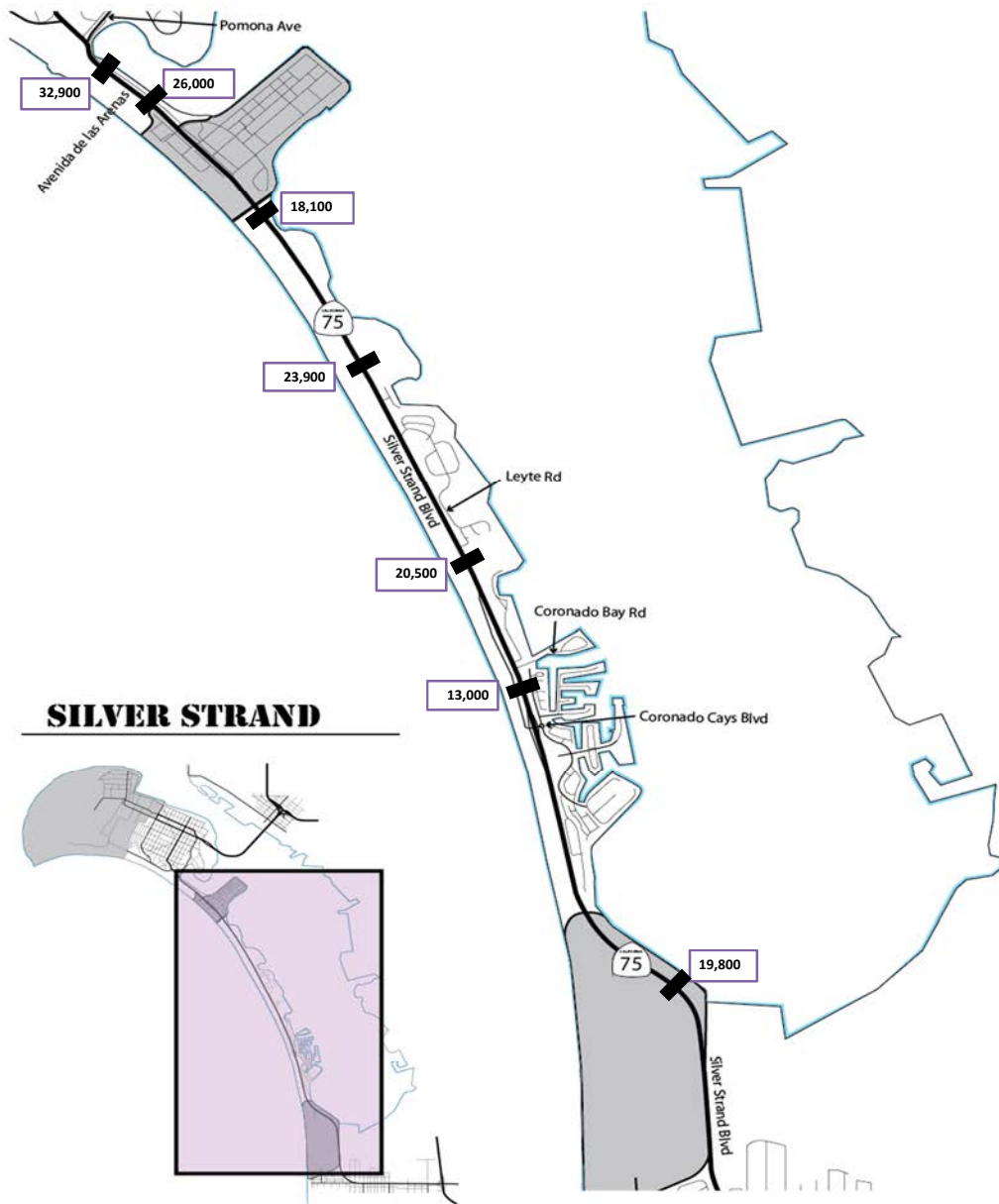
- Roadway Segment Traffic Volumes



Legend

■ X,XXX = Average Daily Traffic





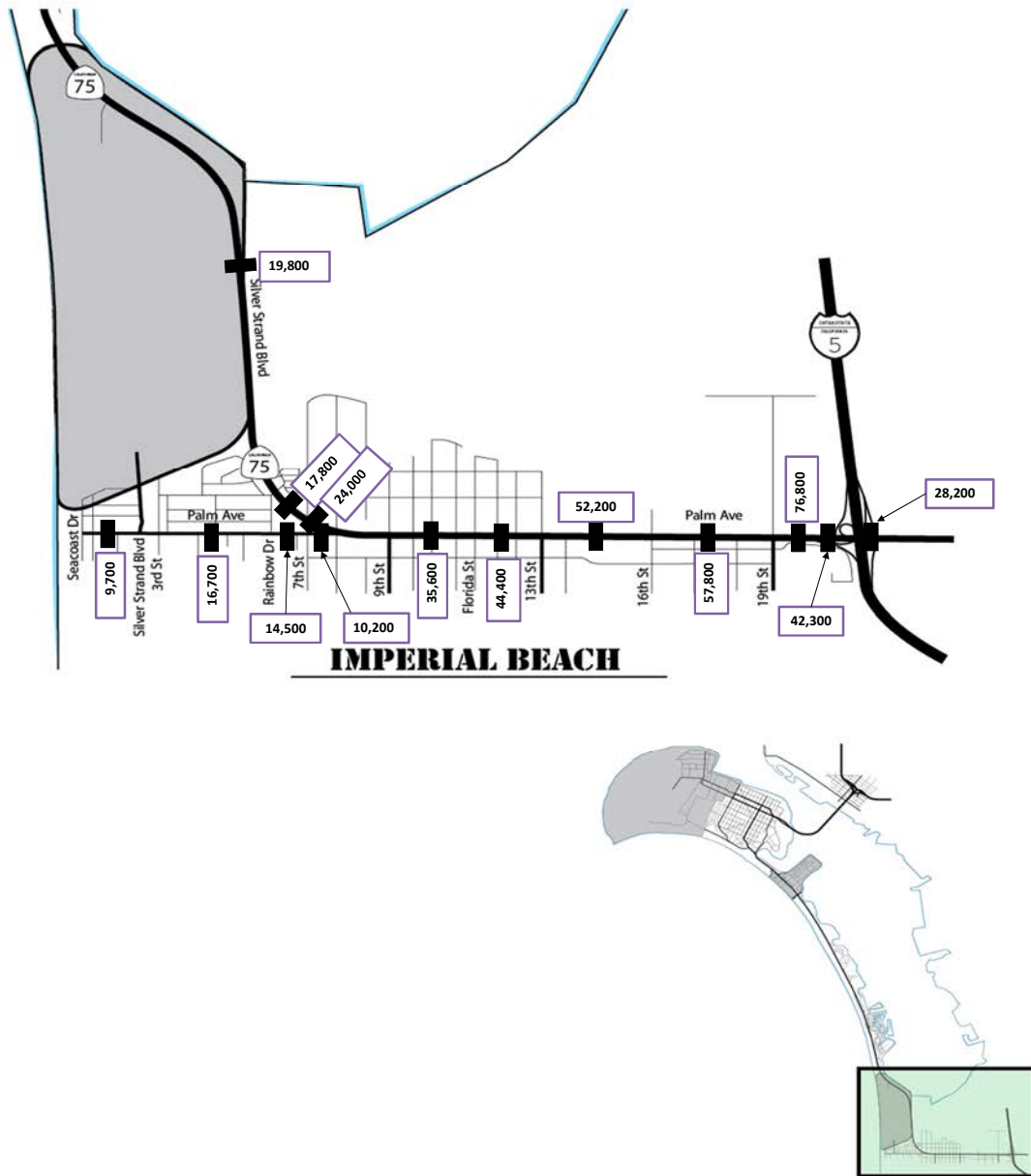
Legend

■ X,XXX = Average Daily Traffic



**Kimley-Horn
and Associates, Inc.**

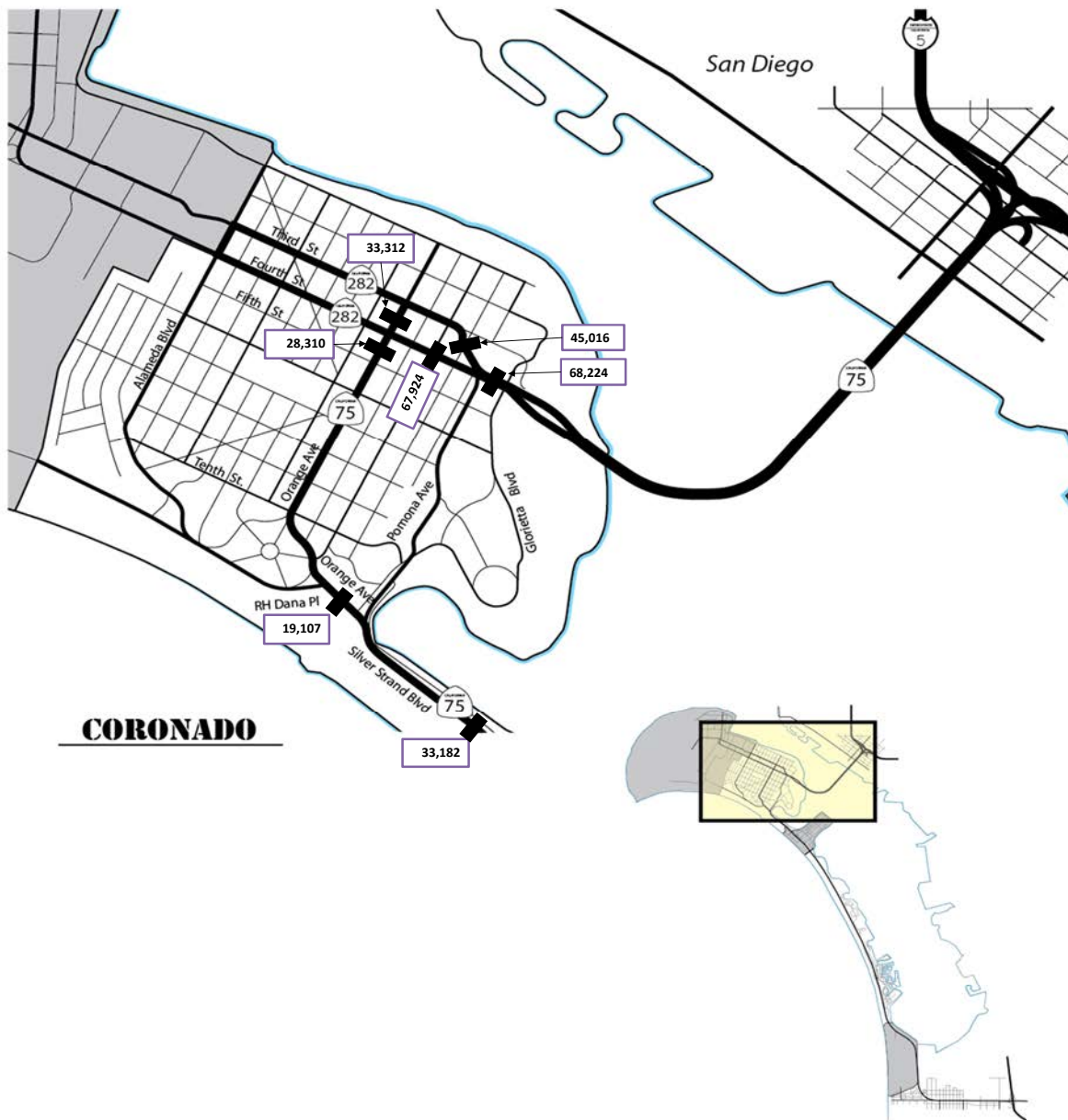
Existing ADT Volumes



Legend

■ X,XXX = Average Daily Traffic





Legend

■ X,XXX = Average Daily Traffic

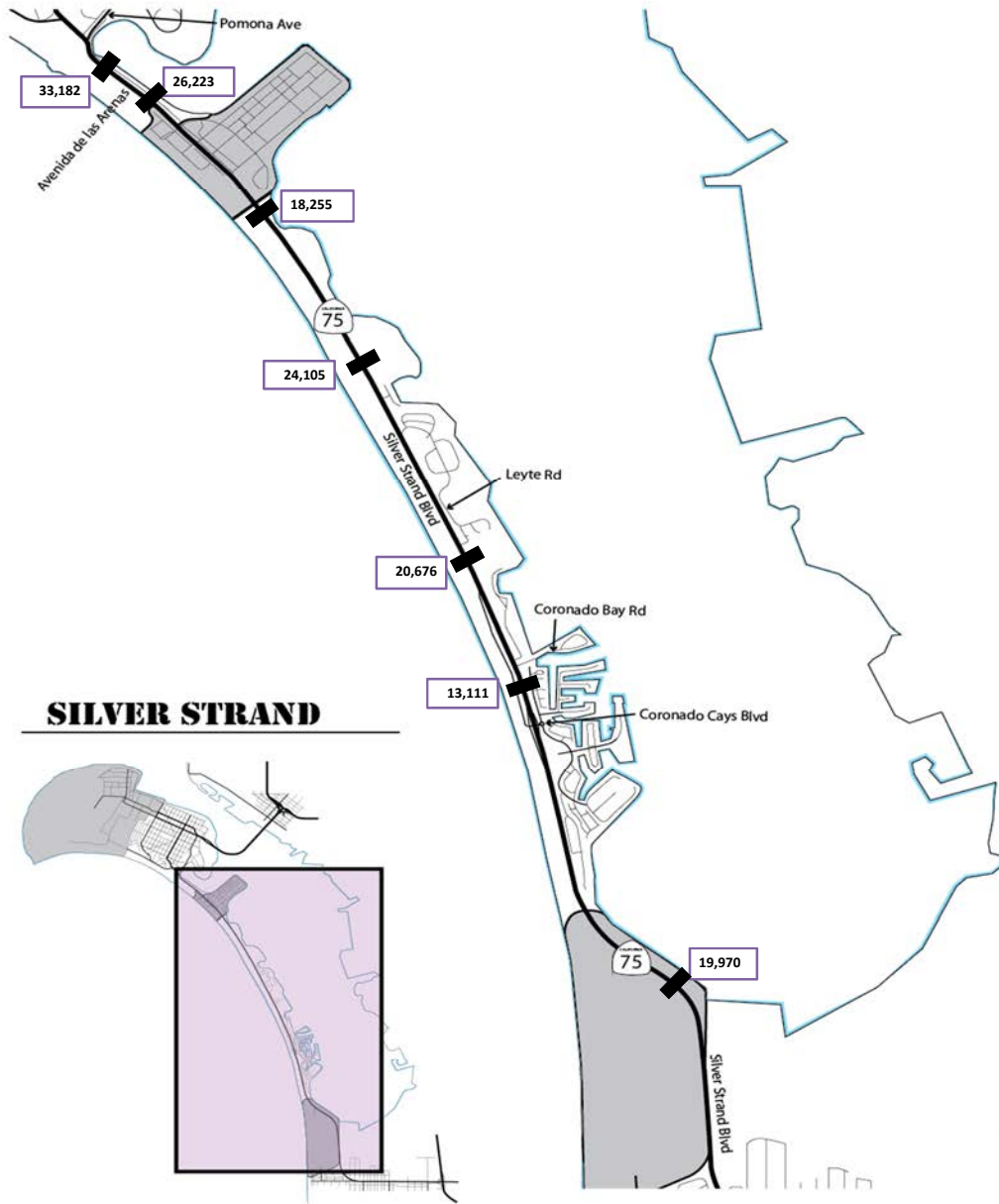


NOT TO SCALE



**Kimley-Horn
and Associates, Inc.**

Year 2024 No Action ADT Volumes



Legend

■ X,XXX = Average Daily Traffic

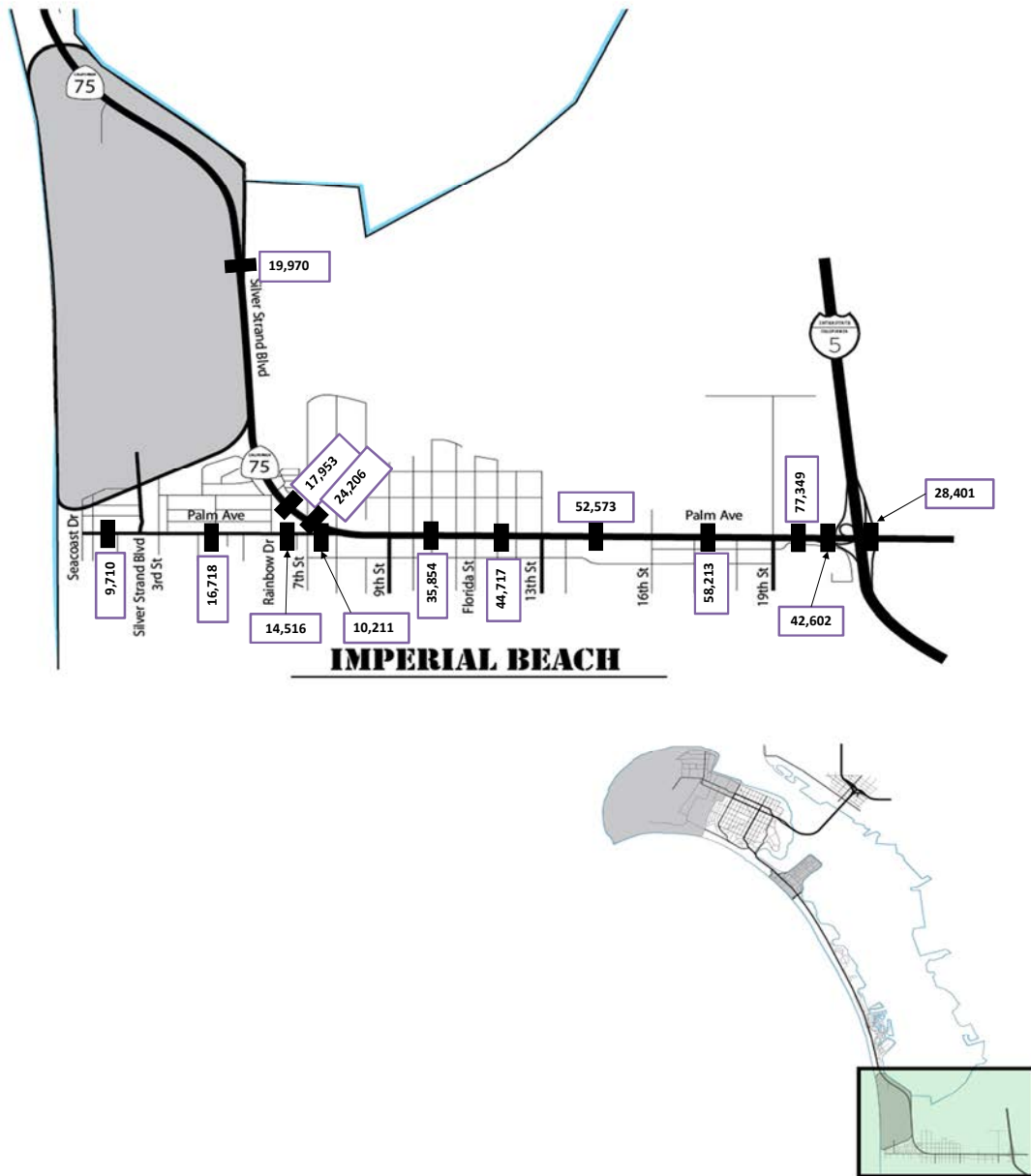


NOT TO SCALE



**Kimley-Horn
and Associates, Inc.**

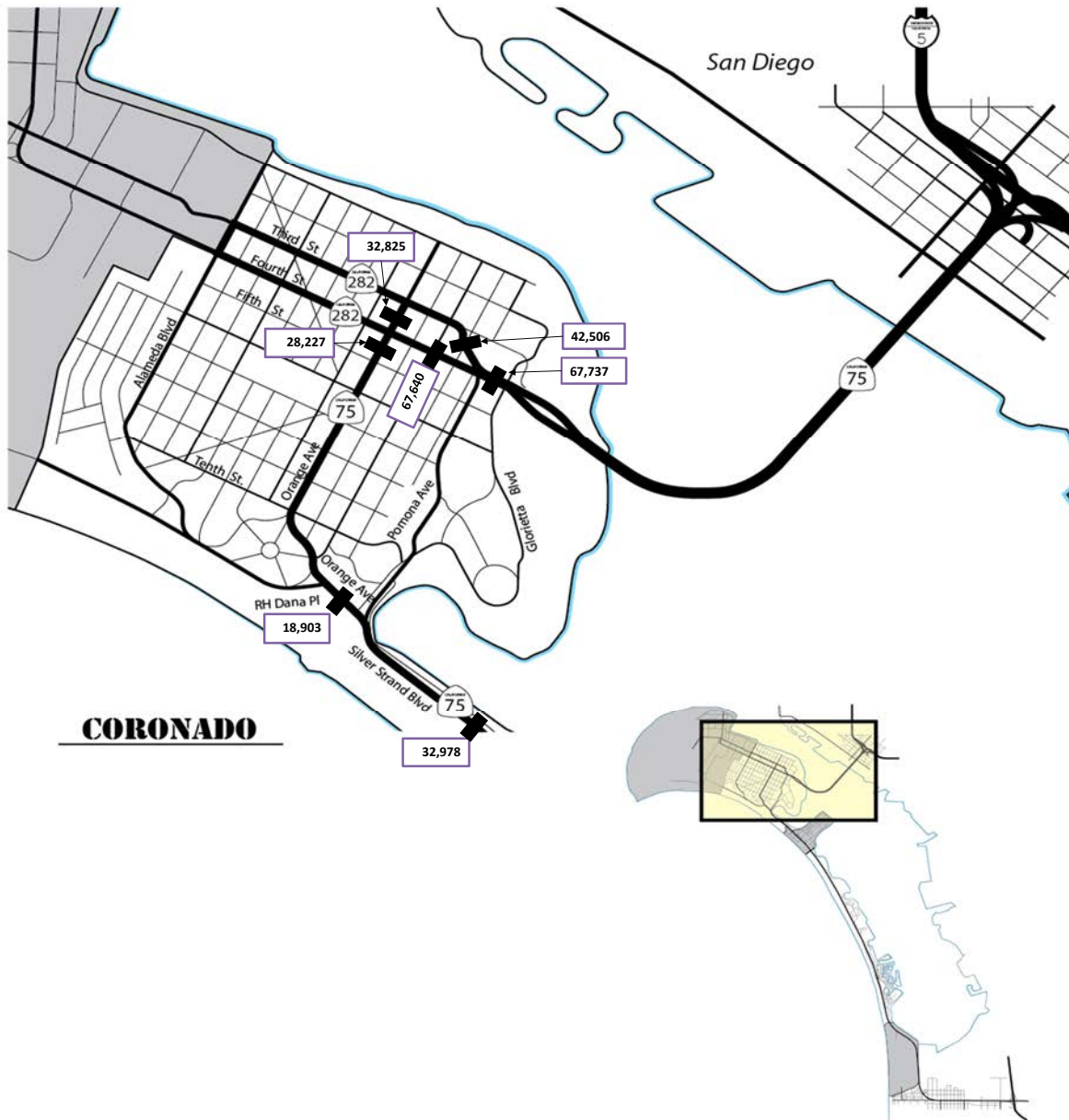
Year 2024 No Action ADT Volumes



Legend

■ X,XXX = Average Daily Traffic

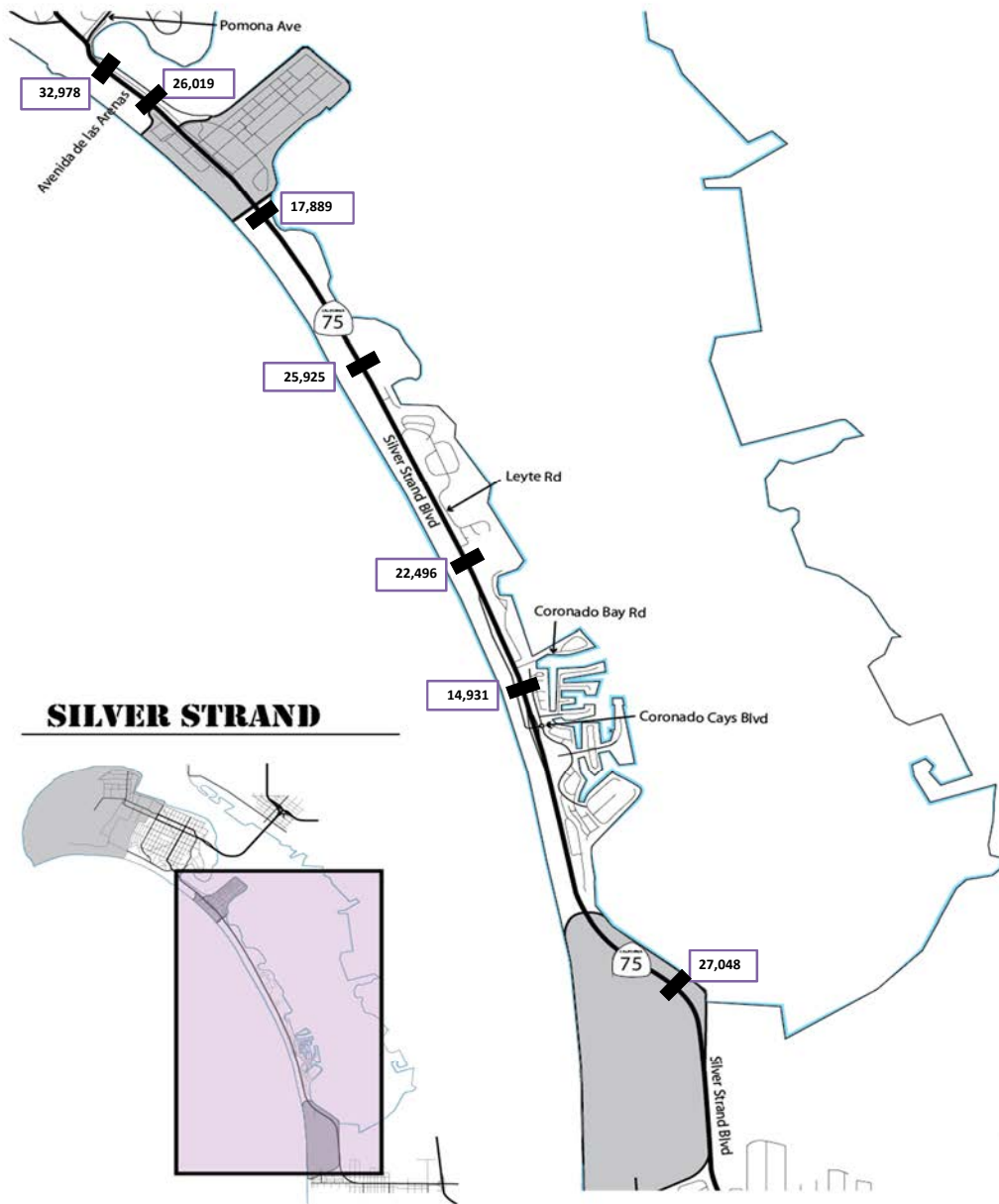




Legend

■ X,XXX = Average Daily Traffic

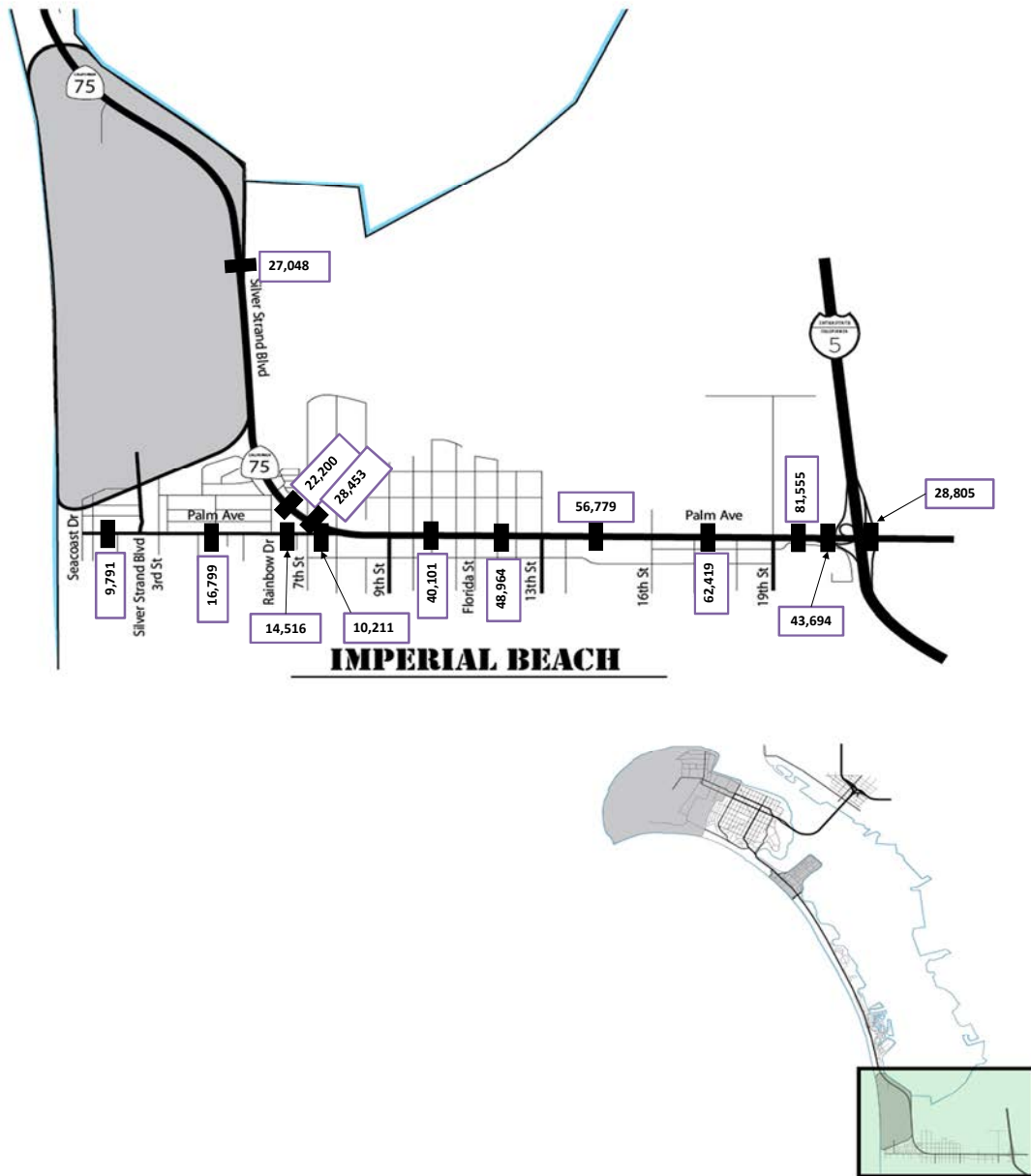




Legend

■ X,XXX = Average Daily Traffic

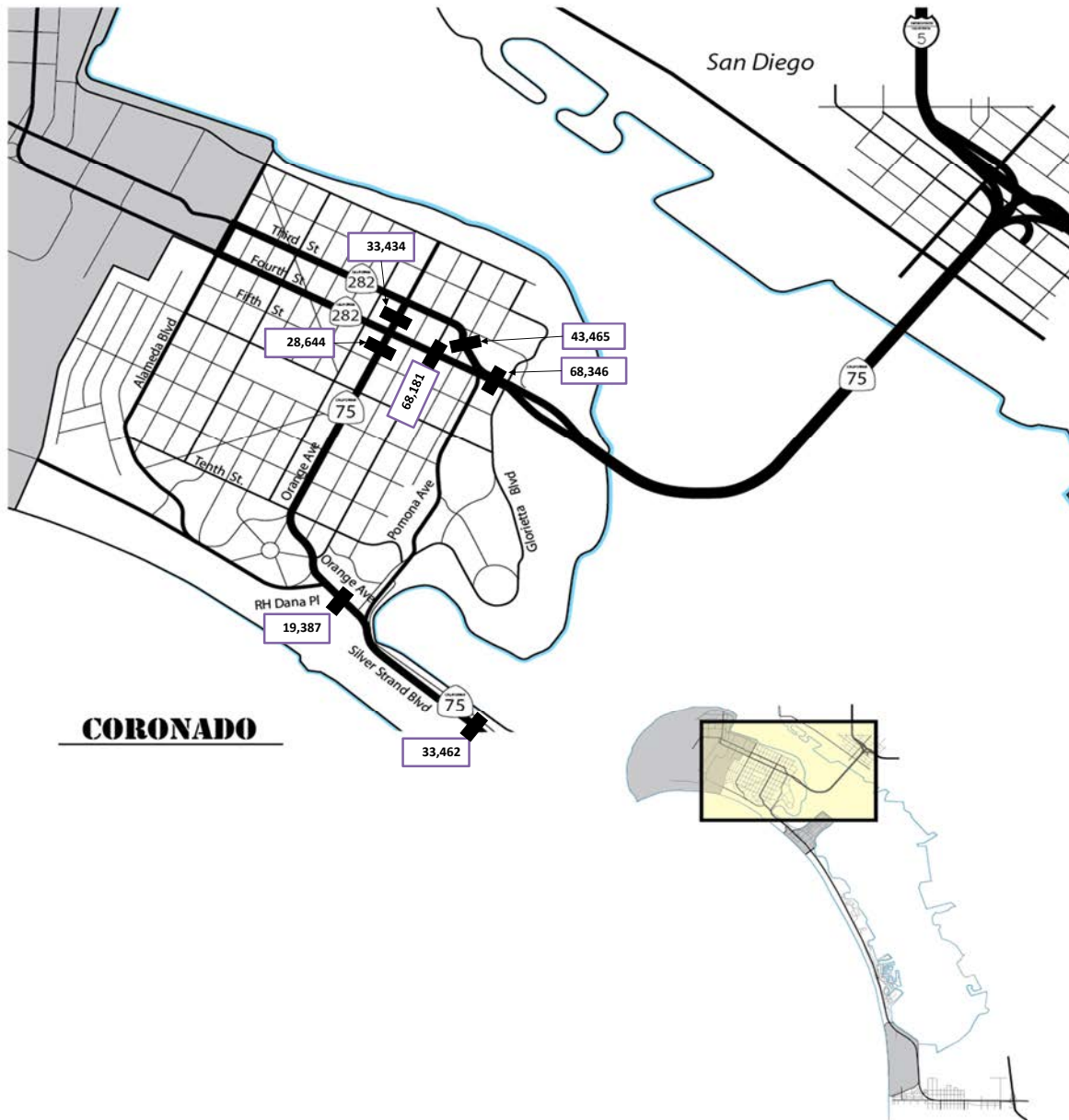




Legend

■ X,XXX = Average Daily Traffic

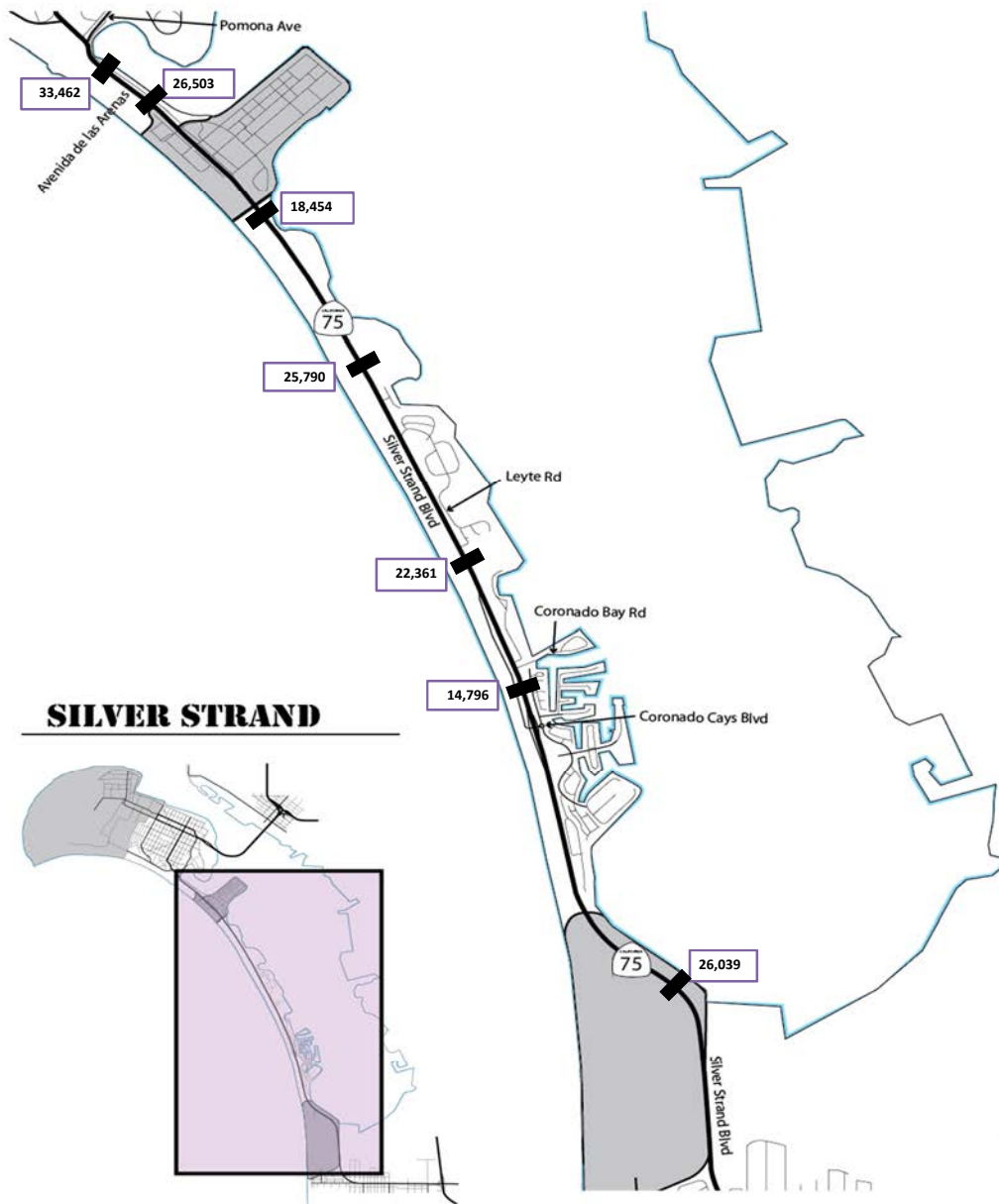


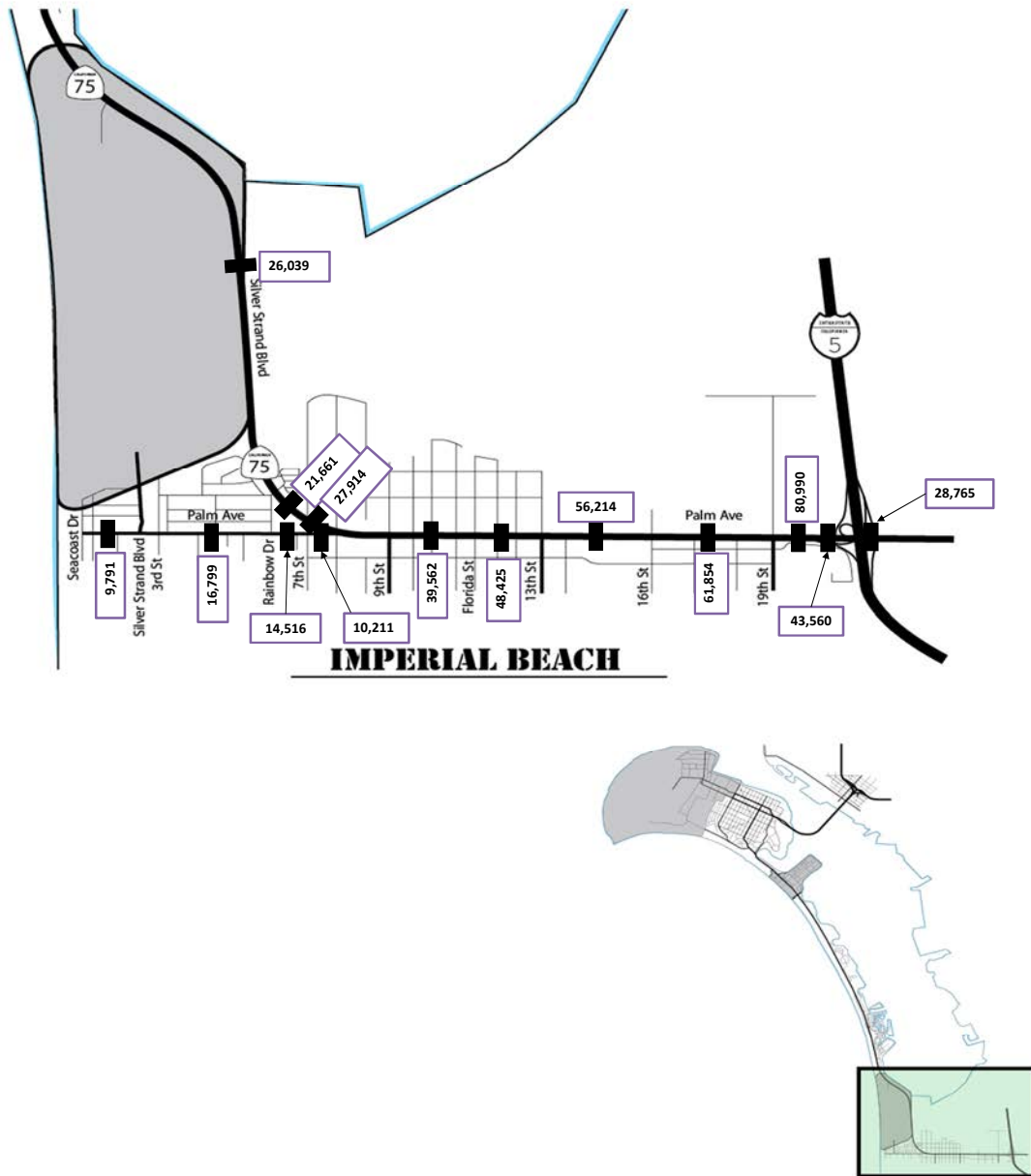


Legend

■ X,XXX = Average Daily Traffic



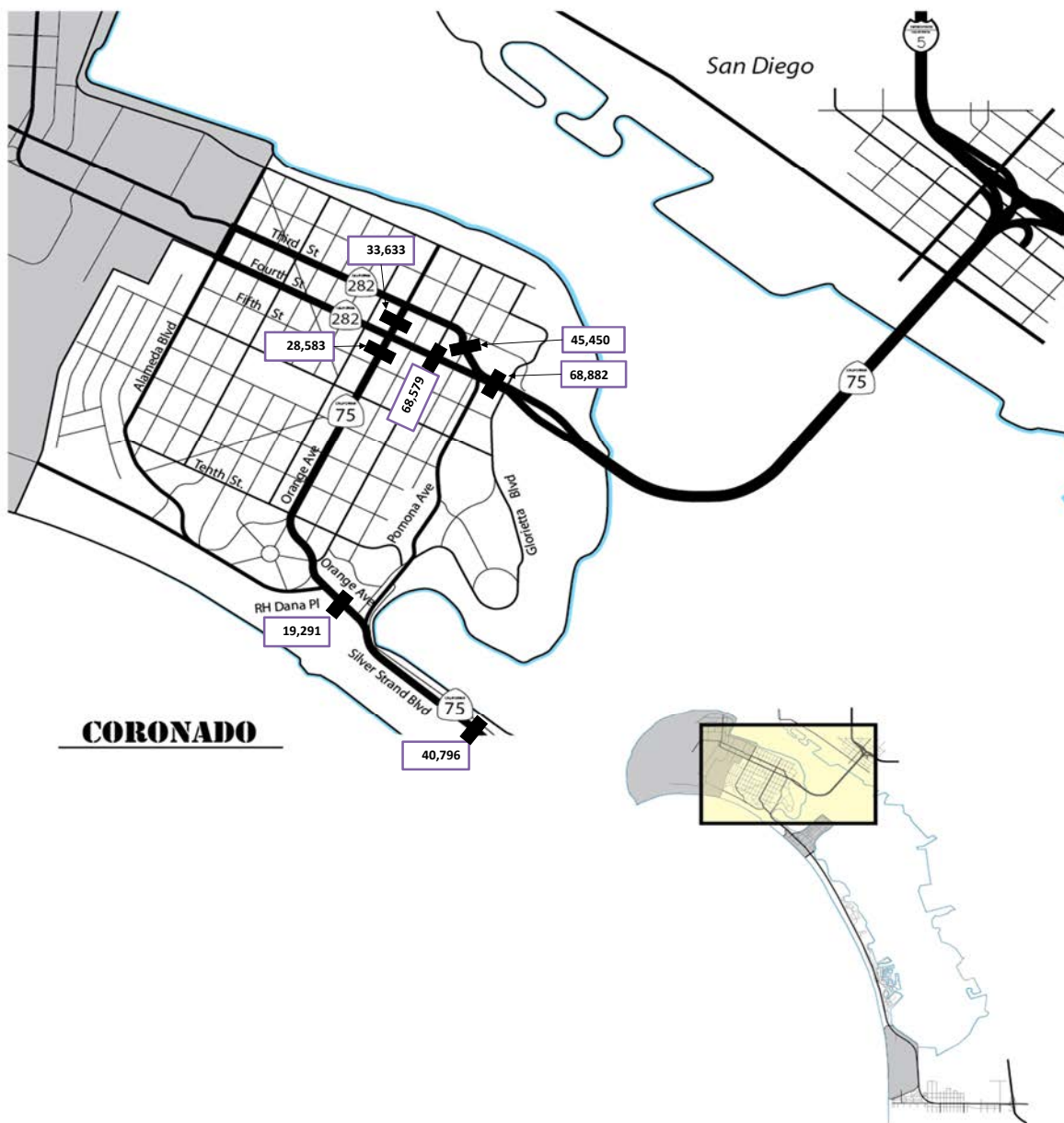




Legend

■ X,XXX = Average Daily Traffic





Legend

■ X,XXX = Average Daily Traffic

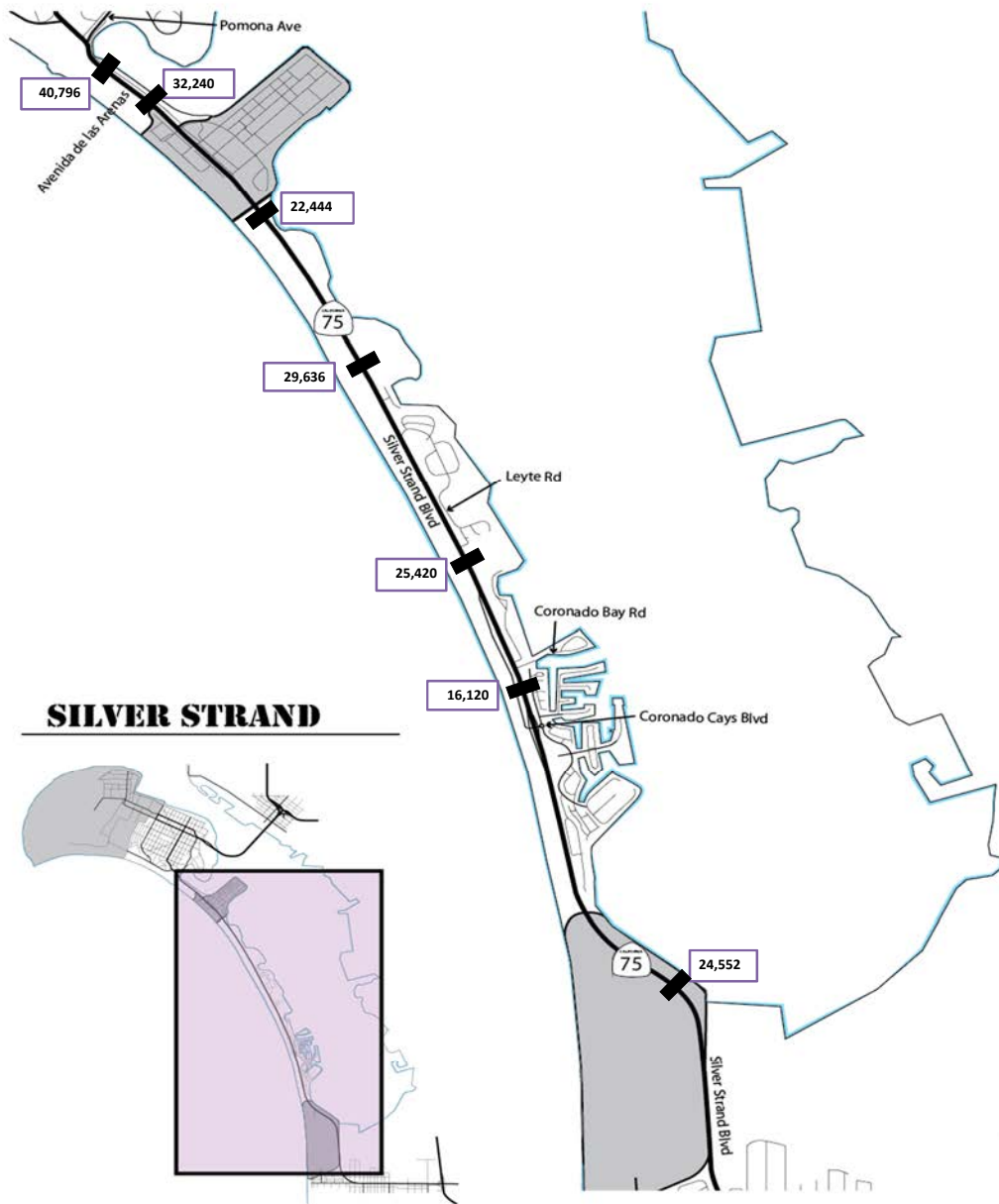


NOT TO SCALE



**Kimley-Horn
and Associates, Inc.**

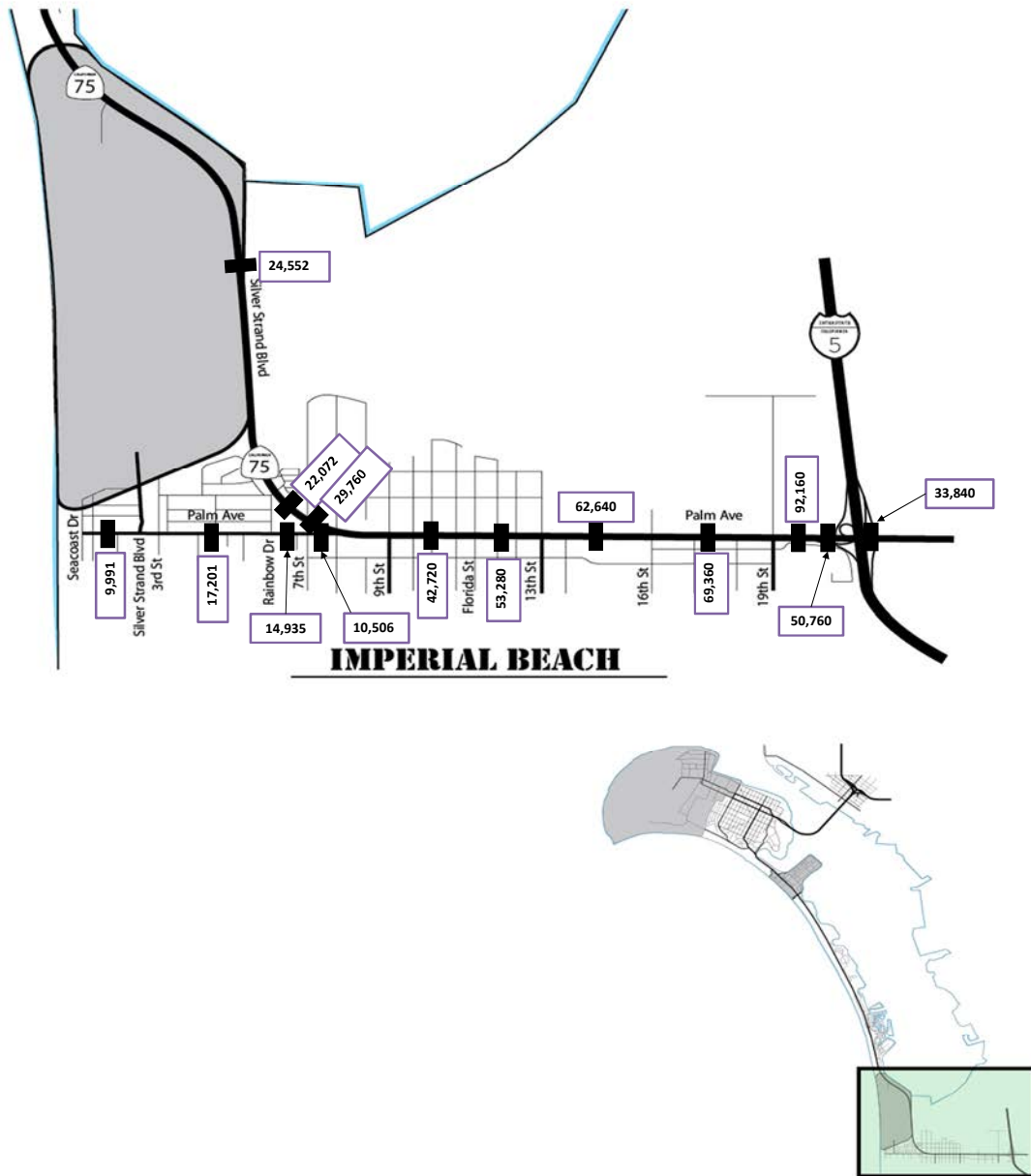
Year 2040 No Action ADT Volumes



Legend

■ X,XXX = Average Daily Traffic

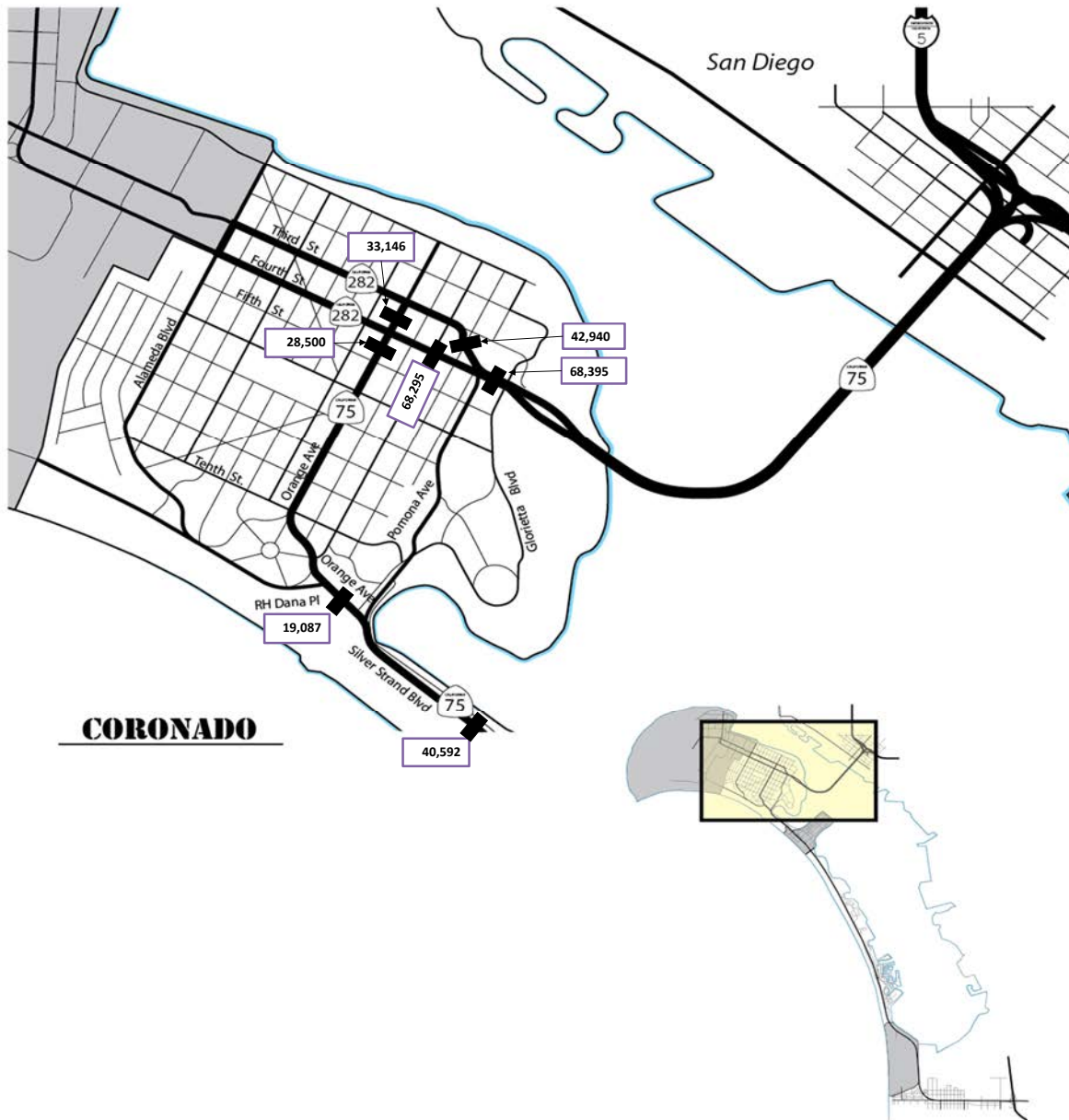




Legend

■ X,XXX = Average Daily Traffic

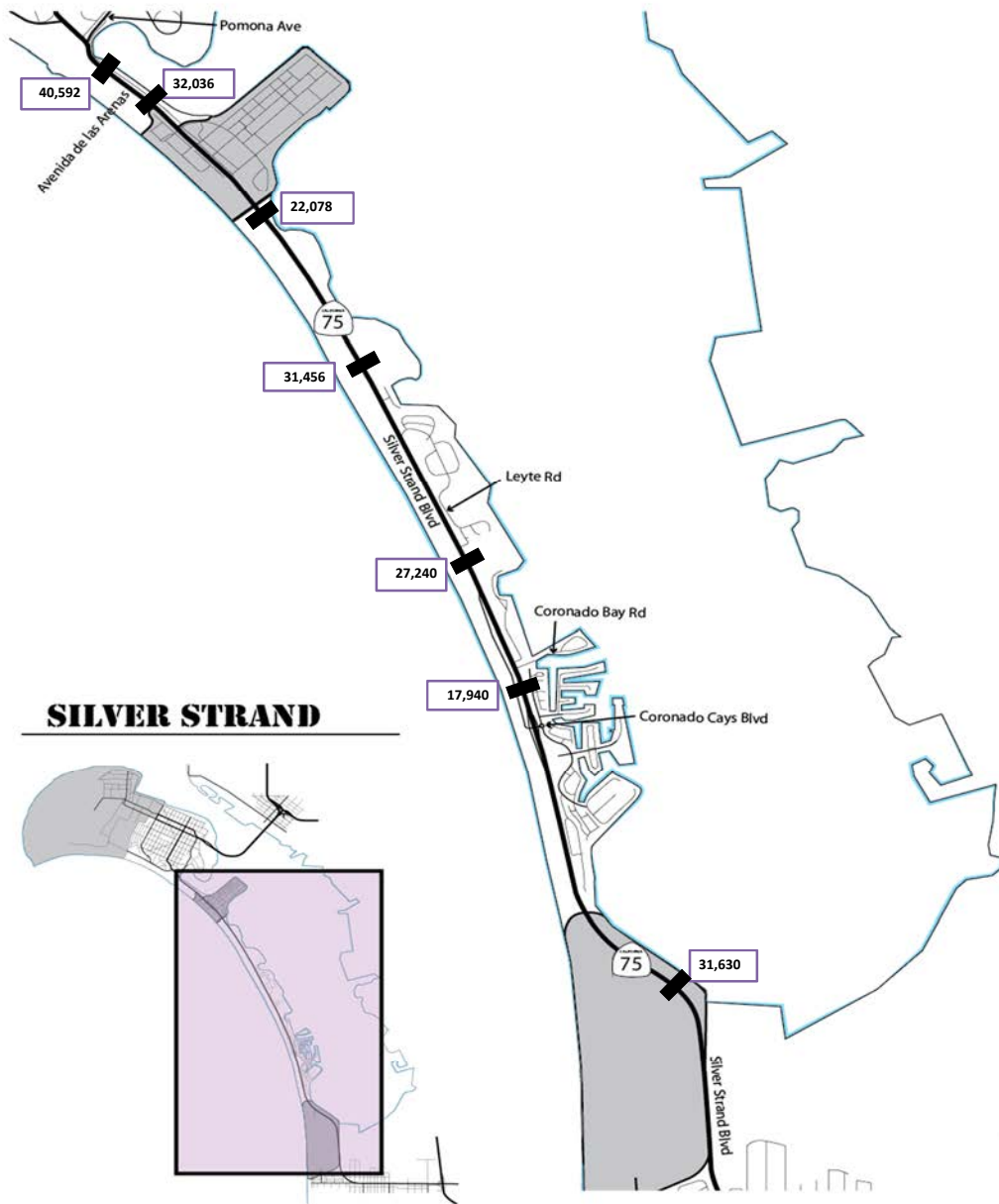




Legend

■ X,XXX = Average Daily Traffic

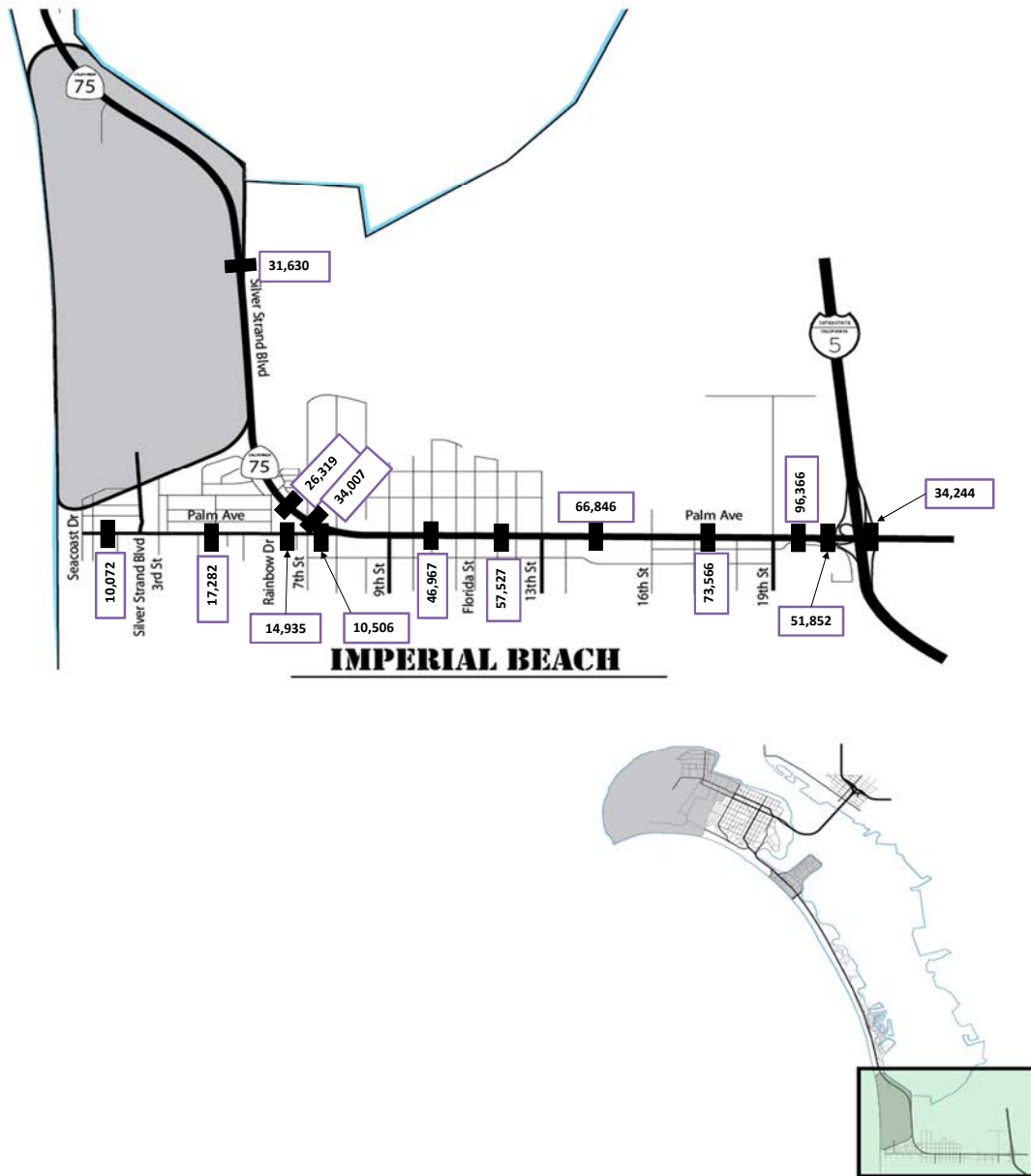




Legend

■ X,XXX = Average Daily Traffic

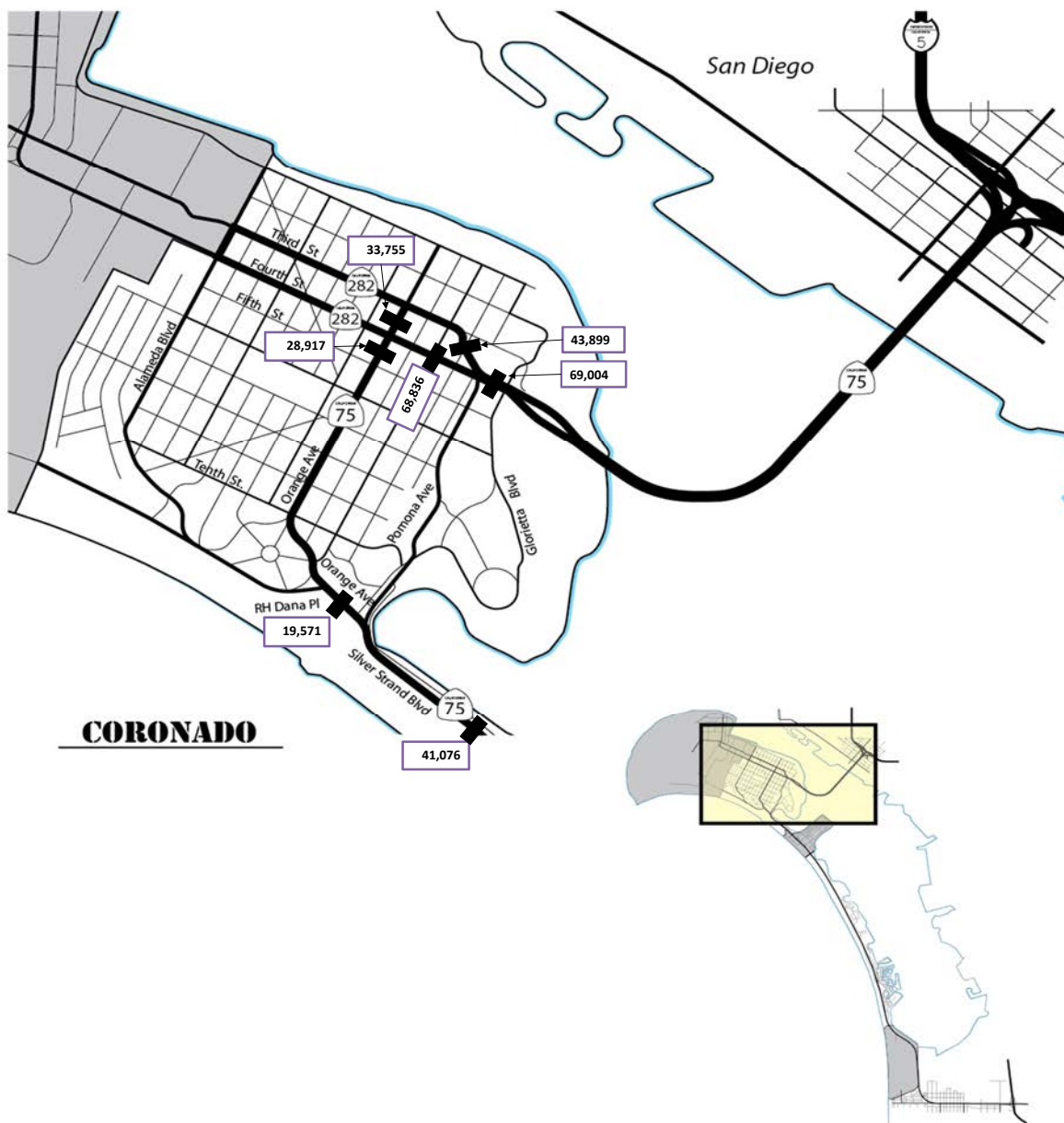




Legend

■ X,XXX = Average Daily Traffic





Legend

■ X,XXX = Average Daily Traffic

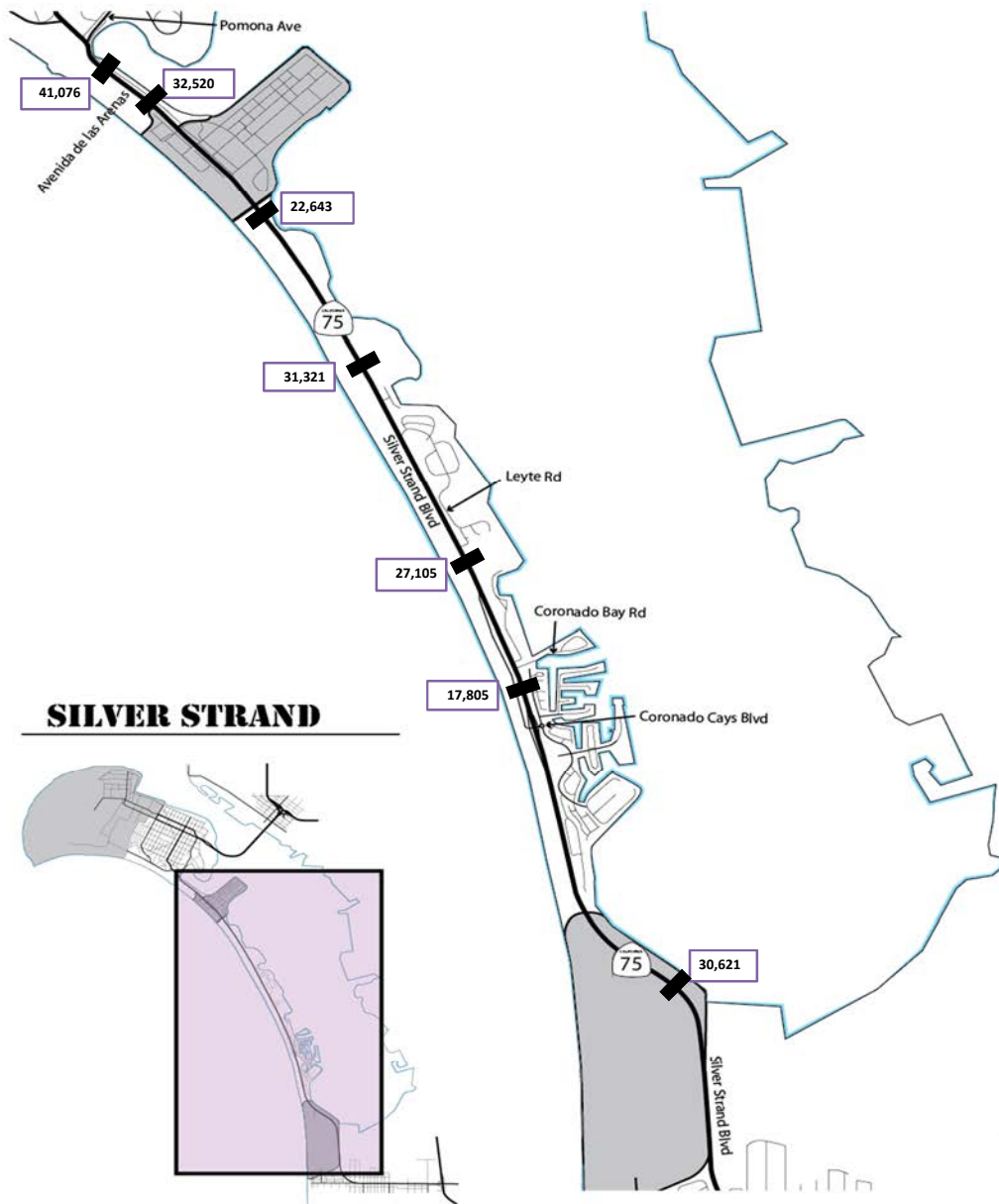


NOT TO SCALE



**Kimley-Horn
and Associates, Inc.**

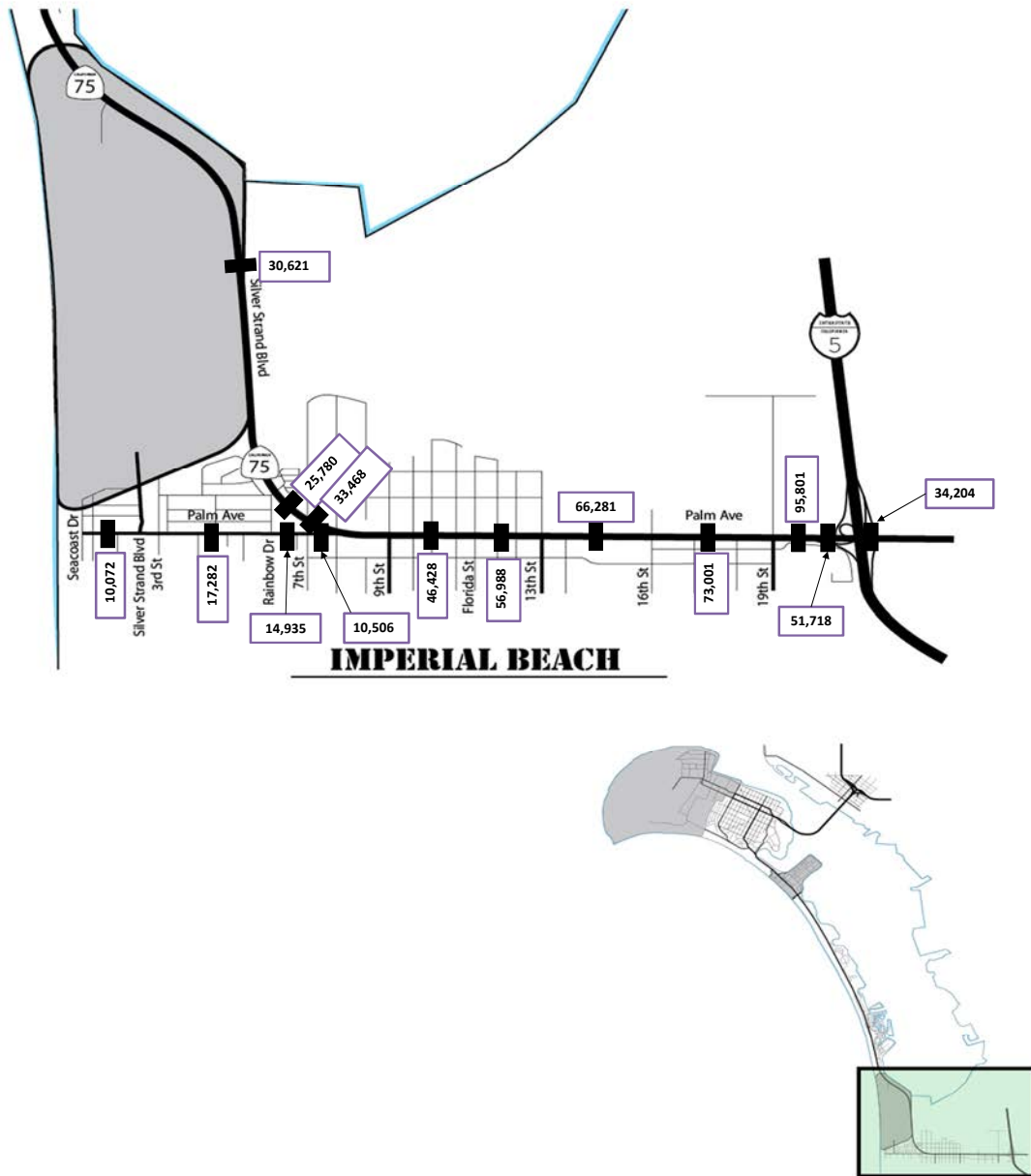
Year 2040 With Alternative 3 ADT Volumes



Legend

■ X,XXX = Average Daily Traffic





Legend

■ X,XXX = Average Daily Traffic

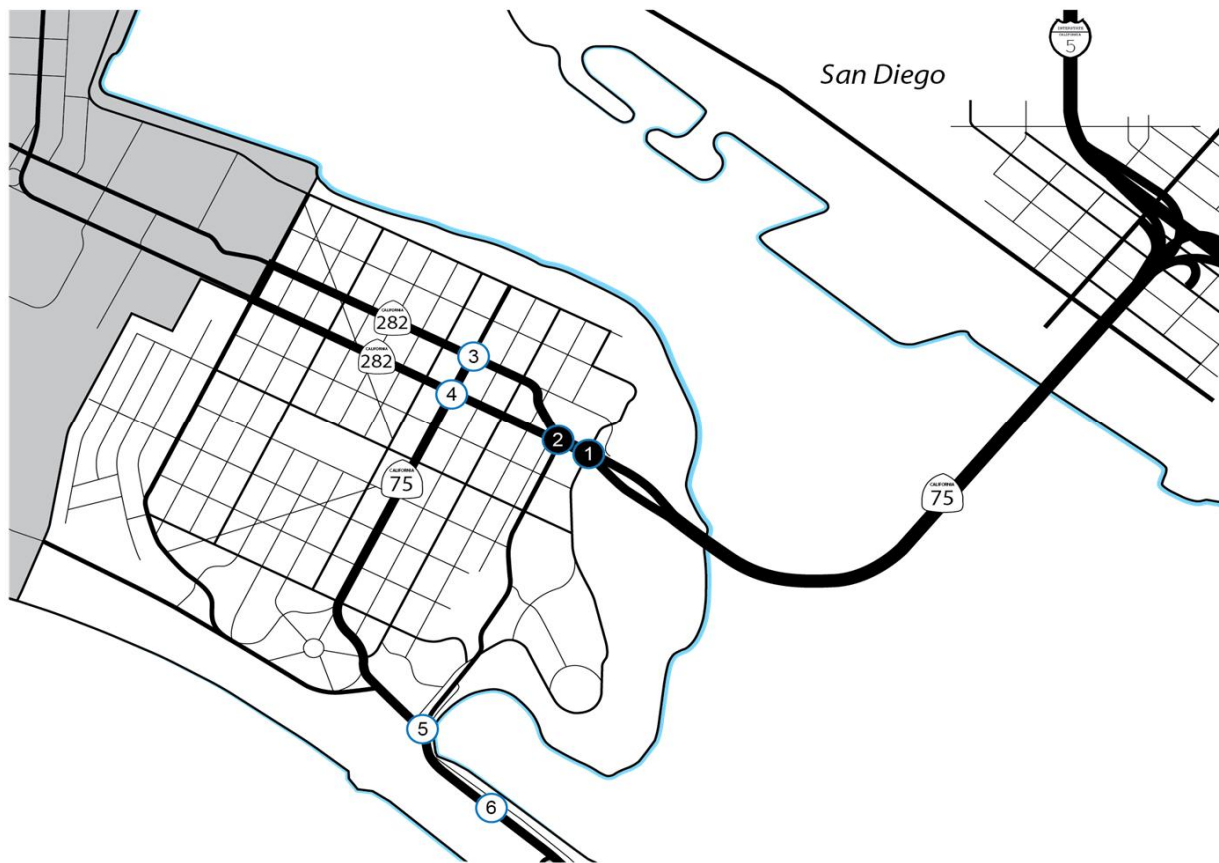


APPENDIX E

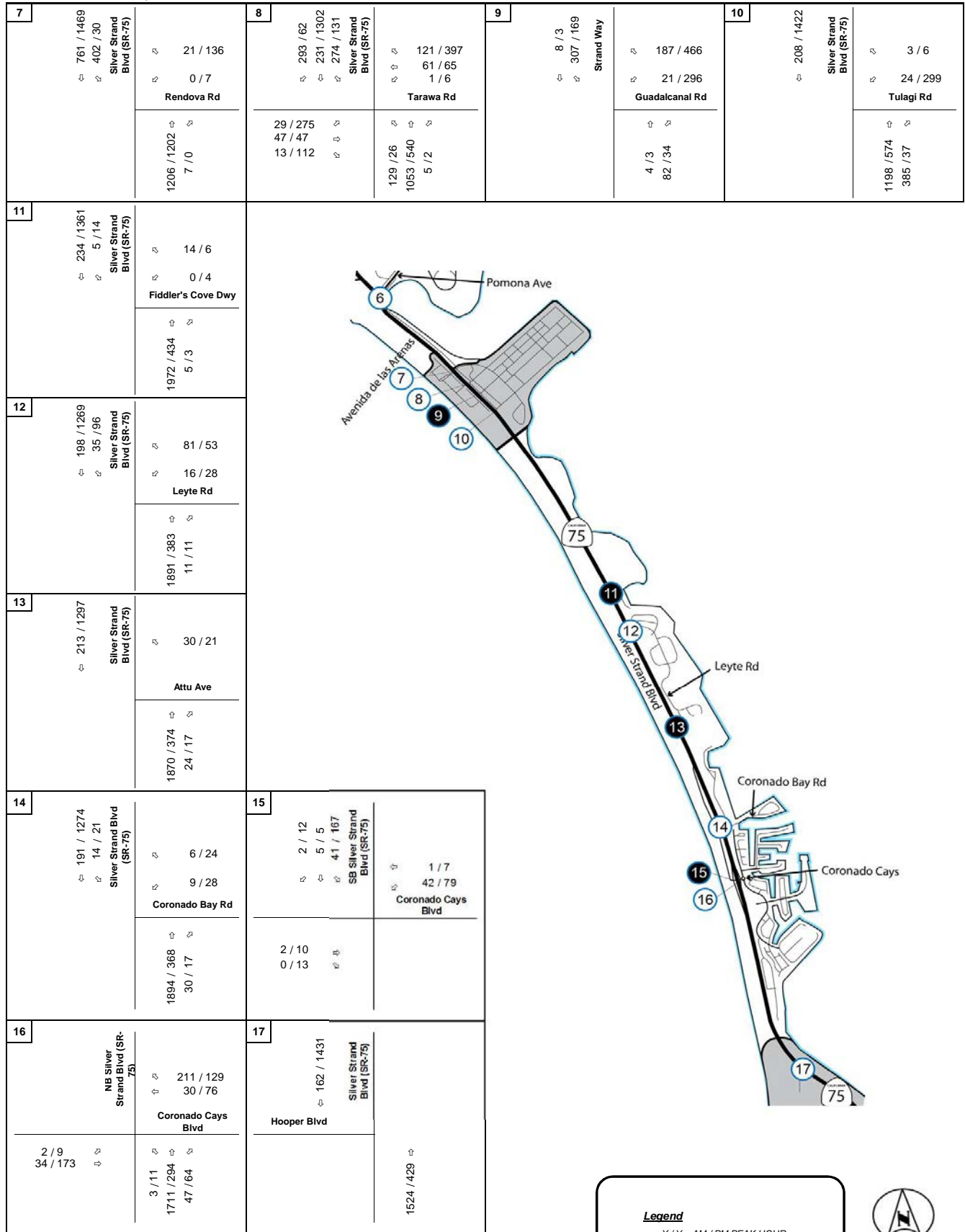
- Traffic Volumes with 3 CVNs in Port

NBC Coastal Campus

<div>1</div> <div>↔</div> <div>9 / 55</div> <div>Glorietta Blvd</div>	<div>↔</div> <div>537 / 239</div> <div>↔</div> <div>3447 / 1690</div> <div>Fourth St (SR-75)</div>	<div>2</div> <div>↔</div> <div>3347 / 1727</div> <div>Fourth St (SR-75)</div>	<div>3</div> <div>↔</div> <div>8 / 14</div> <div>↔</div> <div>261 / 806</div> <div>Orange Ave (SR-75)</div>	<div>↔</div> <div>282 / 90</div> <div>↔</div> <div>1678 / 551</div> <div>↔</div> <div>1537 / 956</div> <div>Third Street (SR-75)</div>	<div>4</div> <div>↔</div> <div>1420 / 1075</div> <div>↔</div> <div>435 / 709</div> <div>Orange Ave (SR-75)</div>	<div>↔</div> <div>0 / 3</div> <div>↔</div> <div>514 / 1876</div> <div>↔</div> <div>53 / 71</div> <div>Fourth St (SR-75)</div>
<div>5</div> <div>↔</div> <div>1038 / 1127</div> <div>Orange Ave (SR-75)</div>	<div>↔</div> <div>6 / 11</div> <div>↔</div> <div>204 / 163</div> <div>Pomona Ave</div>	<div>6</div> <div>↔</div> <div>34 / 143</div> <div>↔</div> <div>1171 / 1338</div> <div>↔</div> <div>37 / 63</div> <div>Silver Strand Blvd (SR-75)</div>	<div>↔</div> <div>5 / 23</div> <div>↔</div> <div>0 / 9</div> <div>↔</div> <div>7 / 24</div> <div>Avenidas De Las Arenas</div>			
<div>Silver Strand Blvd (SR-75)</div>	<div>↔</div> <div>1056 / 814</div> <div>↔</div> <div>567 / 648</div>	<div>44 / 135</div> <div>2 / 9</div> <div>↔</div> <div>9 / 27</div> <div>↔</div> <div>18 / 21</div> <div>↔</div> <div>1258 / 1385</div> <div>↔</div> <div>24 / 46</div>				



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<div>18</div> <div> <div>41 / 180</div> <div>119 / 1016</div> <div>0 / 1</div> <div>Silver Strand Blvd (SR-75)</div> <div>2 / 0</div> <div>1 / 1</div> <div>2 / 1</div> <div>Rainbow Dr</div> <div>367 / 81</div> <div>36 / 63</div> <div>24 / 68</div> <div>1412 / 294</div> <div>0 / 11</div> </div>	<div>19</div> <div> <div>48 / 19</div> <div>38 / 24</div> <div>18 / 22</div> <div>7th St</div> <div>16 / 32</div> <div>1279 / 329</div> <div>Silver Strand Blvd (SR-75)</div> <div>7 / 53</div> <div>165 / 974</div> <div>13 / 54</div> <div>35 / 12</div> <div>21 / 37</div> <div>1 / 4</div> </div>	<div>20</div> <div> <div>12 / 3</div> <div>Delaware St</div> <div>8 / 35</div> <div>1287 / 364</div> <div>368 / 467</div> <div>Silver Strand Blvd (SR-75)</div> <div>182 / 1002</div> </div>	<div>21</div> <div> <div>4 / 8</div> <div>47 / 103</div> <div>Silver Strand Blvd</div> <div>103 / 40</div> <div>127 / 303</div> <div>Palm Ave</div> <div>9 / 3</div> <div>231 / 211</div> <div>Dwy</div> </div>
<div>22</div> <div> <div>14 / 13</div> <div>10 / 33</div> <div>11 / 28</div> <div>3rd St</div> <div>24 / 24</div> <div>207 / 317</div> <div>26 / 84</div> <div>Palm Ave</div> <div>7 / 7</div> <div>269 / 292</div> <div>4 / 12</div> <div>11 / 14</div> <div>14 / 38</div> <div>125 / 67</div> </div>	<div>23</div> <div> <div>68 / 139</div> <div>17 / 52</div> <div>Rainbow Dr</div> <div>151 / 39</div> <div>330 / 452</div> <div>Palm Ave</div> <div>223 / 72</div> <div>422 / 419</div> </div>	<div>24</div> <div> <div>27 / 30</div> <div>21 / 40</div> <div>1 / 12</div> <div>7th St</div> <div>0 / 3</div> <div>331 / 454</div> <div>26 / 31</div> <div>Palm Ave</div> <div>16 / 28</div> <div>415 / 428</div> <div>15 / 29</div> <div>65 / 54</div> <div>35 / 19</div> <div>80 / 22</div> </div>	<div>###</div> <div> <div>499 / 475</div> <div>4 / 8</div> <div>Delaware St</div> <div>2 / 6</div> <div>5 / 2</div> <div>Palm Ave</div> </div>
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<div>30</div> <div> <div>73 / 217</div> <div>88 / 228</div> <div>224 / 561</div> <div>19th St</div> <div>205 / 530</div> <div>1533 / 1480</div> <div>233 / 313</div> <div>Palm Ave (SR-75)</div> <div>87 / 180</div> <div>1163 / 1518</div> <div>28 / 23</div> <div>Saturn Blvd</div> <div>70 / 62</div> <div>69 / 169</div> <div>736 / 509</div> </div>	<div>31</div> <div> <div>964 / 1527</div> <div>148 / 420</div> <div>I-5 SB Exit Ramp</div> <div>1009 / 802</div> <div>Palm Ave (SR-75)</div> <div>271 / 479</div> </div>	<div>32</div> <div> <div>I-5 NB Ramps</div> <div>500 / 239</div> <div>402 / 502</div> <div>Palm Ave (SR-75)</div> <div>420 / 893</div> <div>704 / 403</div> <div>1 / 2</div> <div>137 / 102</div> </div>	<div>33</div> <div> <div>13 / 36</div> <div>Silver Strand Blvd</div> <div>YMCA Dwy</div> <div>3 / 10</div> <div>4 / 8</div> <div>65 / 3</div> </div>



Legend

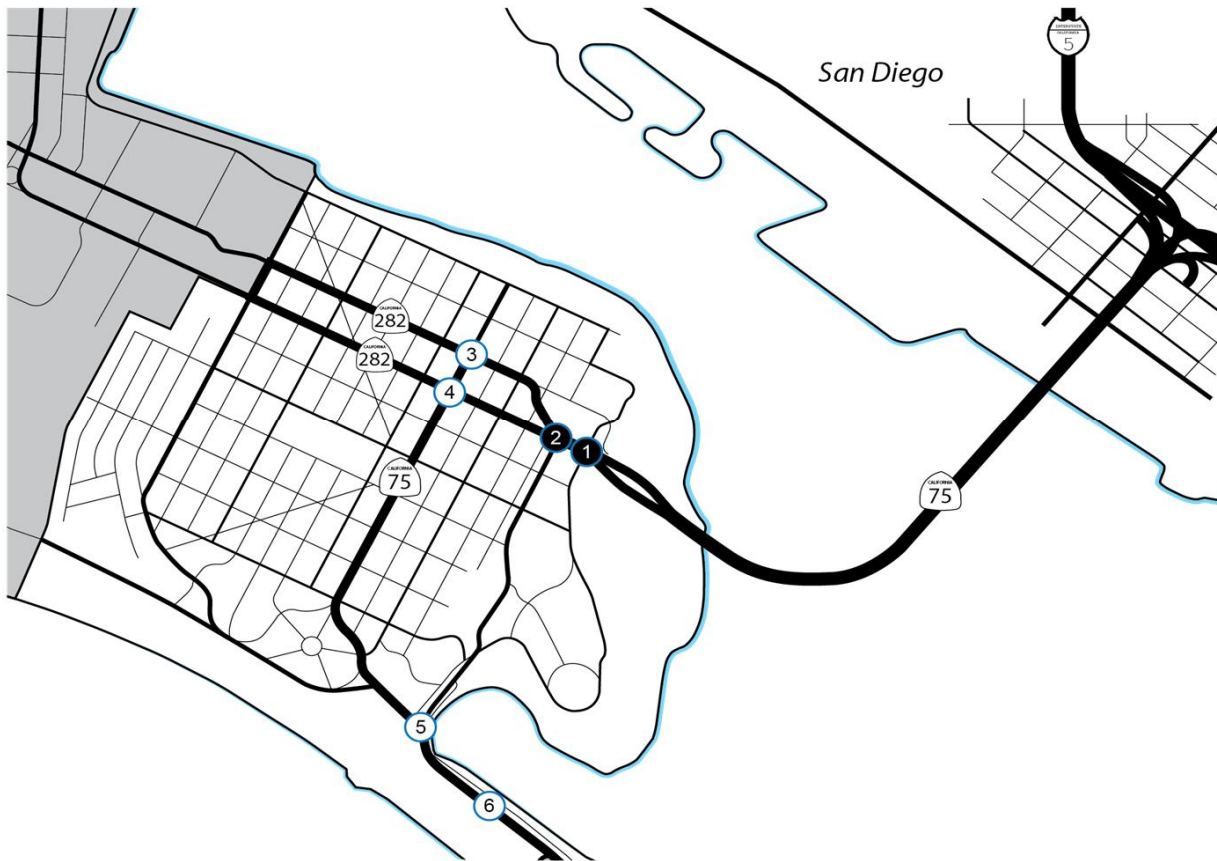
X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



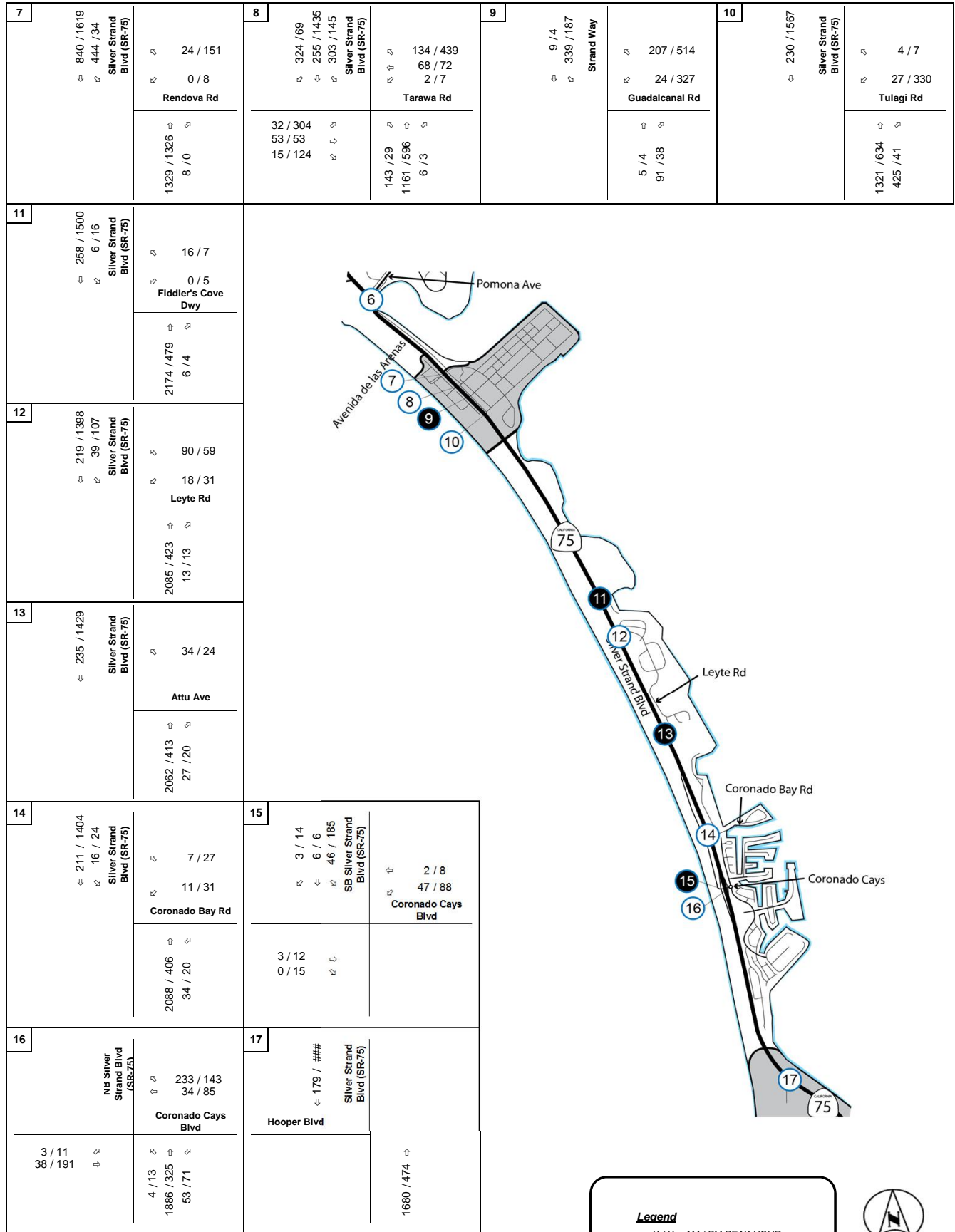
NOT TO SCALE

NBC Coastal Campus

<div>1</div> <div>↻</div> <div>10 / 56</div> <div>Glorietta Blvd</div>	<div>↻</div> <div>540 / 241</div> <div>↻</div> <div>3462 / 1698</div> <div>Fourth St (SR-75)</div>	<div>2</div> <div>↻</div> <div>3361 / 1735</div> <div>Fourth St (SR-75)</div>	<div>3</div> <div>↻</div> <div>9 / 15</div> <div>↻</div> <div>263 / 810</div> <div>Orange Ave (SR-75)</div>	<div>↻</div> <div>284 / 91</div> <div>↻</div> <div>1685 / 554</div> <div>↻</div> <div>1572 / 988</div> <div>Third Street (SR-75)</div>	<div>4</div> <div>↻</div> <div>1455 / 1107</div> <div>↻</div> <div>438 / 712</div> <div>Orange Ave (SR-75)</div>	<div>↻</div> <div>0 / 3</div> <div>↻</div> <div>517 / 1884</div> <div>↻</div> <div>54 / 72</div>	<div>↻</div> <div>152 / 325</div> <div>↻</div> <div>218 / 449</div> <div>Fourth St (SR-75)</div>
<div>5</div> <div>↻</div> <div>1145 / 1242</div> <div>Orange Ave (SR-75)</div>	<div>↻</div> <div>7 / 13</div> <div>↻</div> <div>225 / 181</div> <div>Pomona Ave</div>	<div>6</div> <div>↻</div> <div>38 / 158</div> <div>↻</div> <div>1292 / 1475</div> <div>↻</div> <div>41 / 70</div> <div>Silver Strand Blvd (SR-75)</div>	<div>↻</div> <div>6 / 26</div> <div>↻</div> <div>0 / 11</div> <div>↻</div> <div>8 / 27</div> <div>Avenidas De Las Arenas</div>				
<div>Silver Strand Blvd (SR-75)</div>	<div>↻</div> <div>1164 / 898</div> <div>↻</div> <div>626 / 715</div>	<div>49 / 150</div> <div>↻</div> <div>3 / 11</div> <div>↻</div> <div>11 / 30</div>	<div>↻</div> <div>21 / 24</div> <div>↻</div> <div>1387 / 1528</div> <div>↻</div> <div>27 / 52</div>				

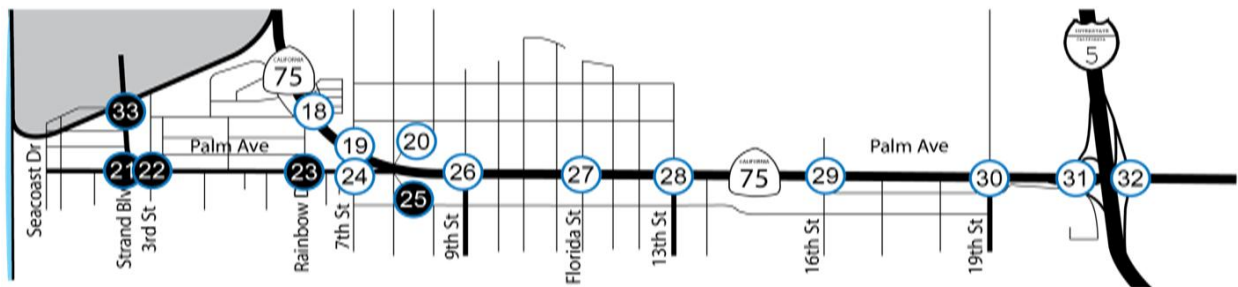


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NBC Coastal Campus

<div>18</div> <div> <div>46 / 199</div> <div>132 / 1120</div> <div>0 / 2</div> <div>Silver Strand Blvd (SR-75)</div> <div>3 / 0</div> <div>2 / 2</div> <div>3 / 2</div> <div>Rainbow Dr</div> <div>406 / 90</div> <div>40 / 70</div> <div>27 / 76</div> <div>1556 / 325</div> <div>0 / 13</div> </div>	<div>19</div> <div> <div>54 / 22</div> <div>43 / 27</div> <div>21 / 25</div> <div>7th St</div> <div>18 / 36</div> <div>1410 / 363</div> <div>Silver Strand Blvd (SR-75)</div> <div>8 / 59</div> <div>183 / 1073</div> <div>15 / 60</div> <div>39 / 14</div> <div>24 / 41</div> <div>2 / 5</div> </div>	<div>20</div> <div> <div>14 / 4</div> <div>Delaware St</div> <div>9 / 39</div> <div>1419 / 402</div> <div>407 / 516</div> <div>Silver Strand Blvd (SR-75)</div> <div>201 / 1104</div> </div>	<div>21</div> <div> <div>5 / 9</div> <div>48 / 105</div> <div>Silver Strand Blvd</div> <div>105 / 41</div> <div>129 / 308</div> <div>Palm Ave</div> <div>10 / 4</div> <div>234 / 214</div> <div>Dwy</div> </div>
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Legend

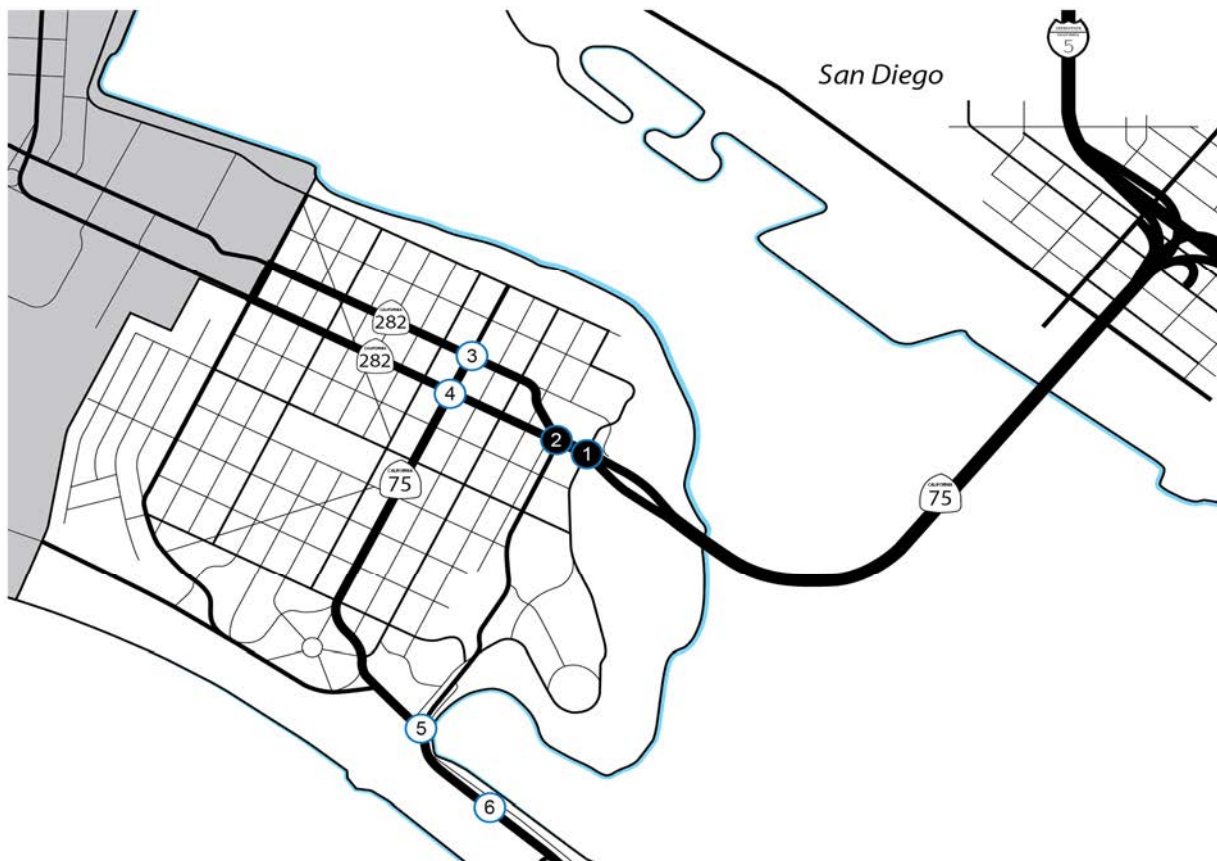
X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus

1 <div> <div>10 / 56</div> <div>Glorietta Blvd</div> <div> <div>540 / 241</div> <div>3422 / 1688</div> </div> <div>Fourth St (SR-75)</div> </div> <div> <div>1331 / 3751</div> <div>35 / 18</div> </div> <div> <div>477 / 903</div> </div>	2 <div> <div>3321 / 1725</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1192 / 3517</div> <div>203 / 131</div> </div> <div> <div>Pomona Ave</div> <div>231 / 184</div> </div>	3 <div> <div>9 / 15</div> <div>263 / 810</div> </div> <div> <div>Orange Ave (SR-75)</div> <div> <div>284 / 91</div> <div>1685 / 554</div> <div>1532 / 978</div> </div> <div>Third Street (SR-75)</div> </div> <div> <div>66 / 89</div> <div>97 / 247</div> </div>	4 <div> <div>1415 / 1097</div> <div>438 / 712</div> </div> <div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> </div> <div> <div>0 / 3</div> <div>517 / 1884</div> <div>70 / 75</div> </div> <div> <div>154 / 340</div> <div>216 / 425</div> </div>
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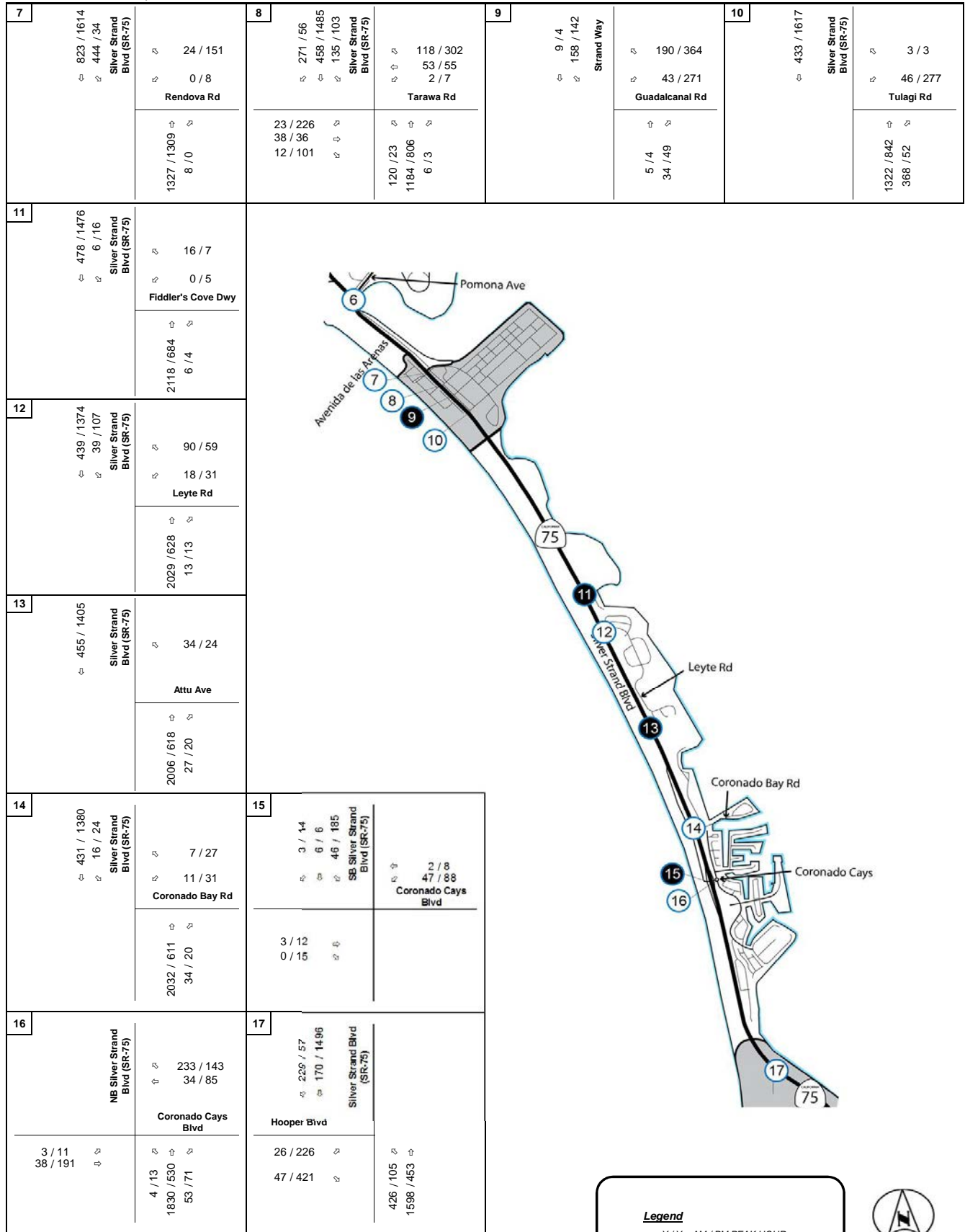
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



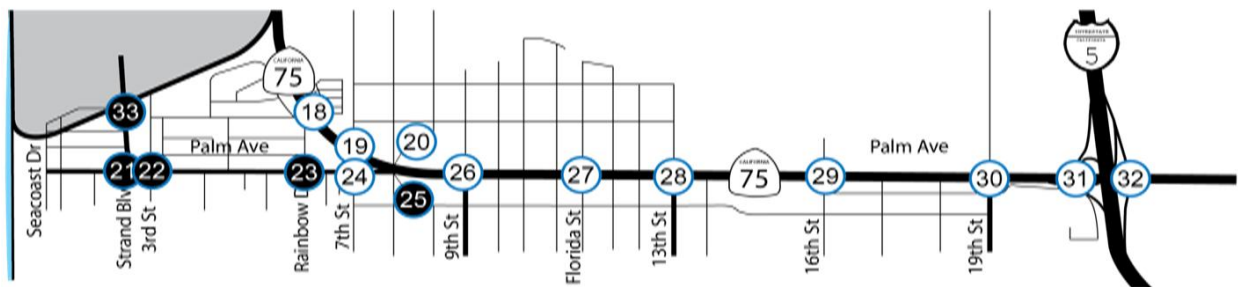
NOT TO SCALE

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Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES

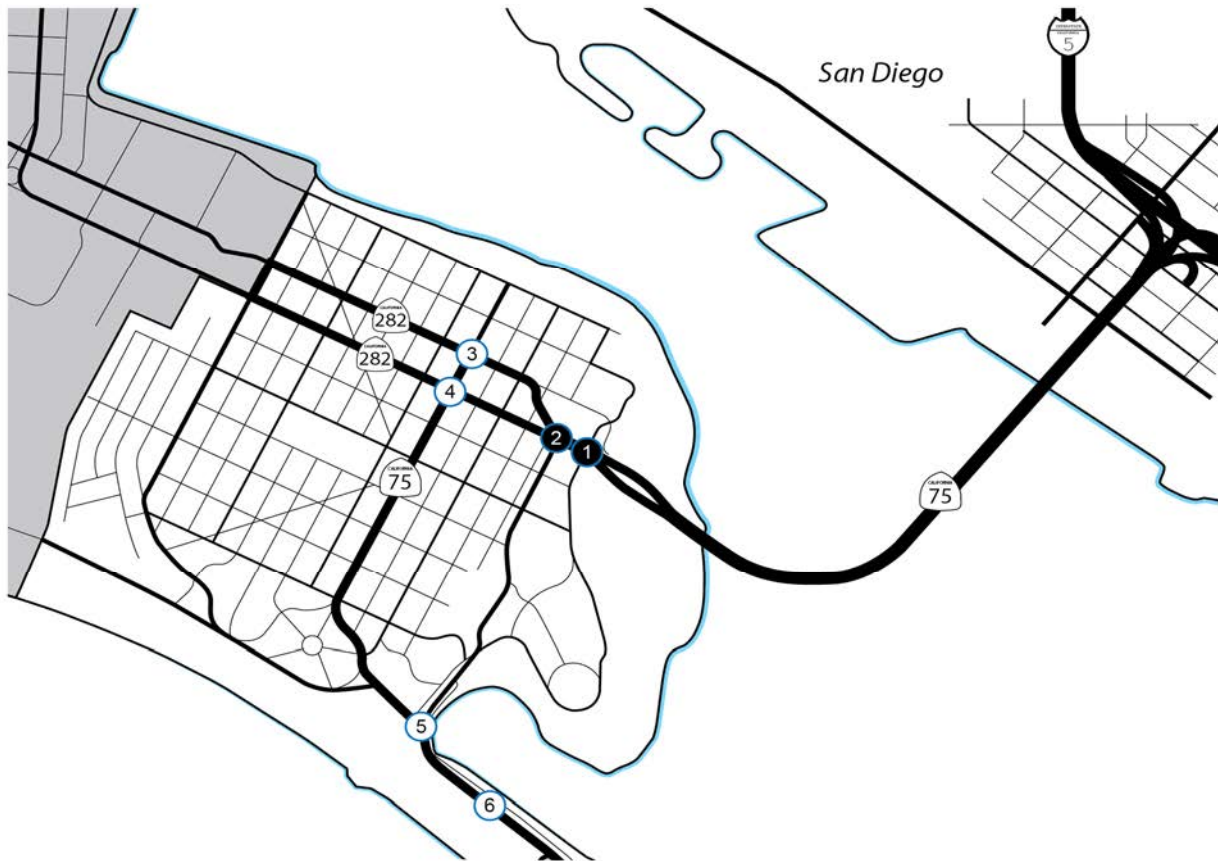


Figure 3.9.2-39c

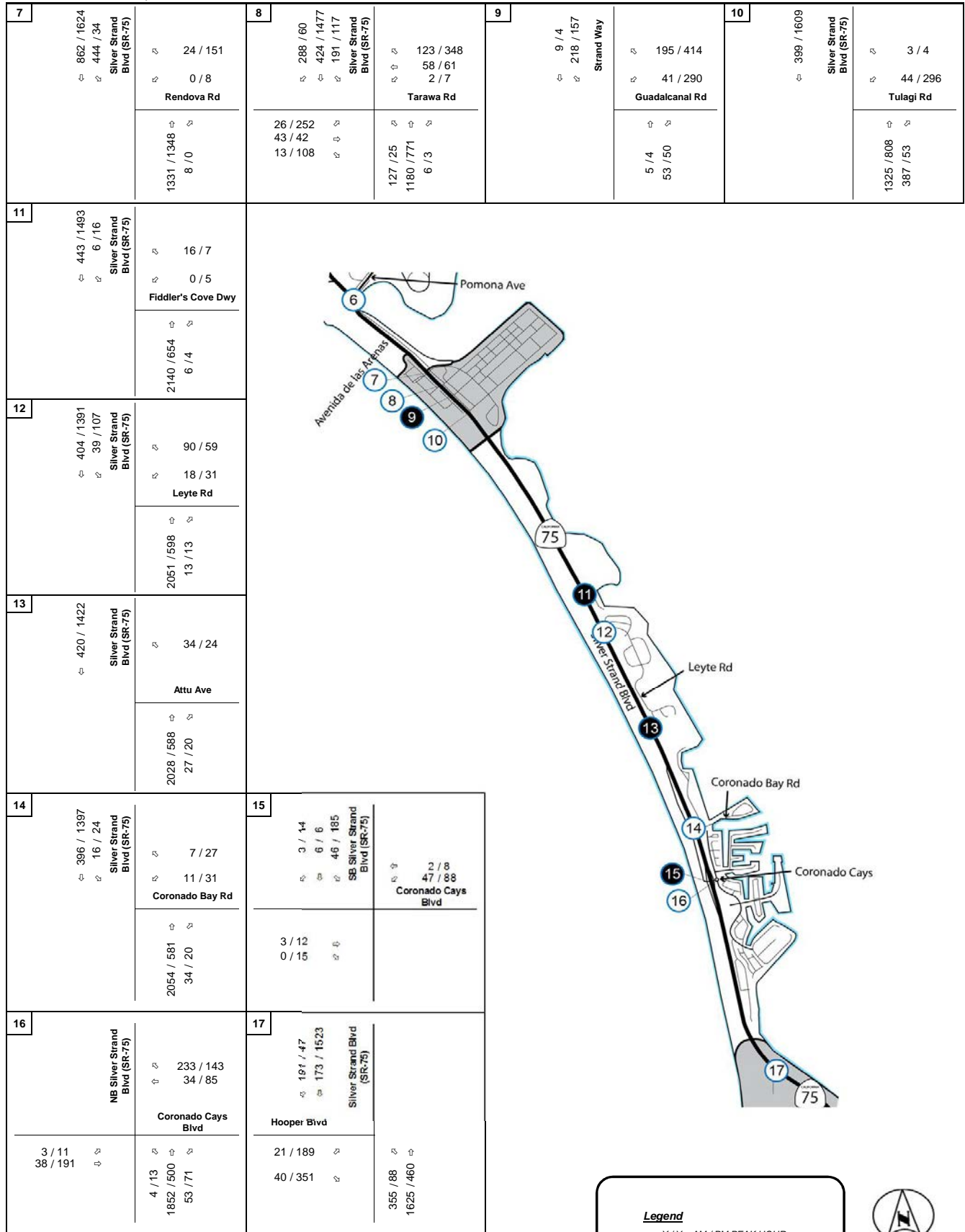
Year 2024 (3 CVNs) With Alternative 1 Peak-Hour Traffic
Volumes

NBC Coastal Campus

1		10 / 56 ↖		Glorietta Blvd		↗ ↕ ↖ 540 / 241 3471 / 1700		2		↕ ↖ ↗ 3370 / 1737		3		9 / 15 ↖ ↕ ↗ 263 / 810		Orange Ave (SR-75)		↖ ↕ ↗ 284 / 91 1695 / 557 1571 / 987		4		↖ ↕ ↗ 1454 / 1106 438 / 712		Orange Ave (SR-75)		Fourth St (SR-75)	
		1335 / 3796 35 / 18		↕ ↖		477 / 903				1196 / 3562 203 / 131		↕ ↖						65 / 90 97 / 247				0 / 3 518 / 1894 70 / 76		↕ ↖		153 / 341 219 / 460	
5		↖ ↕ ↗ 1167 / 1247		Orange Ave (SR-75)		↖ ↕ ↗ 7 / 13 225 / 181		Pomona Ave		6		↖ ↕ ↗ 38 / 158 1314 / 1480 41 / 70		Silver Strand Blvd (SR-75)		↖ ↕ ↗ 6 / 26 0 / 11 8 / 27		Avenidas De Las Arenas									
		↕ ↖ ↗ 1168 / 931 624 / 704								49 / 150 3 / 11 11 / 30		↕ ↖ ↗				21 / 24 1389 / 1550 27 / 52											



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<div>18</div> <div> <div>46 / 201</div> <div>165 / 1414</div> <div>0 / 2</div> <div>Silver Strand Blvd (SR-75)</div> <div>3 / 0</div> <div>2 / 2</div> <div>3 / 2</div> <div>Rainbow Dr</div> <div>408 / 90</div> <div>40 / 70</div> <div>27 / 76</div> <div>1852 / 398</div> <div>0 / 13</div> </div>	<div>19</div> <div> <div>54 / 22</div> <div>43 / 27</div> <div>21 / 25</div> <div>7th St</div> <div>18 / 36</div> <div>1703 / 435</div> <div>Silver Strand Blvd (SR-75)</div> <div>8 / 59</div> <div>215 / 1363</div> <div>15 / 62</div> <div>41 / 14</div> <div>24 / 41</div> <div>2 / 5</div> </div>	<div>20</div> <div> <div>14 / 4</div> <div>Delaware St</div> <div>9 / 39</div> <div>1712 / 474</div> <div>407 / 516</div> <div>Silver Strand Blvd (SR-75)</div> <div>233 / 1394</div> </div>	<div>21</div> <div> <div>5 / 9</div> <div>48 / 105</div> <div>Silver Strand Blvd</div> <div>105 / 41</div> <div>130 / 313</div> <div>Palm Ave</div> <div>10 / 4</div> <div>239 / 215</div> <div>Dwy</div> </div>
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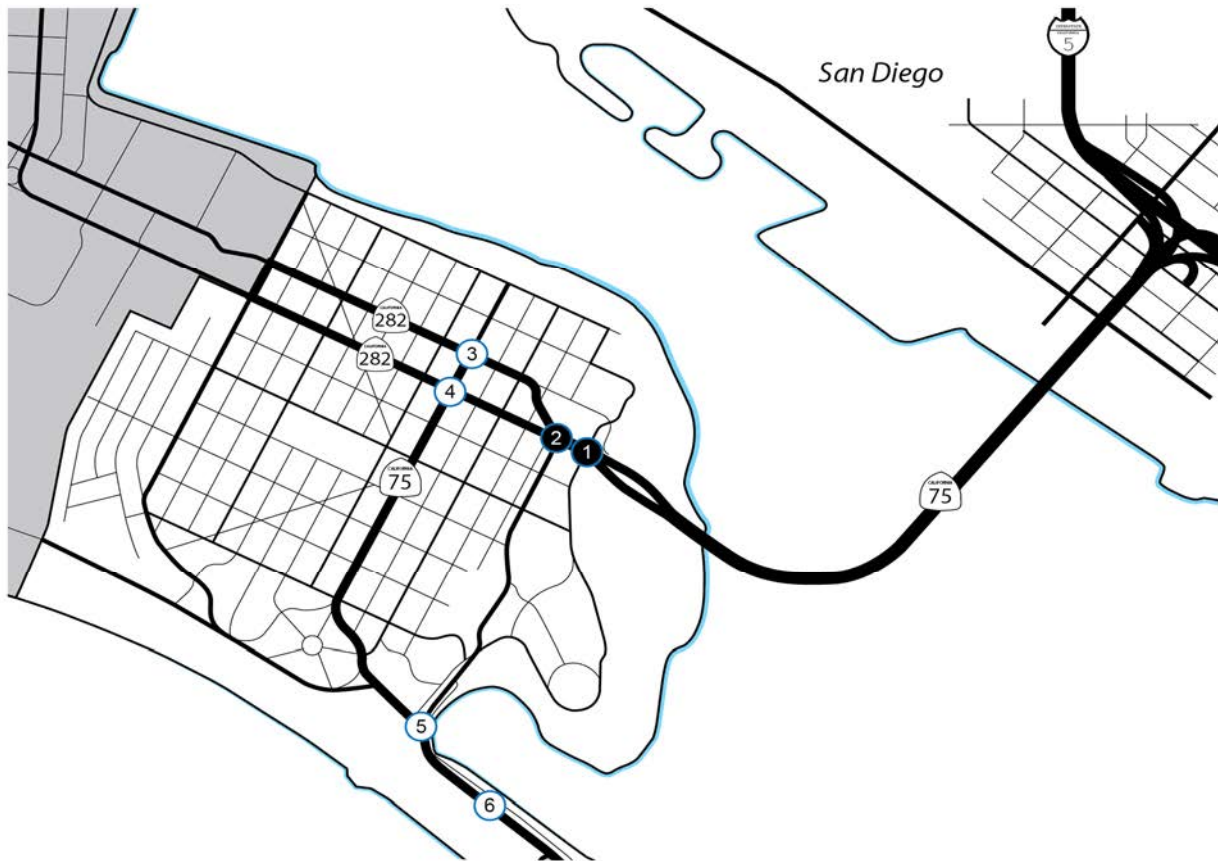
Legend

X / Y = AM / PM PEAK HOUR
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NBC Coastal Campus

<div>1</div> <div> <div> <div>10 / 56</div> <div>↔</div> <div>Glorietta Blvd</div> </div> <div> <div>540 / 241</div> <div>↕</div> <div>3357 / 1672</div> </div> <div> <div>Fourth St (SR-75)</div> </div> </div> <div> <div>1323 / 3687</div> <div>↕</div> <div>35 / 18</div> </div> <div> <div>477 / 903</div> <div>↕</div> </div>	<div>2</div> <div> <div>3256 / 1709</div> <div>↕</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1184 / 3453</div> <div>↕</div> <div>203 / 131</div> </div> <div> <div>Pomona Ave</div> </div> <div> <div>231 / 184</div> <div>↕</div> </div>	<div>3</div> <div> <div>9 / 15</div> <div>↕</div> <div>263 / 810</div> </div> <div> <div>Orange Ave (SR-75)</div> </div> <div> <div>284 / 91</div> <div>↕</div> <div>1685 / 554</div> <div>↕</div> <div>1467 / 962</div> </div> <div> <div>Third Street (SR-75)</div> </div> <div> <div>66 / 89</div> <div>↕</div> <div>97 / 247</div> </div>	<div>4</div> <div> <div>1350 / 1081</div> <div>↕</div> <div>438 / 712</div> </div> <div> <div>Orange Ave (SR-75)</div> </div> <div> <div>Fourth St (SR-75)</div> </div> <div> <div>0 / 3</div> <div>↕</div> <div>517 / 1884</div> <div>↕</div> <div>70 / 75</div> </div> <div> <div>154 / 340</div> <div>↕</div> <div>208 / 361</div> </div>
<div>5</div> <div> <div>1063 / 1221</div> <div>↕</div> <div>Orange Ave (SR-75)</div> </div> <div> <div>7 / 13</div> <div>↕</div> <div>225 / 181</div> </div> <div> <div>Pomona Ave</div> </div> <div> <div>1156 / 833</div> <div>↕</div> <div>624 / 698</div> </div>	<div>6</div> <div> <div>38 / 158</div> <div>↕</div> <div>1210 / 1454</div> <div>↕</div> <div>41 / 70</div> </div> <div> <div>Silver Strand Blvd (SR-75)</div> </div> <div> <div>6 / 26</div> <div>↕</div> <div>0 / 11</div> <div>↕</div> <div>8 / 27</div> </div> <div> <div>Avenidas De Las Arenas</div> </div> <div> <div>49 / 150</div> <div>↕</div> <div>3 / 11</div> <div>↕</div> <div>11 / 30</div> </div> <div> <div>21 / 24</div> <div>↕</div> <div>1377 / 1446</div> <div>↕</div> <div>27 / 52</div> </div>		



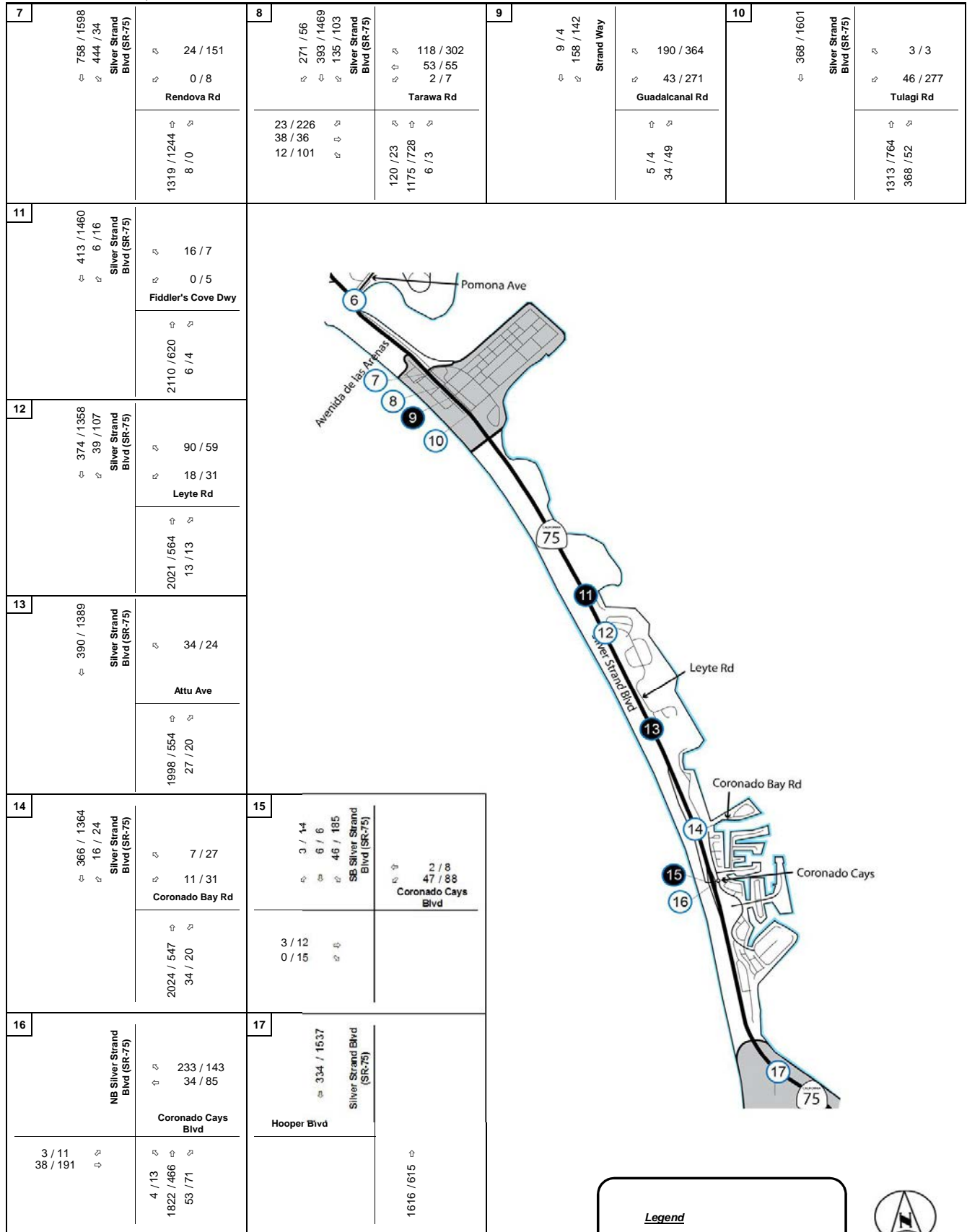
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

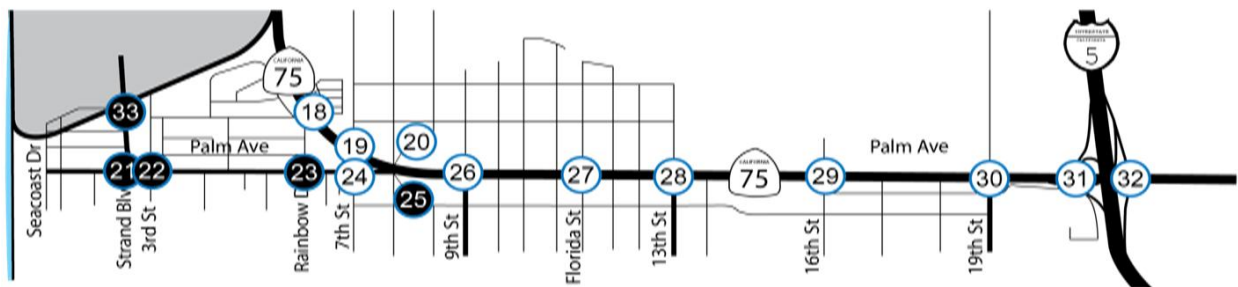
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18 <div> <div> 209 / 236 123 / 1042 0 / 2 Silver Strand Blvd (SR-75) </div> <div> 3 / 0 2 / 2 3 / 2 Rainbow Dr </div> </div> <div> 420 / 251 40 / 70 </div>	19 <div> <div> 54 / 22 43 / 27 21 / 25 7th St </div> <div> 18 / 36 1334 / 344 Silver Strand Blvd (SR-75) </div> </div> <div> 8 / 59 174 / 998 14 / 56 </div> <div> 35 / 13 24 / 41 2 / 5 </div>	20 <div> 14 / 4 Delaware St </div> <div> 9 / 39 1343 / 383 885 / 634 Silver Strand Blvd (SR-75) </div>
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192 / 1029



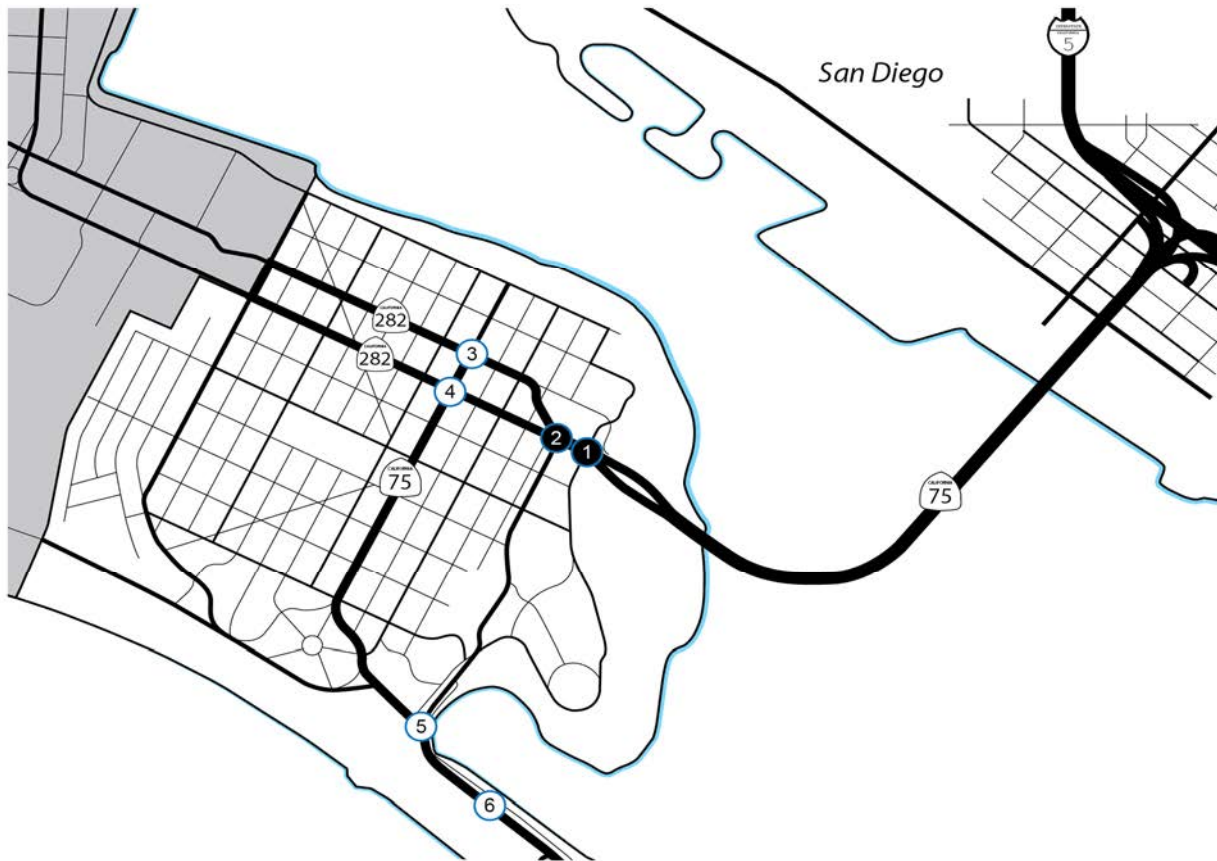
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1 <div> <div>10 / 56</div> <div>Glorietta Blvd</div> <div> <div>540 / 241</div> <div>3416 / 1687</div> <div>Fourth St (SR-75)</div> </div> </div> <div> <div>1329 / 3742</div> <div>35 / 18</div> </div> <div> <div>477 / 903</div> </div>	2 <div> <div>3315 / 1724</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1190 / 3508</div> <div>203 / 131</div> <div>Pomona Ave</div> </div> <div> <div>231 / 190</div> </div>	3 <div> <div>9 / 15</div> <div>263 / 810</div> <div>Orange Ave (SR-75)</div> </div> <div> <div>284 / 91</div> <div>1695 / 557</div> <div>1516 / 974</div> <div>Third Street (SR-75)</div> </div> <div> <div>65 / 90</div> <div>97 / 247</div> </div>	4 <div> <div>1399 / 1093</div> <div>438 / 712</div> <div>Orange Ave (SR-75)</div> </div> <div> <div>0 / 3</div> <div>518 / 1894</div> <div>70 / 76</div> </div> <div> <div>153 / 341</div> <div>213 / 406</div> </div>
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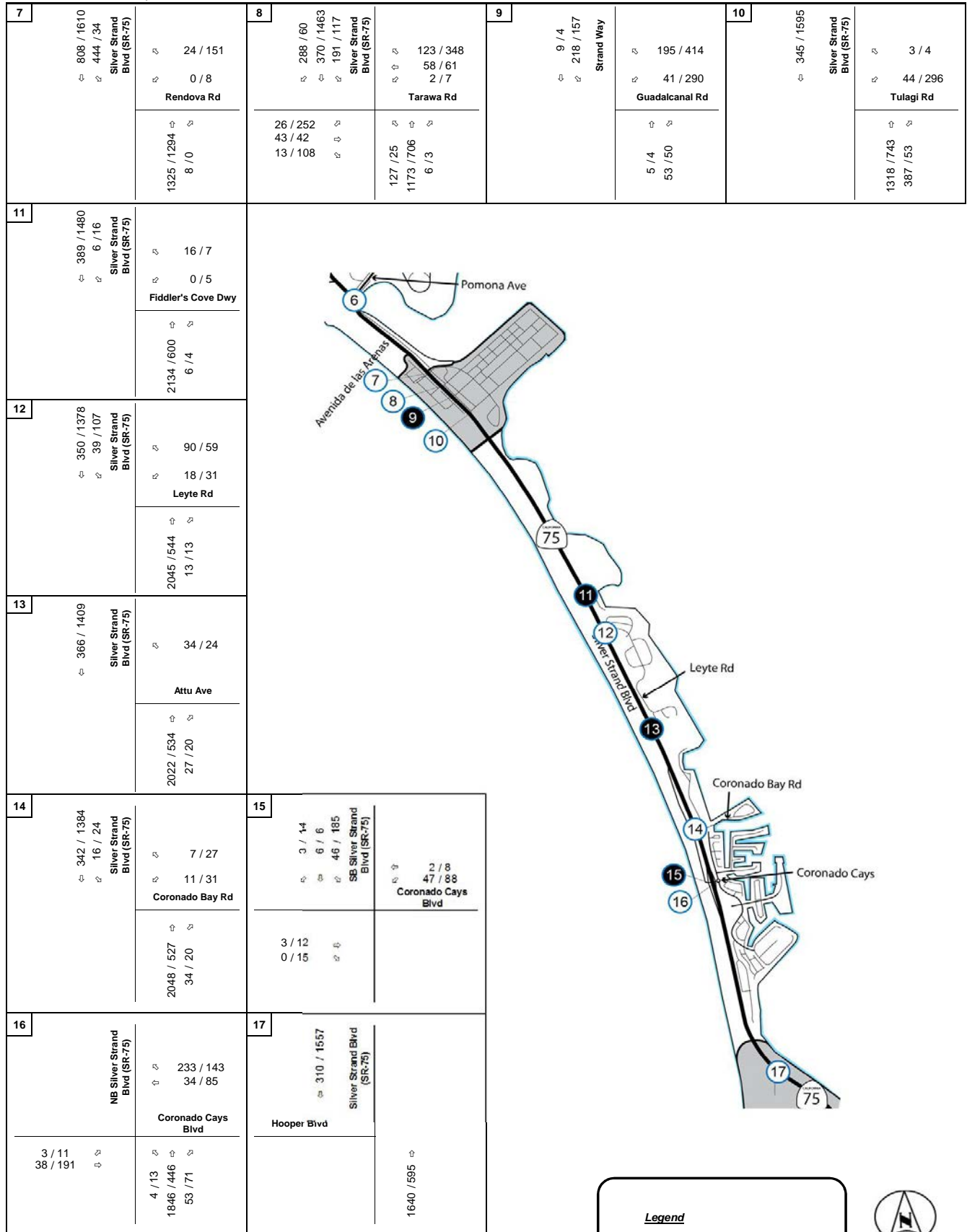
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TURNING VOLUMES



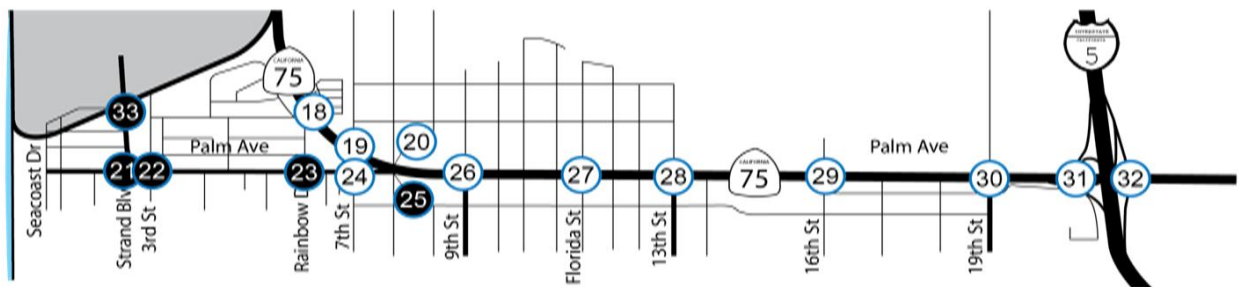
NOT TO SCALE

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<div>26</div> <div> <div>26 / 27</div> <div>47 / 82</div> <div>93 / 179</div> <div>45 / 135</div> <div>1905 / 880</div> <div>25 / 60</div> <div>Palm Ave (SR-75)</div> <div>22 / 43</div> <div>702 / 1744</div> <div>36 / 130</div> <div>170 / 101</div> <div>38 / 93</div> <div>53 / 65</div> </div>	<div>27</div> <div> <div>16 / 15</div> <div>11 / 14</div> <div>57 / 66</div> <div>Florida St</div> <div>13 / 57</div> <div>2084 / 1298</div> <div>21 / 51</div> <div>Palm Ave (SR-75)</div> <div>3 / 21</div> <div>940 / 2035</div> <div>36 / 59</div> <div>19 / 22</div> <div>5 / 11</div> <div>32 / 36</div> </div>	<div>28</div> <div> <div>16 / 21</div> <div>37 / 46</div> <div>174 / 159</div> <div>13th St</div> <div>54 / 84</div> <div>1933 / 1374</div> <div>100 / 162</div> <div>Palm Ave (SR-75)</div> <div>4 / 28</div> <div>1012 / 1913</div> <div>66 / 206</div> <div>151 / 133</div> <div>20 / 42</div> <div>94 / 132</div> </div>	<div>29</div> <div> <div>22 / 11</div> <div>3 / 11</div> <div>40 / 25</div> <div>16th St</div> <div>13 / 17</div> <div>2067 / 1682</div> <div>45 / 177</div> <div>Palm Ave (SR-75)</div> <div>15 / 10</div> <div>1286 / 2044</div> <div>27 / 52</div> <div>17 / 41</div> <div>7 / 9</div> <div>51 / 84</div> </div>
<div>30</div> <div> <div>80 / 236</div> <div>96 / 248</div> <div>244 / 610</div> <div>19th St</div> <div>223 / 576</div> <div>2002 / 1691</div> <div>254 / 340</div> <div>Palm Ave (SR-75)</div> <div>95 / 196</div> <div>1301 / 1981</div> <div>31 / 28</div> <div>78 / 68</div> <div>75 / 184</div> <div>800 / 553</div> </div>	<div>31</div> <div> <div>1336 / 1730</div> <div>161 / 456</div> <div>I-5 SB Exit Ramp</div> <div>1144 / 882</div> <div>Palm Ave (SR-75)</div> <div>295 / 527</div> <div>41 / 367</div> </div>	<div>32</div> <div> <div>I-5 NB Ramps</div> <div>543 / 260</div> <div>443 / 547</div> <div>Palm Ave (SR-75)</div> <div>456 / 976</div> <div>806 / 448</div> <div>2 / 3</div> <div>149 / 111</div> </div>	<div>33</div> <div> <div>75 / 577</div> <div>Silver Strand Blvd</div> <div>YMCA Dwy</div> <div>4 / 11</div> <div>5 / 9</div> <div>612 / 139</div> </div>



Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES

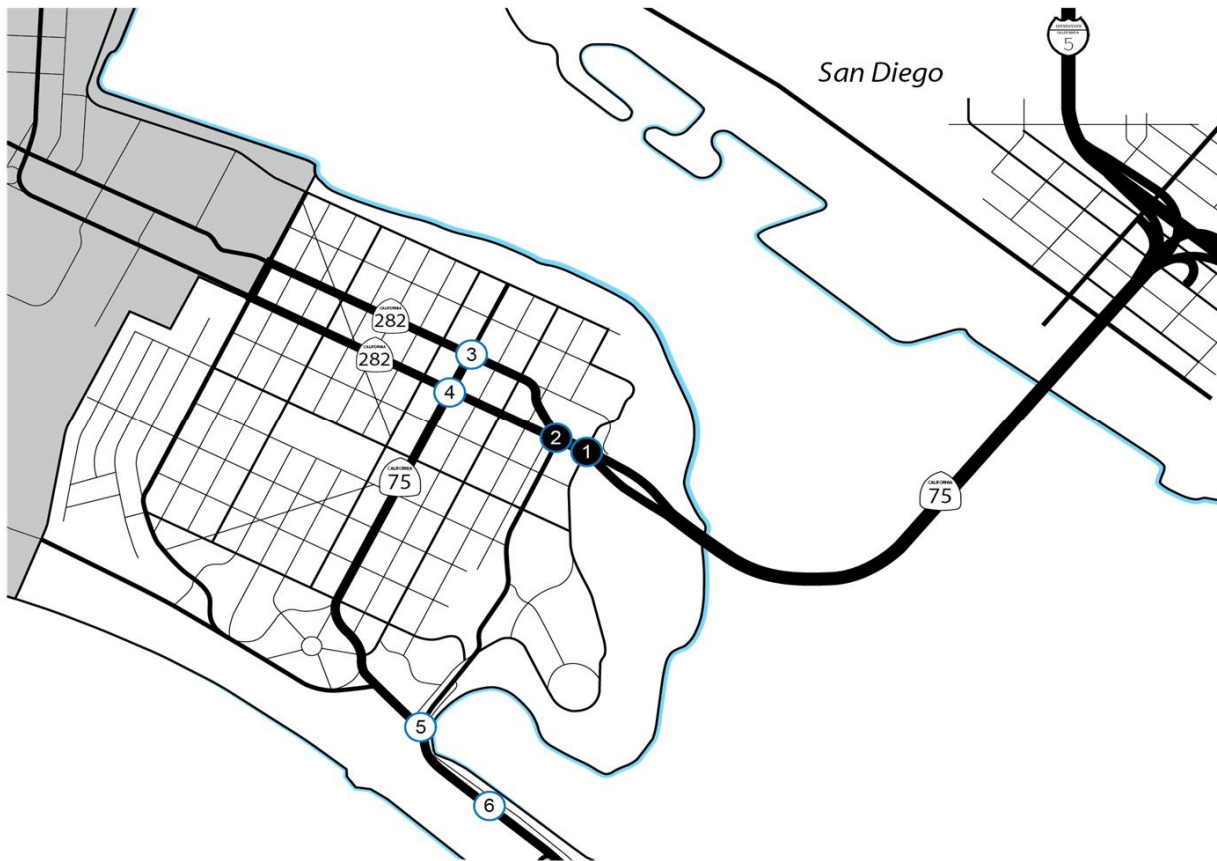


Figure 3.9.2-39c

Year 2024 (3 CVNs) With Alternative 3 Peak-Hour Traffic
Volumes

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1		10 / 56		Glorietta Blvd		↻ 543 / 242 ↻ 3480 / 1707		Fourth St (SR-75)		2		↻ 3379 / 1745		Fourth St (SR-75)		3		9 / 15 ↻ 264 / 814		Orange Ave (SR-75)		↻ 285 / 91 ↻ 1694 / 557 ↻ 1572 / 988		Third Street (SR-75)		64 / 74 ↻ 97 / 248		4		↻ 1455 / 1107 ↻ 440 / 716		Orange Ave (SR-75)		↻ 0 / 3 ↻ 519 / 1893 ↻ 54 / 72		Fourth St (SR-75)		↻ 153 / 327 ↻ 218 / 449	
5		↻ 1287 / 1394		Orange Ave (SR-75)		↻ 8 / 14 ↻ 253 / 203		Pomona Ave		1307 / 1009 ↻ 704 / 804		6		43 / 178 ↻ 1452 / 1656 ↻ 46 / 79		Silver Strand Blvd (SR-75)		↻ 7 / 29 ↻ 0 / 12 ↻ 9 / 30		Avenidas De Las Arenas		↻ 23 / 27 ↻ 1557 / 1717 ↻ 30 / 58																	



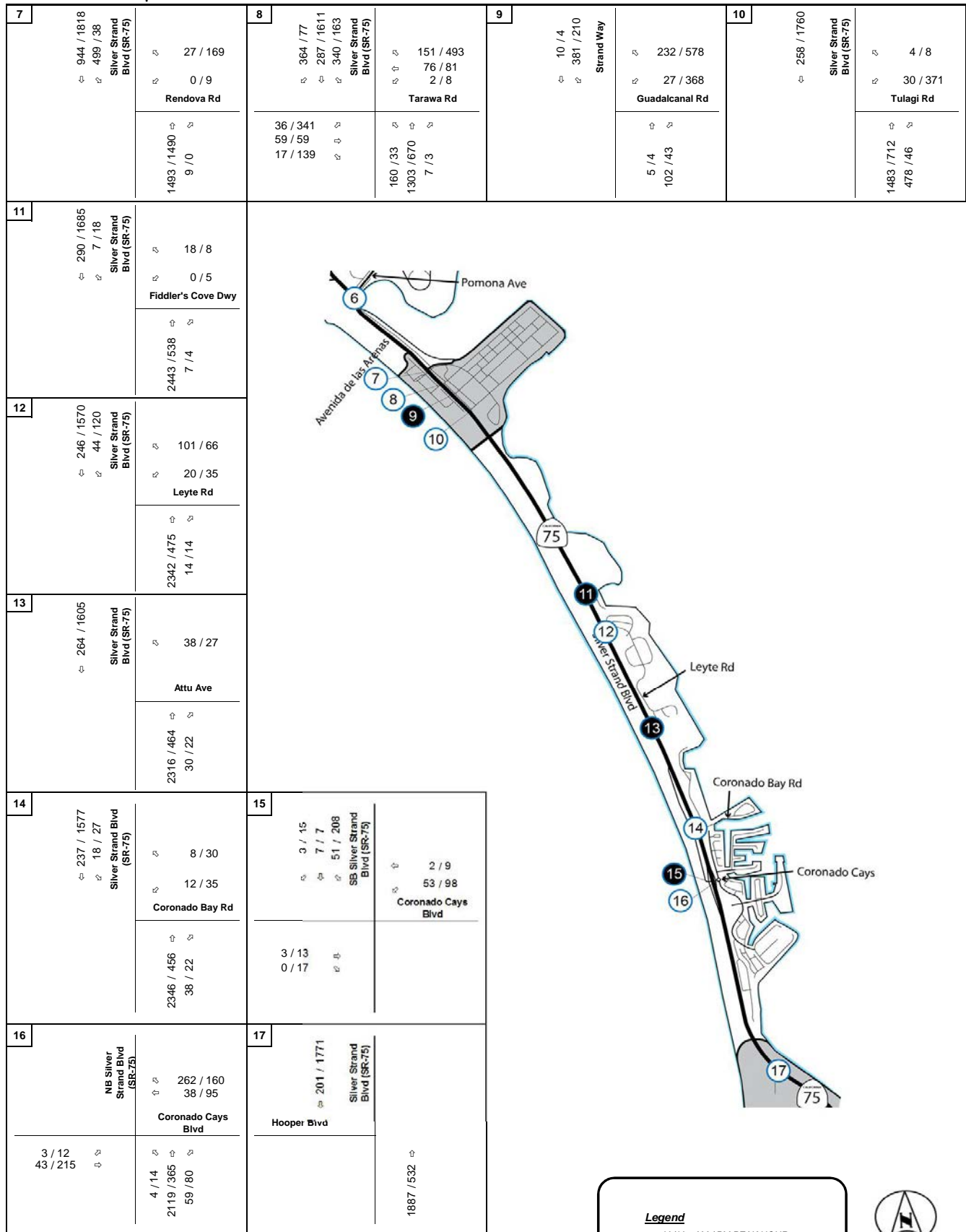
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus



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18 51 / 224 148 / 1257 0 / 2 Silver Strand Blvd (SR-75) 3 / 0 2 / 2 3 / 2 Rainbow Dr 456 / 101 45 / 79 30 / 85 1748 / 365 0 / 14	19 60 / 24 48 / 30 23 / 28 7th St 20 / 40 1583 / 408 Silver Strand Blvd (SR-75) 9 / 66 205 / 1205 17 / 67 44 / 15 27 / 46 2 / 5	20 15 / 4 Delaware St 10 / 44 1593 / 451 457 / 580 Silver Strand Blvd (SR-75) 226 / 1239	21 5 / 9 49 / 107 Silver Strand Blvd 107 / 42 131 / 313 Palm Ave 10 / 4 238 / 218 Dwy
22 15 / 14 11 / 34 12 / 29 3rd St 25 / 25 214 / 327 27 / 87 Palm Ave 8 / 8 278 / 301 5 / 13 12 / 15 15 / 40 129 / 70	23 71 / 144 18 / 54 Rainbow Dr 156 / 41 340 / 466 Palm Ave 230 / 75 435 / 432	24 28 / 31 22 / 42 2 / 13 7th St 0 / 4 341 / 468 27 / 32 Palm Ave 17 / 29 428 / 441 16 / 30 67 / 56 37 / 20 83 / 23	25 514 / 490 5 / 9 Delaware St 3 / 7 6 / 3 Palm Ave
26 28 / 29 52 / 90 102 / 197 9th St 50 / 149 1723 / 878 27 / 66 Palm Ave (SR-75) 24 / 47 733 / 1549 40 / 141 185 / 111 42 / 102 58 / 71	27 17 / 16 12 / 15 63 / 72 Florida St 14 / 63 1921 / 1340 23 / 56 Palm Ave (SR-75) 3 / 23 996 / 1871 40 / 65 21 / 24 5 / 12 35 / 40	28 17 / 23 41 / 51 192 / 176 13th St 59 / 93 1757 / 1426 110 / 179 Palm Ave (SR-75) 4 / 30 1077 / 1740 72 / 225 165 / 147 22 / 46 104 / 146	29 24 / 12 3 / 12 44 / 27 16th St 14 / 18 1905 / 1766 50 / 195 Palm Ave (SR-75) 16 / 11 1380 / 1885 29 / 57 18 / 45 8 / 10 56 / 93
30 88 / 261 106 / 274 269 / 674 19th St 246 / 636 1837 / 1776 280 / 376 Palm Ave (SR-75) 105 / 216 1396 / 1819 34 / 28 84 / 75 83 / 203 884 / 611	31 1157 / 1833 178 / 504 I-5 SB Exit Ramp 1209 / 962 Palm Ave (SR-75) 326 / 575	32 I-5 NB Ramps 600 / 287 483 / 603 Palm Ave (SR-75) 504 / 1072 843 / 484 2 / 3 165 / 123	33 14 / 38 Silver Strand Blvd YMCA Dwy 4 / 11 5 / 9 67 / 4



Legend

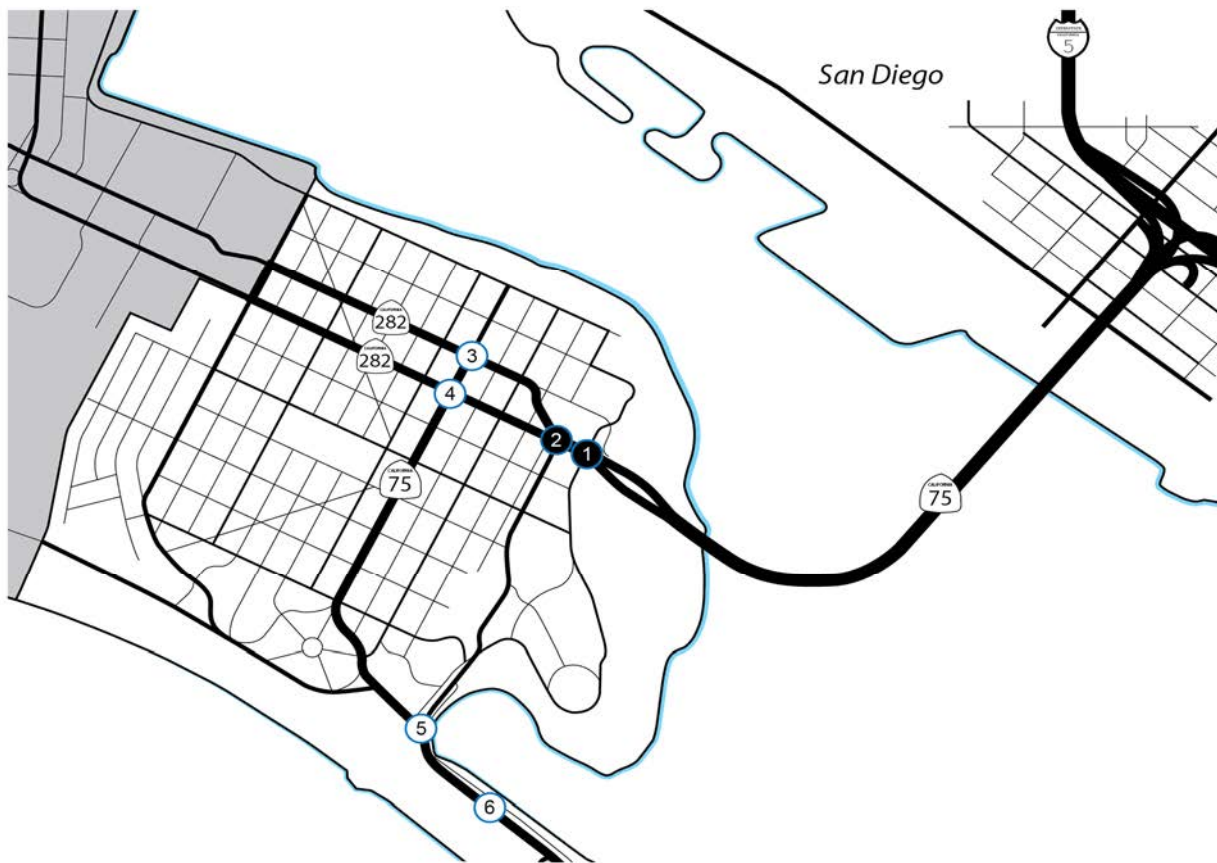
X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



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NBC Coastal Campus

1 <div> <div>10 / 56</div> <div>Glorietta Blvd</div> <div> <div>543 / 242</div> <div>3440 / 1697</div> </div> <div>Fourth St (SR-75)</div> </div> <div> <div>1331 / 3759</div> <div>35 / 18</div> </div> <div> <div>479 / 908</div> </div>	2 <div> <div>3339 / 1735</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1192 / 3522</div> <div>204 / 132</div> </div> <div> <div>Pomona Ave</div> <div>232 / 185</div> </div>	3 <div> <div>9 / 15</div> <div>264 / 814</div> <div>Orange Ave (SR-75)</div> <div> <div>285 / 91</div> <div>1694 / 557</div> <div>1532 / 978</div> </div> <div>Third Street (SR-75)</div> </div> <div> <div>66 / 89</div> <div>97 / 248</div> </div>	4 <div> <div>1415 / 1097</div> <div>440 / 716</div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> </div> <div> <div>0 / 3</div> <div>519 / 1893</div> <div>70 / 75</div> </div> <div> <div>155 / 342</div> <div>216 / 425</div> </div>
5 <div> <div>1270 / 1389</div> <div>Orange Ave (SR-75)</div> <div> <div>8 / 14</div> <div>253 / 203</div> </div> <div>Pomona Ave</div> </div> <div> <div>1307 / 1009</div> <div>702 / 787</div> </div> <div> <div>Silver Strand Blvd (SR-75)</div> </div>	6 <div> <div>43 / 178</div> <div>1435 / 1651</div> <div>46 / 79</div> <div>Silver Strand Blvd (SR-75)</div> <div> <div>7 / 29</div> <div>0 / 12</div> <div>9 / 30</div> </div> <div>Avenidas De Las Arenas</div> </div> <div> <div>55 / 168</div> <div>3 / 12</div> <div>12 / 34</div> </div> <div> <div>23 / 27</div> <div>1555 / 1700</div> <div>30 / 58</div> </div>		



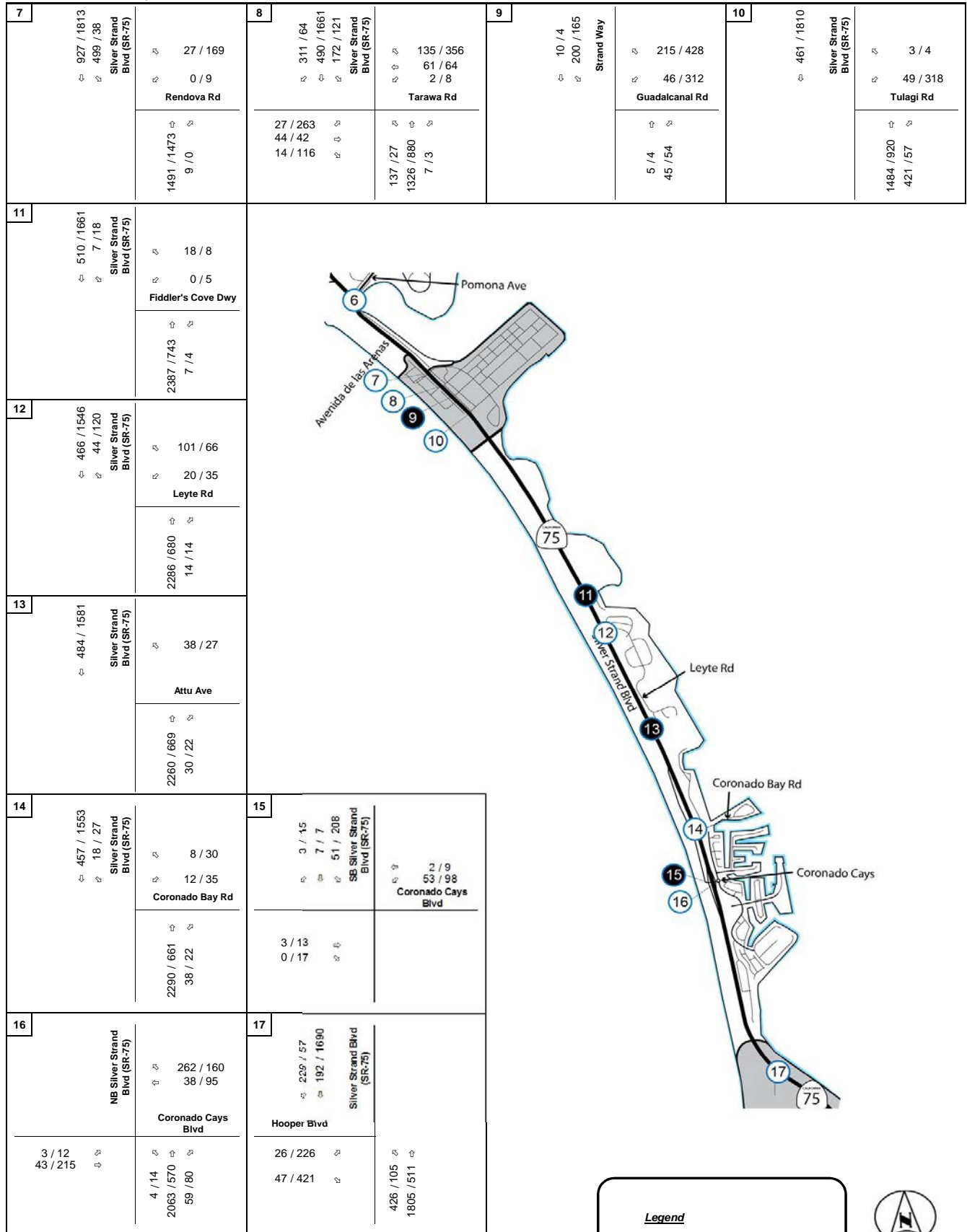
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TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus



NBC Coastal Campus

18 51 / 226 186 / 1593 0 / 2 Silver Strand Blvd (SR-75) 3 / 0 2 / 2 3 / 2 Rainbow Dr 459 / 102 45 / 79 30 / 85 2088 / 449 0 / 14	19 60 / 24 48 / 30 23 / 28 7th St 20 / 40 1920 / 491 Silver Strand Blvd (SR-75) 9 / 66 242 / 1538 17 / 69 47 / 16 27 / 46 2 / 5	20 15 / 4 Delaware St 10 / 44 1930 / 534 457 / 580 Silver Strand Blvd (SR-75) 263 / 1572	21 5 / 9 49 / 107 Silver Strand Blvd 107 / 42 132 / 319 Palm Ave 10 / 4 245 / 220 Dwy
22 15 / 14 11 / 34 12 / 29 3rd St 25 / 25 215 / 333 27 / 87 Palm Ave 8 / 8 285 / 303 5 / 13 12 / 15 15 / 40 129 / 70	23 71 / 146 18 / 54 Rainbow Dr 156 / 41 340 / 466 Palm Ave 233 / 76 435 / 432	24 28 / 31 22 / 44 2 / 13 7th St 0 / 4 341 / 468 27 / 32 Palm Ave 17 / 29 428 / 441 16 / 30 67 / 56 40 / 21 83 / 23	25 Palm Ave 514 / 490 5 / 9 Delaware St 3 / 7 6 / 3
26 28 / 29 52 / 90 102 / 197 Palm Ave (SR-75) 24 / 47 770 / 1878 40 / 143 9th St 188 / 112 42 / 102 58 / 71	27 17 / 16 12 / 15 63 / 72 Florida St 14 / 63 2254 / 1422 23 / 56 Palm Ave (SR-75) 3 / 23 1033 / 2200 40 / 65 21 / 24 5 / 12 35 / 40	28 17 / 23 41 / 51 192 / 176 13th St 59 / 93 2088 / 1507 110 / 179 Palm Ave (SR-75) 4 / 30 1114 / 2066 72 / 227 168 / 148 22 / 46 104 / 146	29 24 / 12 3 / 12 44 / 27 16th St 14 / 18 2236 / 1847 50 / 195 Palm Ave (SR-75) 16 / 11 1417 / 2211 29 / 57 18 / 45 8 / 10 56 / 93
30 88 / 261 106 / 274 269 / 674 19th St 246 / 636 2164 / 1856 280 / 376 Palm Ave (SR-75) 105 / 216 1432 / 2142 34 / 30 Saturn Blvd 87 / 76 83 / 203 884 / 611	31 1435 / 1901 178 / 504 I-5 SB Exit Ramp 1257 / 973 Palm Ave (SR-75) 326 / 581	32 I-5 NB Ramps 600 / 287 489 / 604 Palm Ave (SR-75) 504 / 1078 885 / 494 2 / 3 165 / 123	33 14 / 38 Silver Strand Blvd YMCA Dwy 4 / 11 5 / 9 67 / 4



Legend

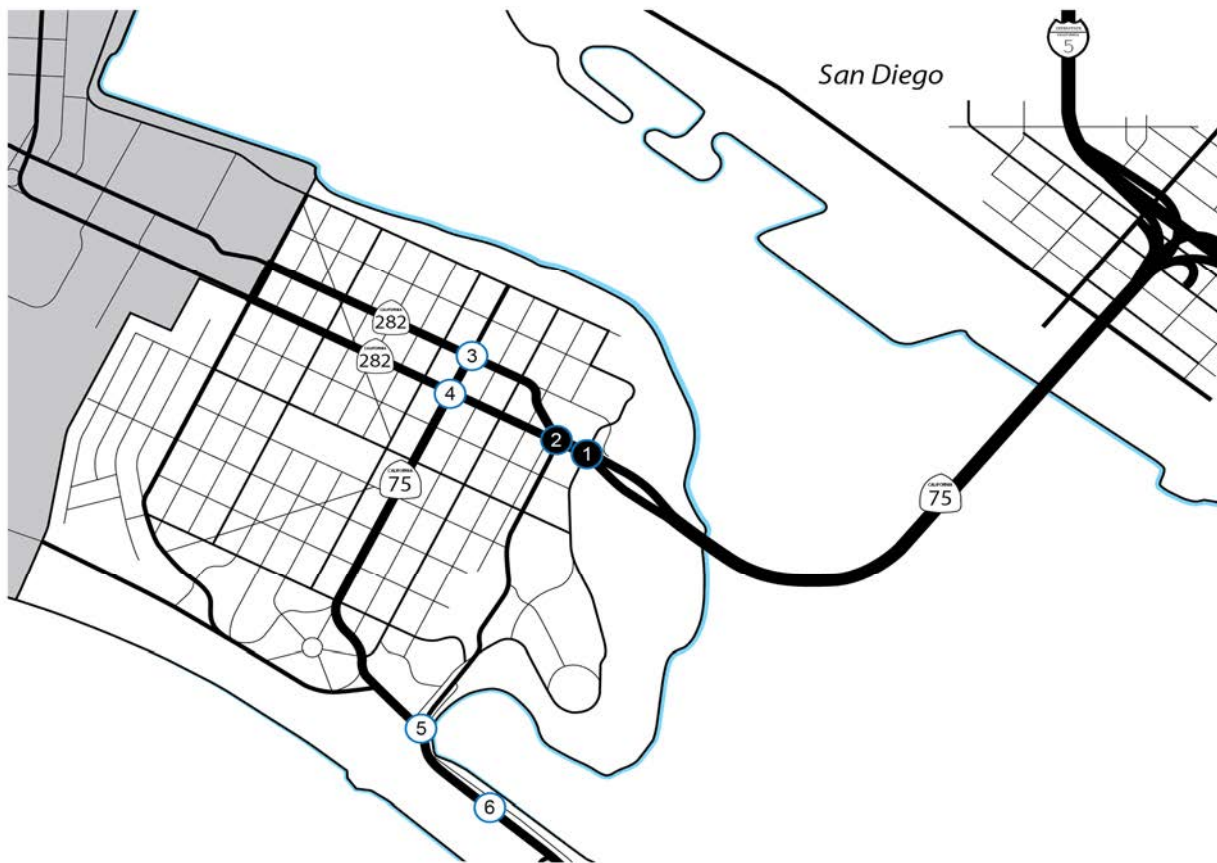
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5 <div> <div>1309 / 1399</div> <div>Orange Ave (SR-75)</div> <div> <div>8 / 14</div> <div>253 / 203</div> <div>Pomona Ave</div> </div> </div> <div> <div>1311 / 1042</div> <div>702 / 793</div> </div>	6 <div> <div>43 / 178</div> <div>1474 / 1661</div> <div>46 / 79</div> <div>Silver Strand Blvd (SR-75)</div> <div> <div>7 / 29</div> <div>0 / 12</div> <div>9 / 30</div> <div>Avenidas De Las Arenas</div> </div> </div> <div> <div>55 / 168</div> <div>3 / 12</div> <div>12 / 34</div> <div>23 / 27</div> <div>1559 / 1739</div> <div>30 / 58</div> </div>		



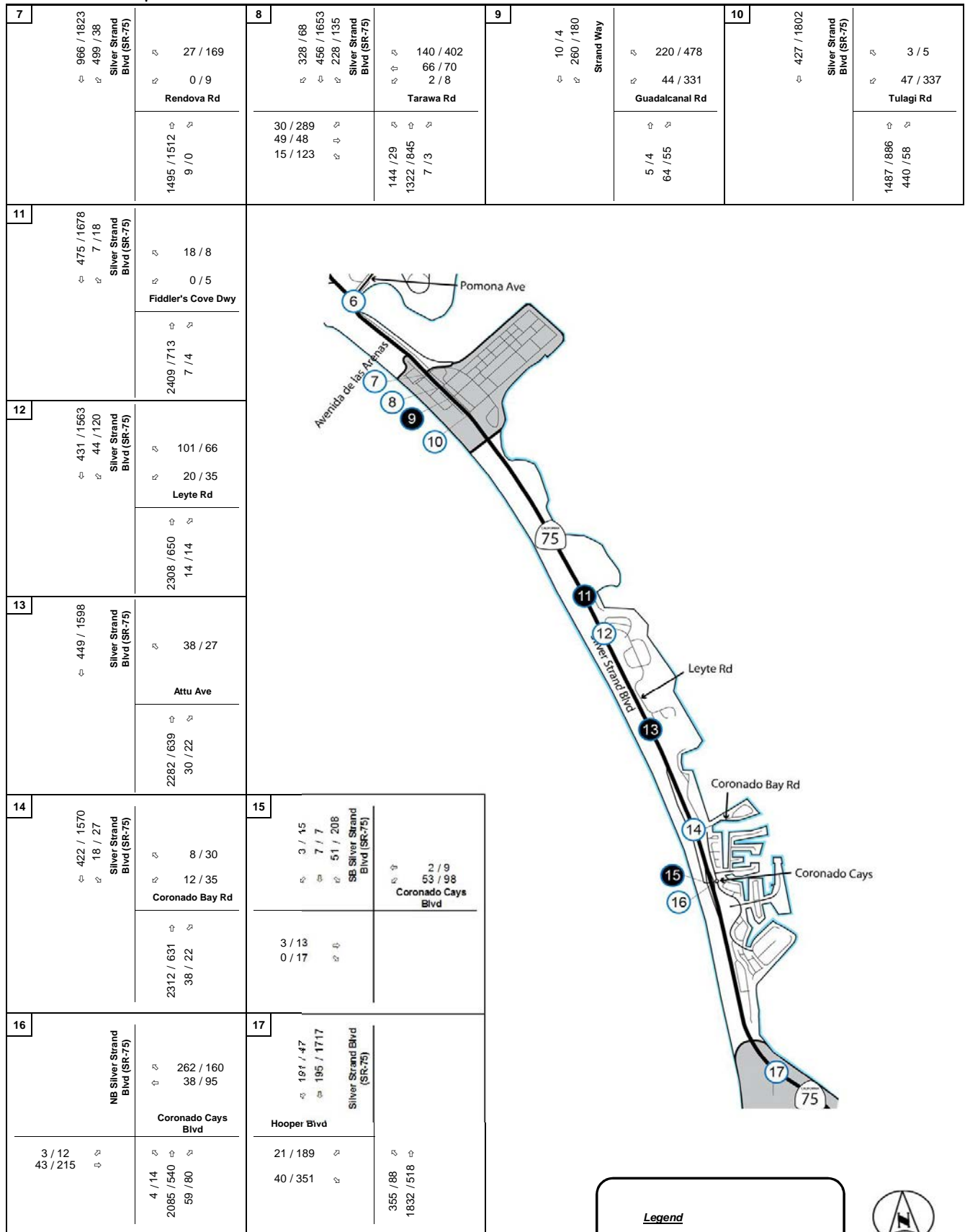
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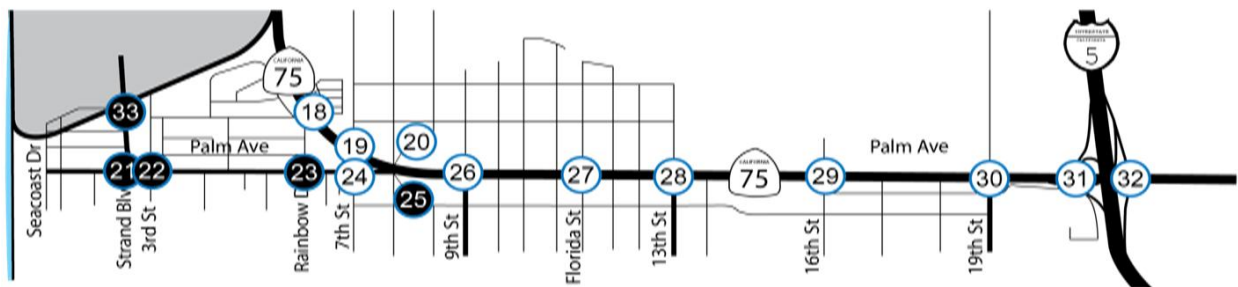
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18 <div> <div> 51 / 226 181 / 1551 0 / 2 Silver Strand Blvd (SR-75) </div> <div> 3 / 0 2 / 2 3 / 2 Rainbow Dr </div> </div> <div> 458 / 101 45 / 79 </div>	19 <div> <div> 60 / 24 48 / 30 23 / 28 7th St </div> <div> 20 / 40 1876 / 480 Silver Strand Blvd (SR-75) </div> </div> <div> 9 / 66 237 / 1495 17 / 69 </div> <div> 46 / 15 27 / 46 2 / 5 </div>	20 <div> 15 / 4 Delaware St </div> <div> 10 / 44 1886 / 523 457 / 580 Silver Strand Blvd (SR-75) </div>
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258 / 1529



Legend

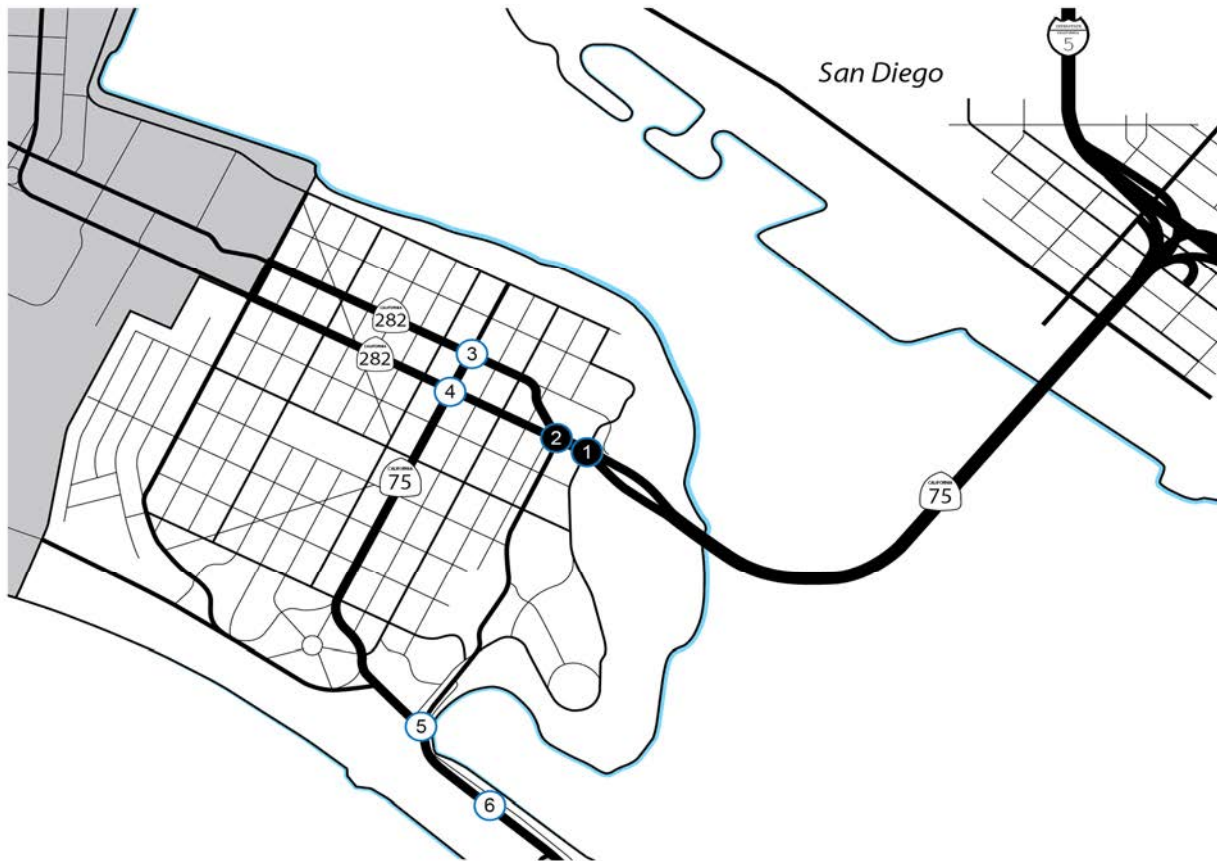
X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus

<div><div>1</div><div>↻</div><div>10 / 56</div><div>Glorietta Blvd</div></div> <div><div>↻</div><div>543 / 242</div><div>↻</div><div>3375 / 1681</div><div>Fourth St (SR-75)</div></div> <div><div>1323 / 3695</div><div>35 / 18</div><div>↻</div><div>479 / 908</div></div>	<div><div>2</div><div>↻</div><div>3274 / 1719</div><div>Fourth St (SR-75)</div></div> <div><div>1184 / 3458</div><div>204 / 132</div><div>↻</div><div>Pomona Ave</div><div>232 / 185</div></div>	<div><div>3</div><div>↻</div><div>9 / 15</div><div>↻</div><div>264 / 814</div><div>Orange Ave (SR-75)</div></div> <div><div>↻</div><div>285 / 91</div><div>↻</div><div>1694 / 557</div><div>↻</div><div>1467 / 962</div><div>Third Street (SR-75)</div><div>↻</div><div>66 / 89</div><div>↻</div><div>97 / 248</div></div>	<div><div>4</div><div>↻</div><div>1350 / 1081</div><div>↻</div><div>440 / 716</div><div>Orange Ave (SR-75)</div></div> <div><div>0 / 3</div><div>519 / 1893</div><div>70 / 75</div><div>↻</div><div>↻</div><div>↻</div><div>155 / 342</div><div>208 / 361</div><div>↻</div></div>
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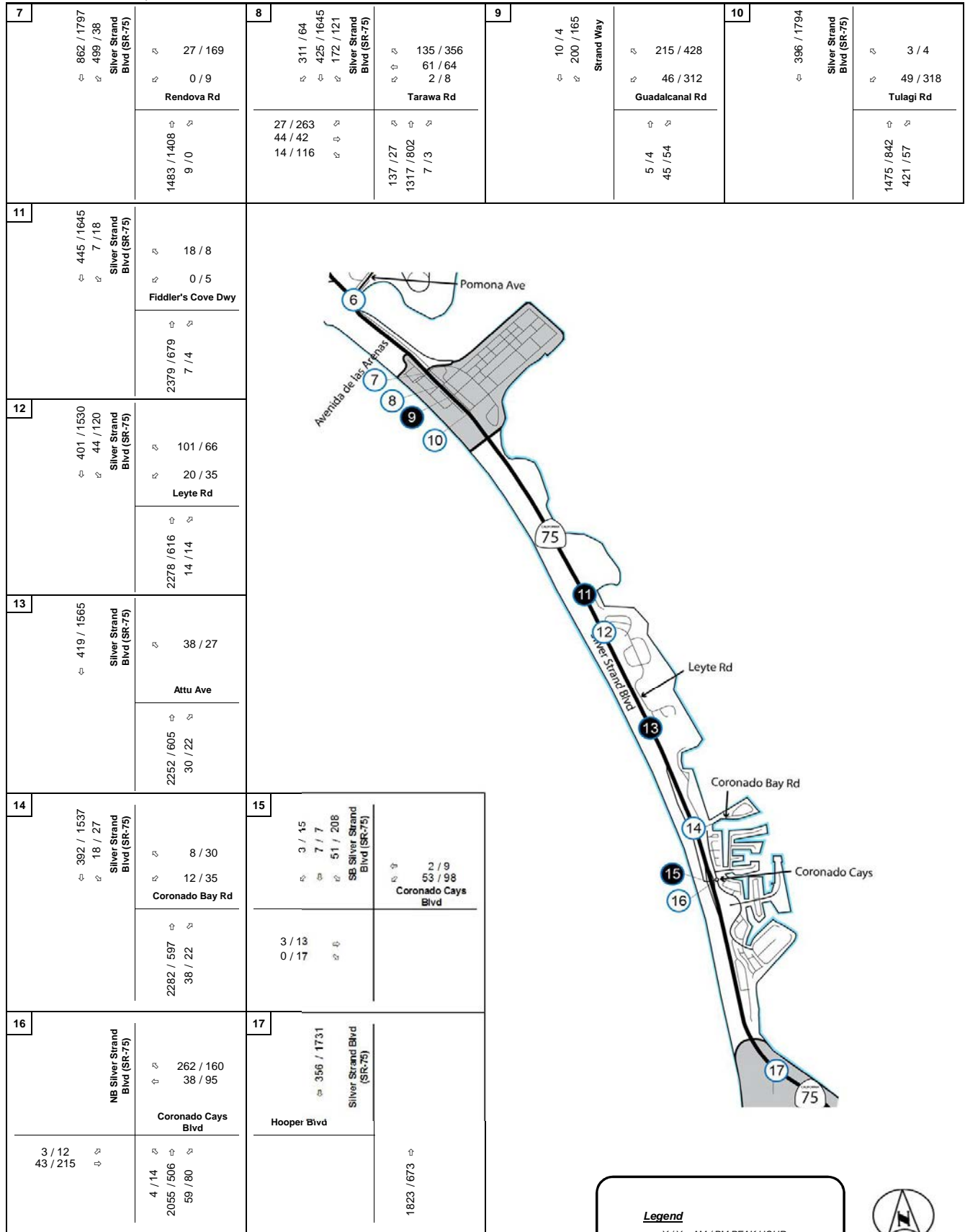
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X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



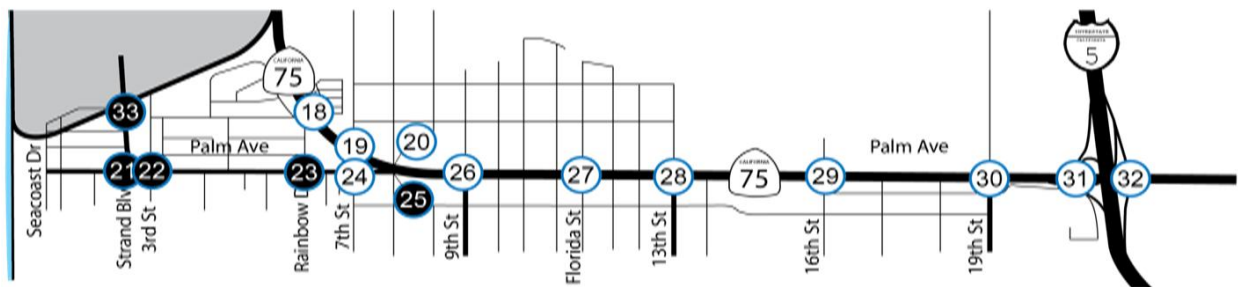
NOT TO SCALE

NBC Coastal Campus



NBC Coastal Campus

<div>18</div> <div> <div>214 / 261</div> <div>139 / 1179</div> <div>0 / 2</div> <div>Silver Strand Blvd (SR-75)</div> <div>3 / 0</div> <div>2 / 2</div> <div>3 / 2</div> <div>Rainbow Dr</div> <div>470 / 262</div> <div>45 / 79</div> <div>30 / 85</div> <div>1669 / 345</div> <div>0 / 14</div> </div>	<div>19</div> <div> <div>60 / 24</div> <div>48 / 30</div> <div>23 / 28</div> <div>7th St</div> <div>20 / 40</div> <div>1507 / 389</div> <div>Silver Strand Blvd (SR-75)</div> <div>9 / 66</div> <div>196 / 1130</div> <div>16 / 63</div> <div>40 / 14</div> <div>27 / 46</div> <div>2 / 5</div> </div>	<div>20</div> <div> <div>15 / 4</div> <div>Delaware St</div> <div>10 / 44</div> <div>1517 / 432</div> <div>935 / 698</div> <div>Silver Strand Blvd (SR-75)</div> <div>217 / 1164</div> </div>	<div>21</div> <div> <div>6 / 15</div> <div>121 / 748</div> <div>Silver Strand Blvd</div> <div>755 / 202</div> <div>131 / 313</div> <div>Palm Ave</div> <div>17 / 6</div> <div>238 / 218</div> <div>Dwy</div> </div>
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<div>30</div> <div> <div>88 / 261</div> <div>106 / 274</div> <div>269 / 674</div> <div>19th St</div> <div>246 / 636</div> <div>2230 / 1872</div> <div>280 / 376</div> <div>Palm Ave (SR-75)</div> <div>105 / 216</div> <div>1439 / 2207</div> <div>34 / 30</div> <div>87 / 76</div> <div>83 / 203</div> <div>884 / 611</div> </div>	<div>31</div> <div> <div>1500 / 1917</div> <div>178 / 504</div> <div>I-5 SB Exit Ramp</div> <div>1257 / 973</div> <div>Palm Ave (SR-75)</div> <div>326 / 581</div> <div>50 / 440</div> </div>	<div>32</div> <div> <div>I-5 NB Ramps</div> <div>600 / 287</div> <div>489 / 604</div> <div>Palm Ave (SR-75)</div> <div>504 / 1078</div> <div>885 / 494</div> <div>2 / 3</div> <div>165 / 123</div> </div>	<div>33</div> <div> <div>87 / 685</div> <div>Silver Strand Blvd</div> <div>YMCA Dwy</div> <div>4 / 11</div> <div>5 / 9</div> <div>722 / 166</div> </div>



Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES

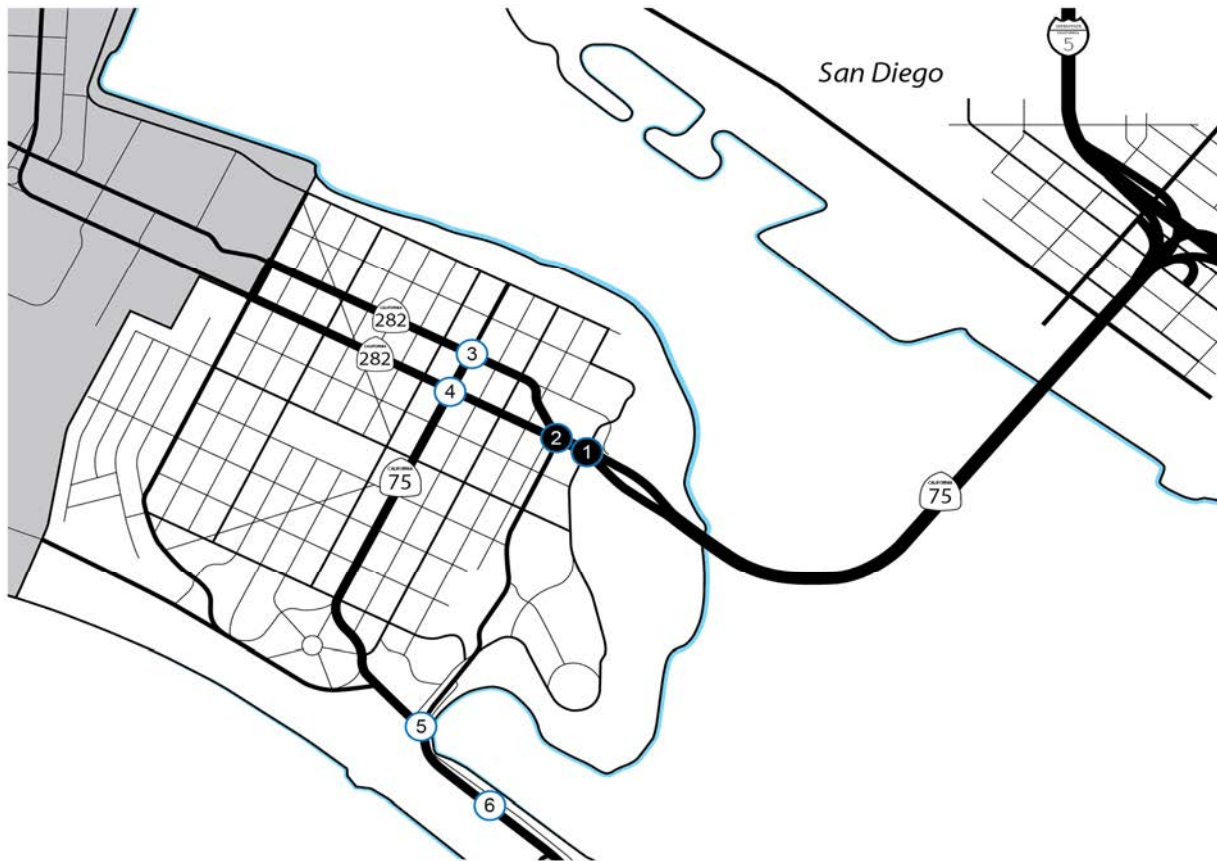


Figure 3.9.2-45c

Year 2040 (3 CVNs) With Alternative 1 Peak-Hour Traffic
Volumes

NBC Coastal Campus

1 <div> <div>10 / 56</div> <div>Glorietta Blvd</div> <div> <div>543 / 242</div> <div>3434 / 1696</div> </div> <div>Fourth St (SR-75)</div> </div> <div> <div>1329 / 3750</div> <div>35 / 18</div> </div> <div> <div>479 / 908</div> </div>	2 <div> <div>3333 / 1734</div> <div>Fourth St (SR-75)</div> </div> <div> <div>1190 / 3513</div> <div>204 / 132</div> </div> <div> <div>Pomona Ave</div> <div>232 / 191</div> </div>	3 <div> <div>9 / 15</div> <div>264 / 814</div> <div>Orange Ave (SR-75)</div> <div> <div>285 / 91</div> <div>1704 / 560</div> <div>1516 / 974</div> </div> <div>Third Street (SR-75)</div> </div> <div> <div>65 / 90</div> <div>97 / 248</div> </div>	4 <div> <div>1399 / 1093</div> <div>440 / 716</div> <div>Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> </div> <div> <div>0 / 3</div> <div>520 / 1903</div> <div>70 / 76</div> </div> <div> <div>154 / 343</div> <div>213 / 406</div> </div>
5 <div> <div>1255 / 1385</div> <div>Orange Ave (SR-75)</div> <div> <div>8 / 14</div> <div>253 / 203</div> </div> <div>Pomona Ave</div> </div> <div> <div>1305 / 988</div> <div>702 / 793</div> </div>	6 <div> <div>43 / 178</div> <div>1420 / 1647</div> <div>46 / 79</div> <div>Silver Strand Blvd (SR-75)</div> <div> <div>7 / 29</div> <div>0 / 12</div> <div>9 / 30</div> </div> <div>Avenidas De Las Arenas</div> </div> <div> <div>55 / 168</div> <div>3 / 12</div> <div>12 / 34</div> </div> <div> <div>23 / 27</div> <div>1553 / 1685</div> <div>30 / 58</div> </div>		



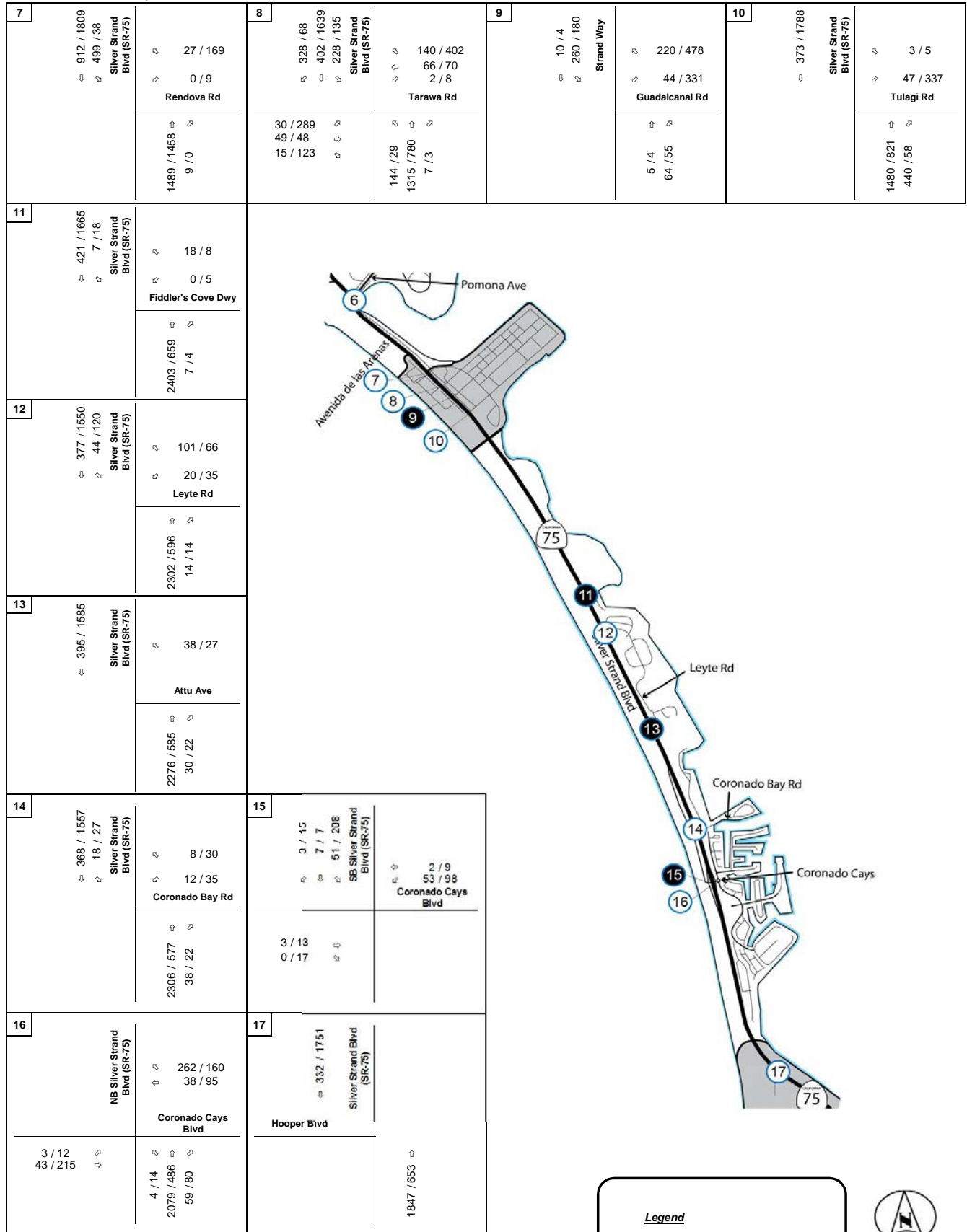
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

NBC Coastal Campus



NBC Coastal Campus

18 187 / 255 142 / 1205 0 / 2 Silver Strand Blvd (SR-75) 3 / 0 2 / 2 3 / 2 Rainbow Dr 468 / 235 45 / 79 30 / 85 1695 / 352 0 / 14	19 60 / 24 48 / 30 23 / 28 7th St 20 / 40 1532 / 395 Silver Strand Blvd (SR-75) 9 / 66 199 / 1155 16 / 64 41 / 14 27 / 46 2 / 5	20 15 / 4 Delaware St 10 / 44 1542 / 438 856 / 679 Silver Strand Blvd (SR-75) 220 / 1189	21 6 / 14 109 / 642 Silver Strand Blvd 648 / 176 131 / 313 Palm Ave 15 / 5 238 / 218 Dwy
22 15 / 14 11 / 34 12 / 29 3rd St 25 / 25 755 / 461 27 / 87 Palm Ave 8 / 8 338 / 836 5 / 13 12 / 15 15 / 40 129 / 70	23 207 / 175 18 / 54 Rainbow Dr 156 / 41 744 / 566 Palm Ave 242 / 209 480 / 832	24 28 / 31 21 / 39 2 / 13 7th St 0 / 4 740 / 567 27 / 32 Palm Ave 17 / 29 473 / 835 17 / 35 72 / 57 34 / 19 83 / 23	25 559 / 884 5 / 9 Delaware St 3 / 7 6 / 3 Palm Ave
26 28 / 29 52 / 90 102 / 197 Palm Ave (SR-75) 24 / 47 771 / 1890 40 / 143 9th St 187 / 111 42 / 102 58 / 71	27 17 / 16 12 / 15 63 / 72 Florida St 14 / 63 2265 / 1425 23 / 56 Palm Ave (SR-75) 3 / 23 1034 / 2212 40 / 65 21 / 24 5 / 12 35 / 40	28 17 / 23 41 / 51 192 / 176 13th St 59 / 93 2099 / 1510 110 / 179 Palm Ave (SR-75) 4 / 30 1114 / 2077 72 / 227 167 / 147 22 / 46 104 / 146	29 24 / 12 3 / 12 44 / 27 16th St 14 / 18 2247 / 1850 50 / 195 Palm Ave (SR-75) 16 / 11 1417 / 2222 29 / 57 18 / 45 8 / 10 56 / 93
30 88 / 261 106 / 274 269 / 674 19th St 246 / 636 2175 / 1860 280 / 376 Palm Ave (SR-75) 105 / 216 1434 / 2153 34 / 30 Saturn Blvd 86 / 75 83 / 203 884 / 611	31 1446 / 1904 178 / 504 I-5 SB Exit Ramp 1258 / 973 Palm Ave (SR-75) 326 / 581 41 / 367	32 I-5 NB Ramps 600 / 287 489 / 604 Palm Ave (SR-75) 504 / 1078 885 / 494 2 / 3 165 / 123	33 75 / 578 Silver Strand Blvd YMCA Dwy 4 / 11 5 / 9 613 / 139



Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

APPENDIX F

- Existing Conditions Traffic Count Data

ITM Peak Hour Summary

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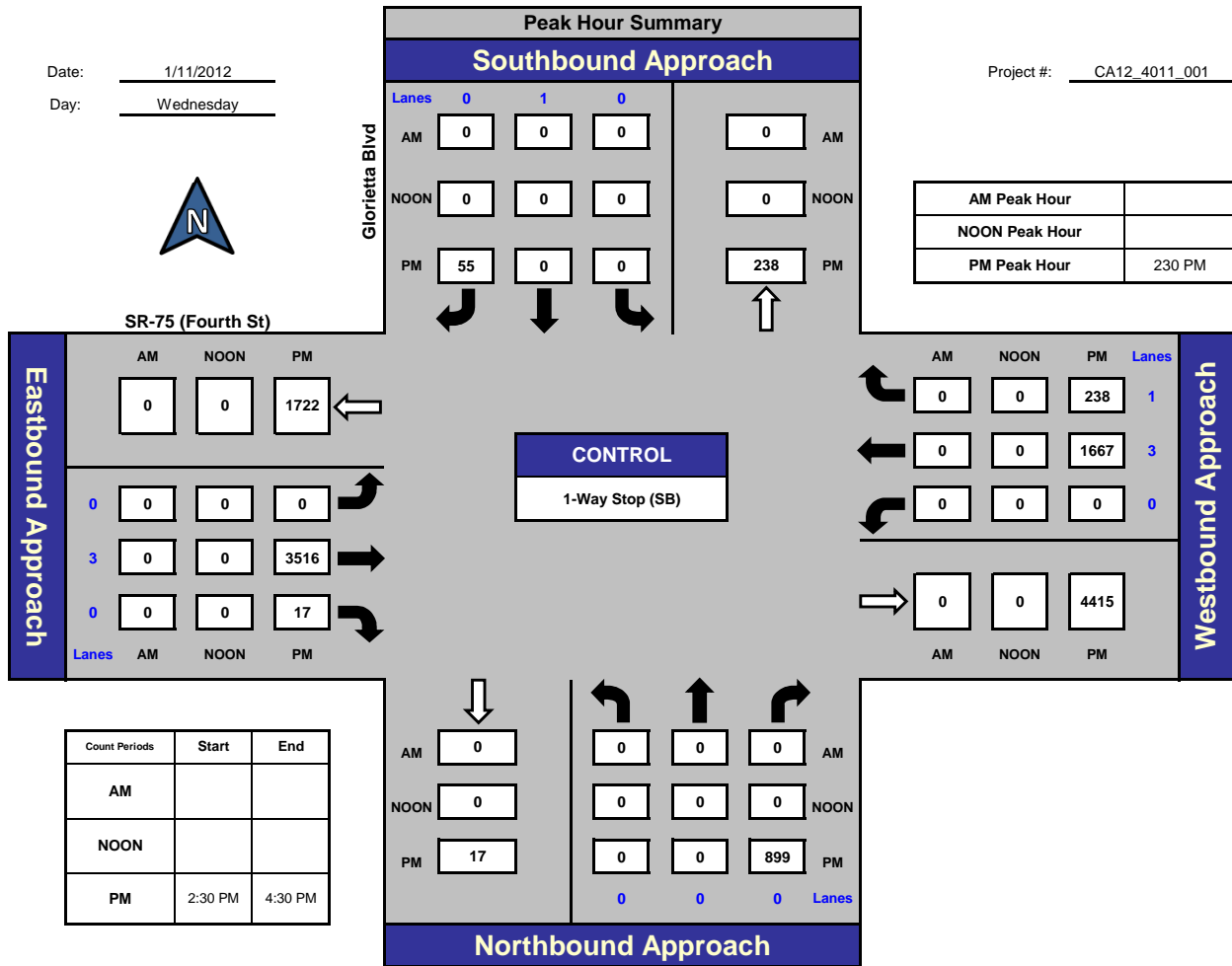


National Data & Surveying Services

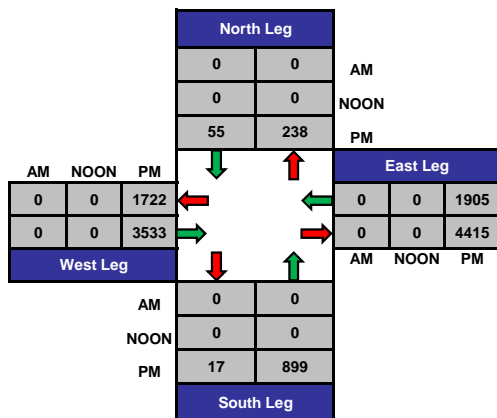
Glorietta Blvd and SR-75 (Fourth St) , City of Coronado

Date: 1/11/2012
Day: Wednesday

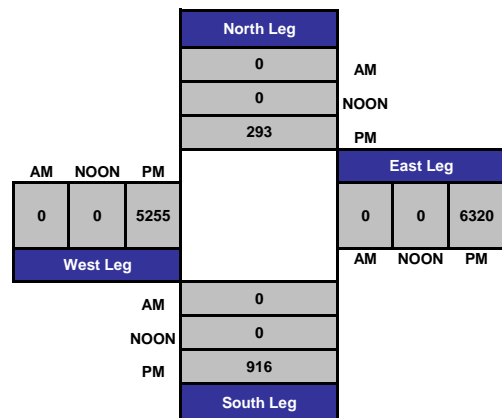
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Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

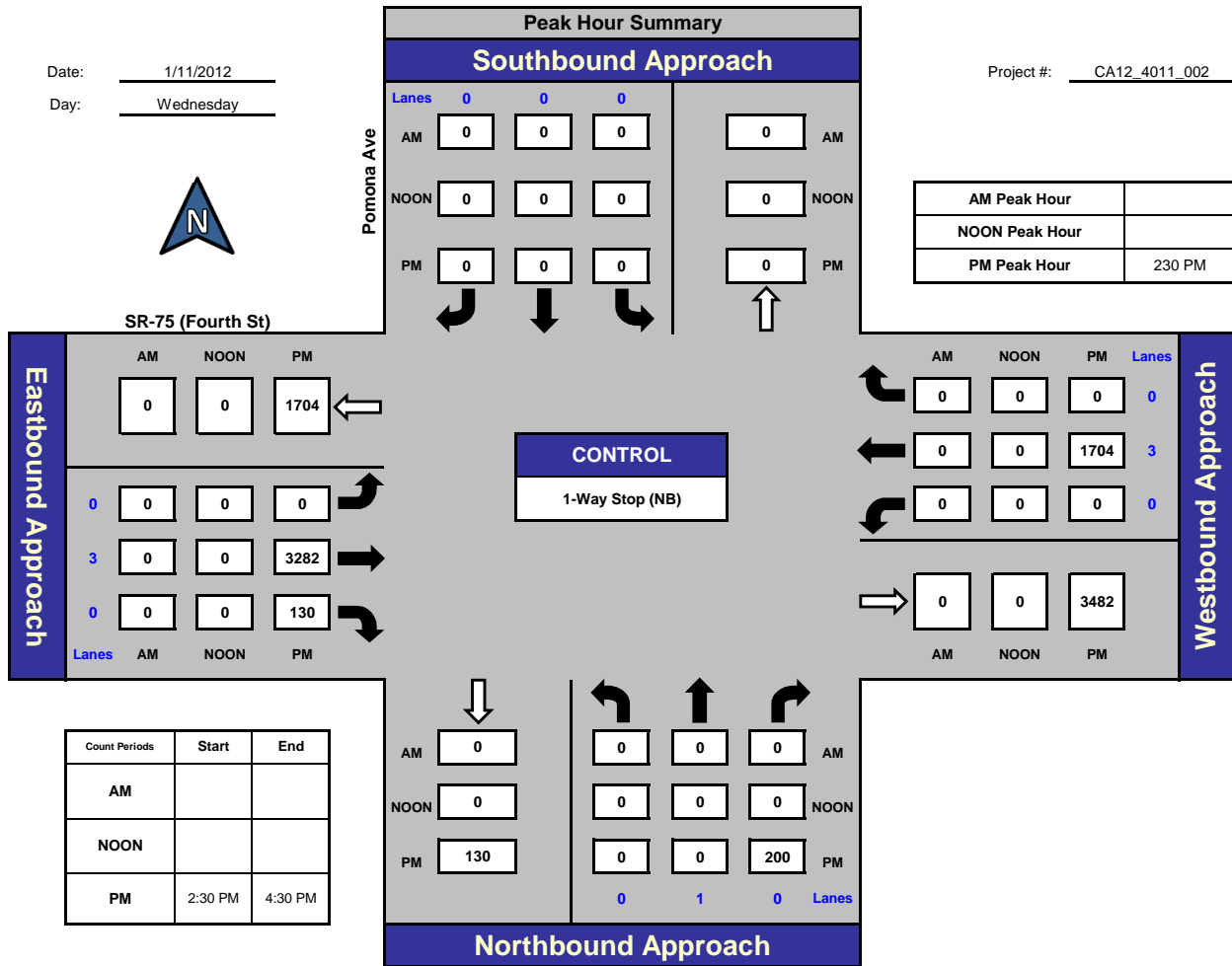


National Data & Surveying Services

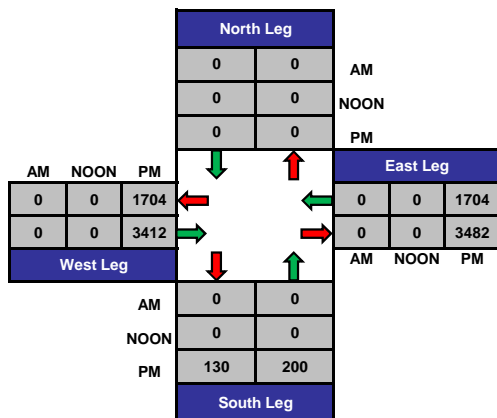
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Date: 1/11/2012
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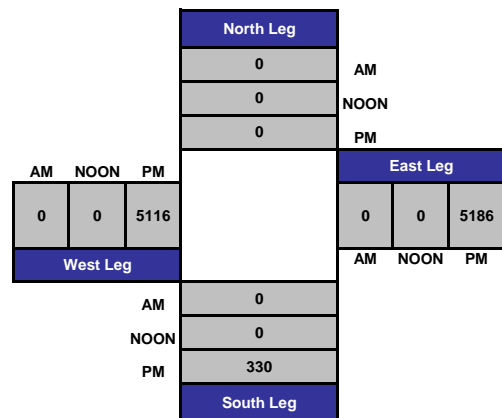
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Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

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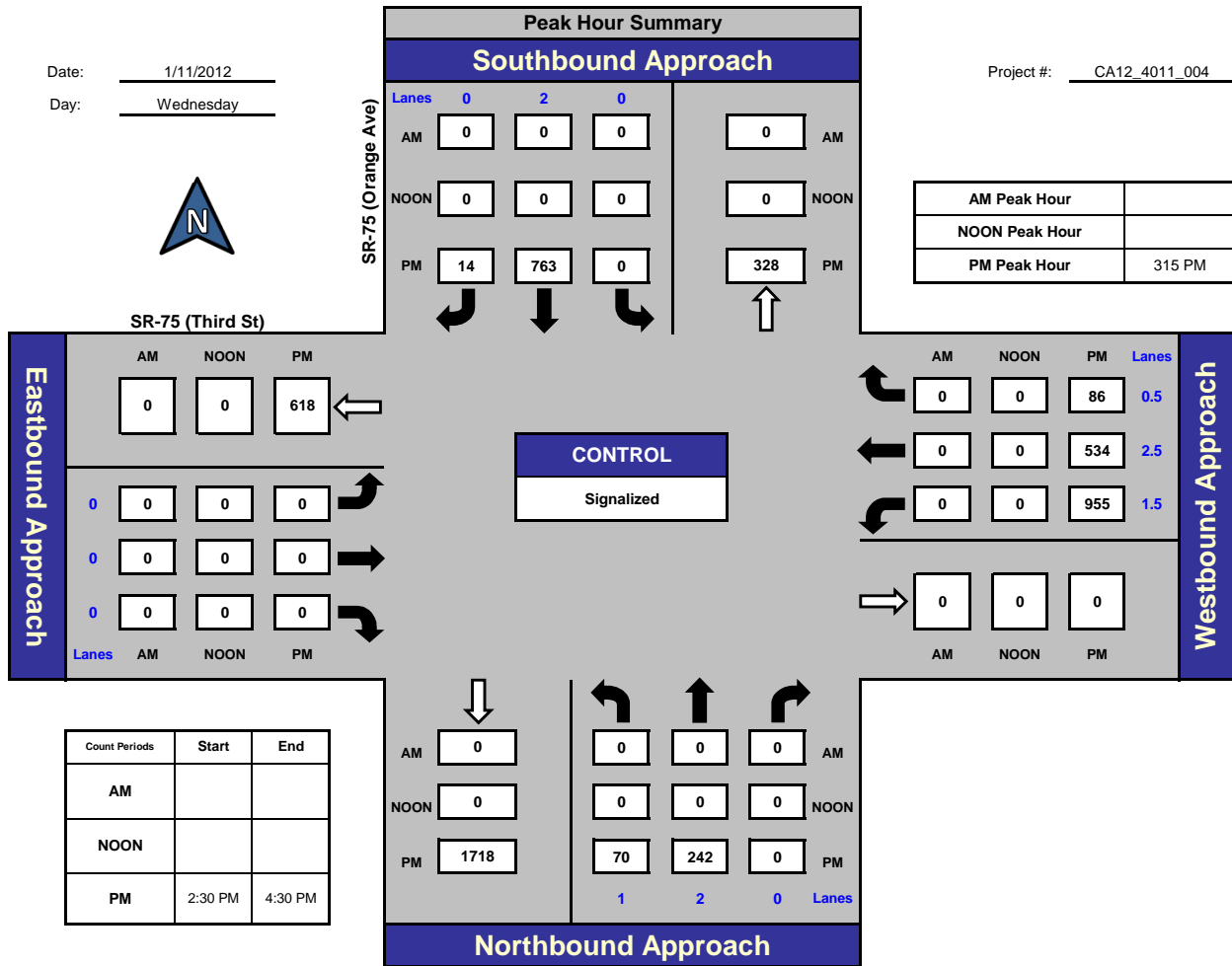


National Data & Surveying Services

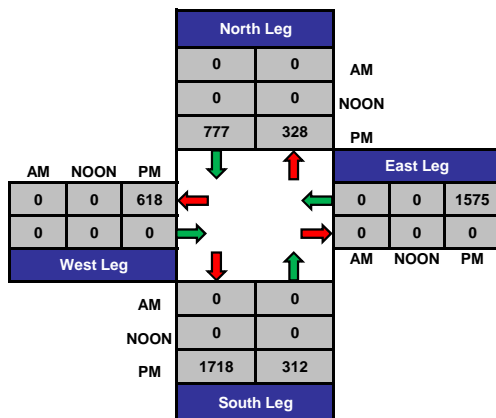
SR-75 (Orange Ave) and SR-75 (Third St), City of Coronado

Date: 1/11/2012
Day: Wednesday

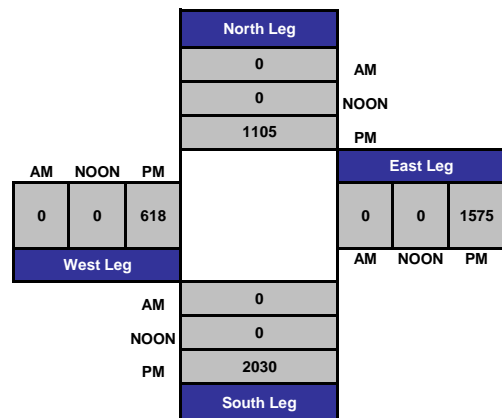
Project #: CA12_4011_004



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

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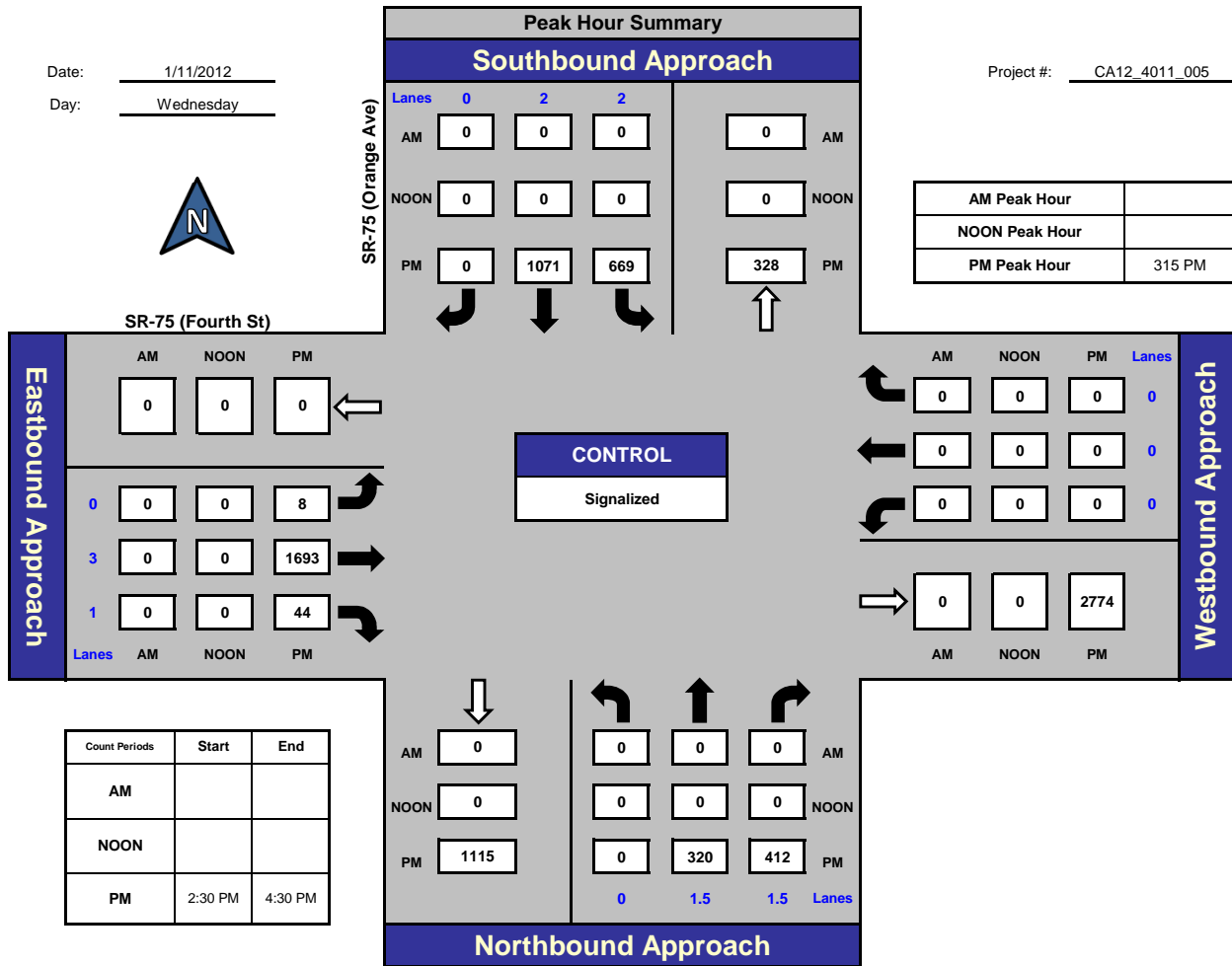


National Data & Surveying Services

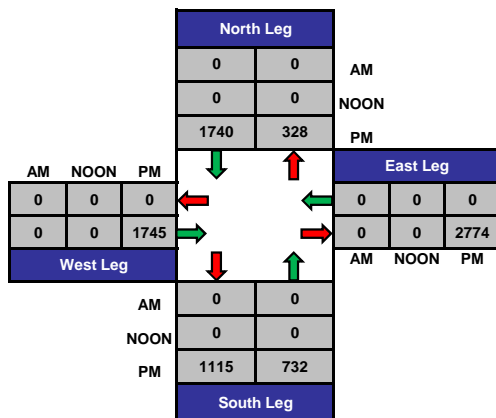
SR-75 (Orange Ave) and SR-75 (Fourth St) , City of Coronado

Date: 1/11/2012
Day: Wednesday

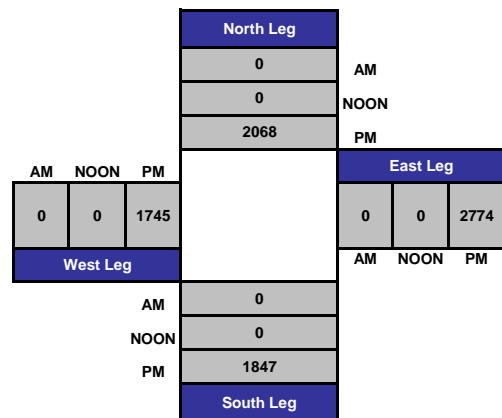
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Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

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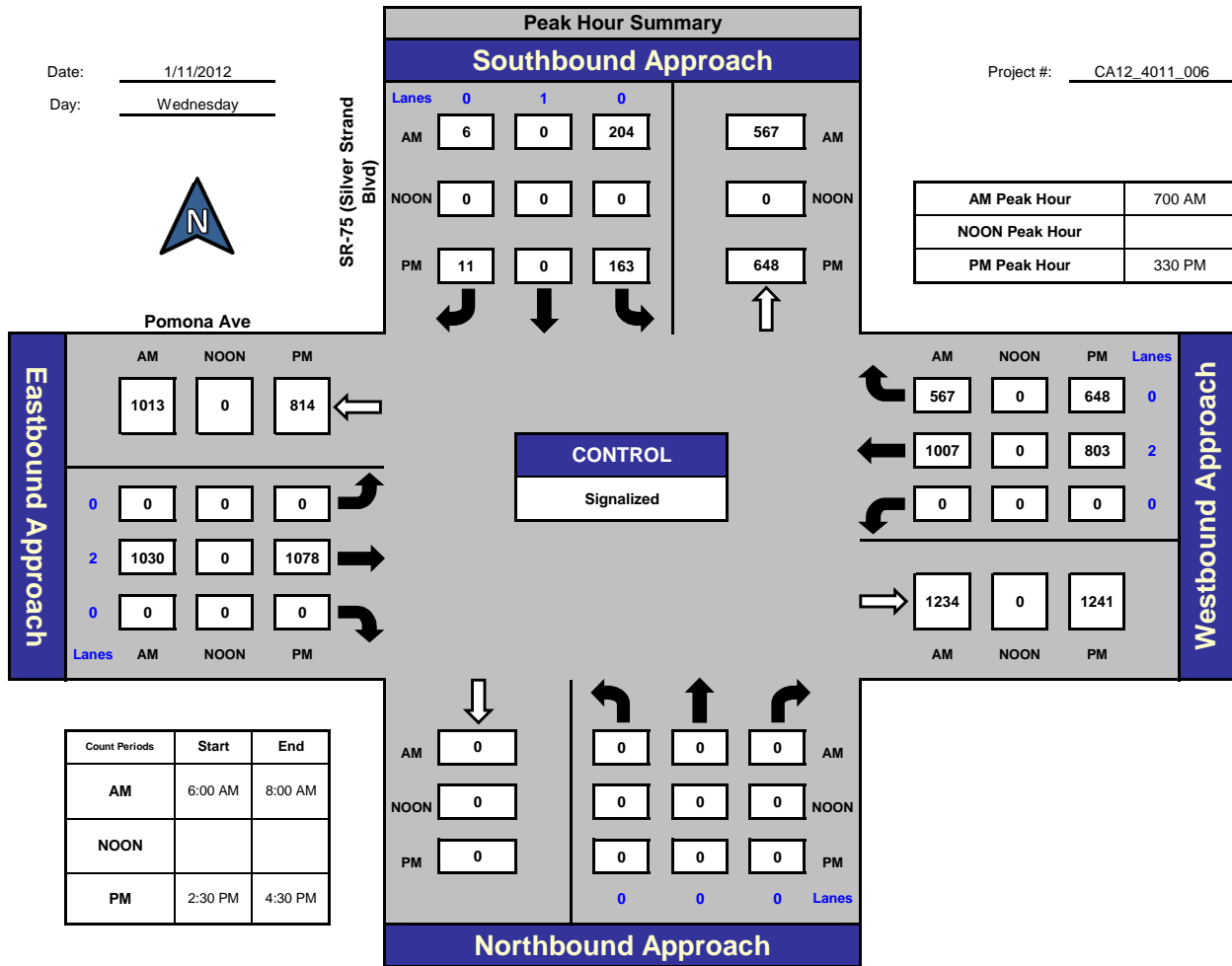


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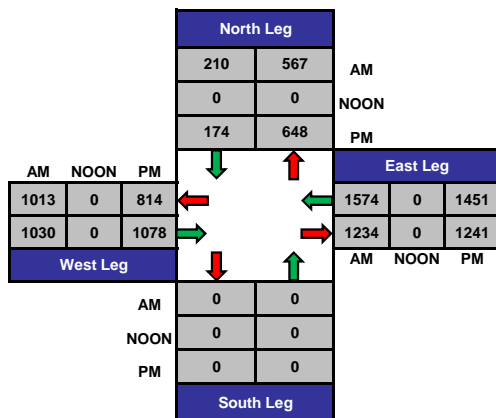
SR-75 (Silver Strand Blvd) and Pomona Ave, City of Coronado

Date: 1/11/2012
Day: Wednesday

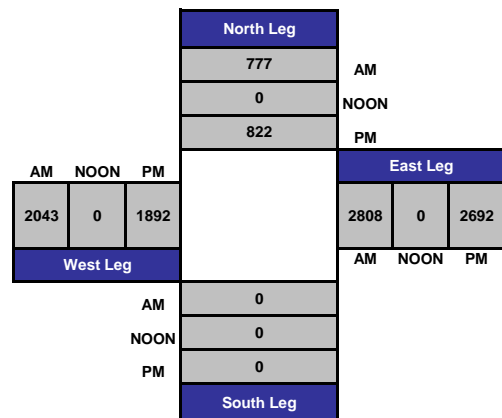
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Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

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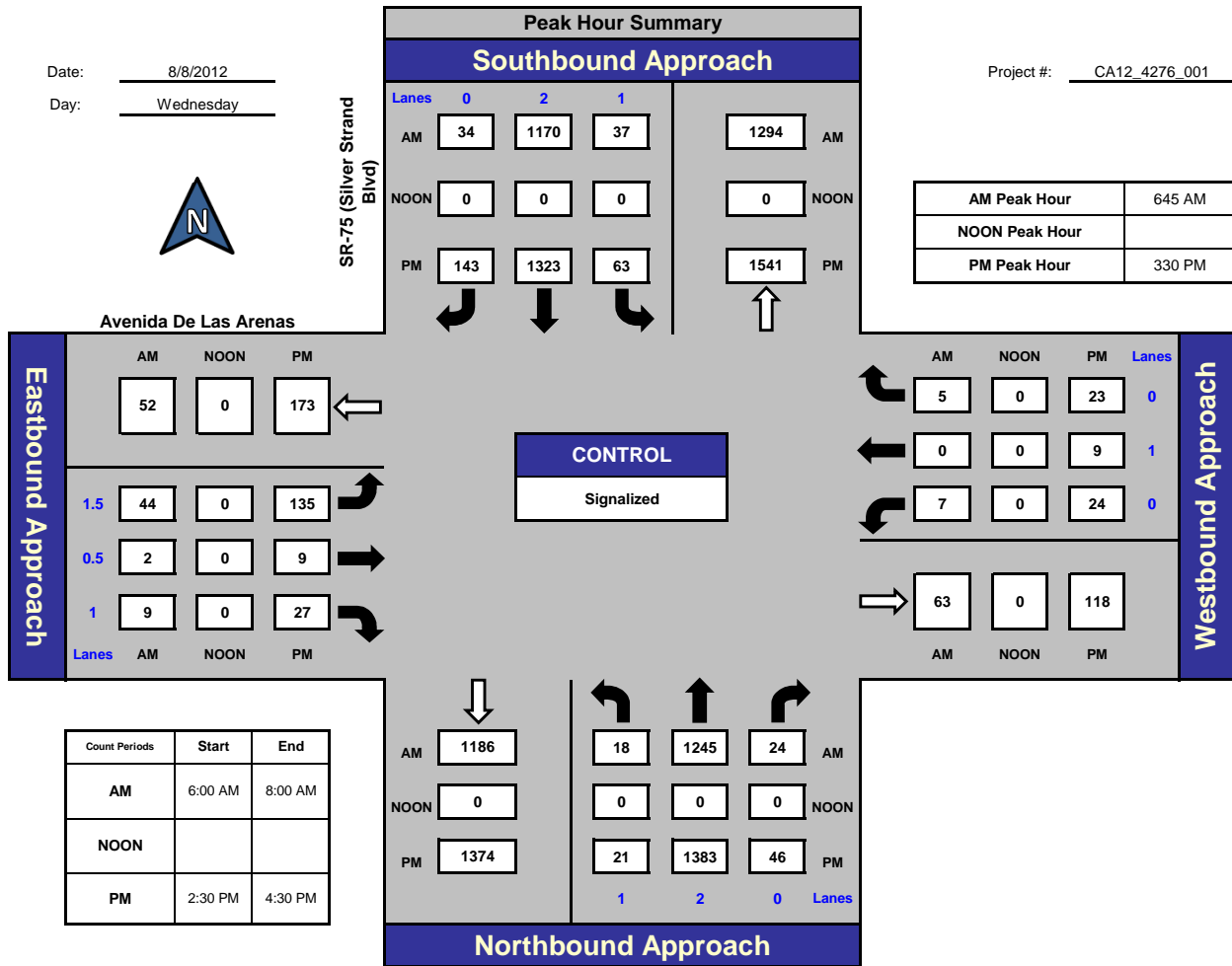


National Data & Surveying Services

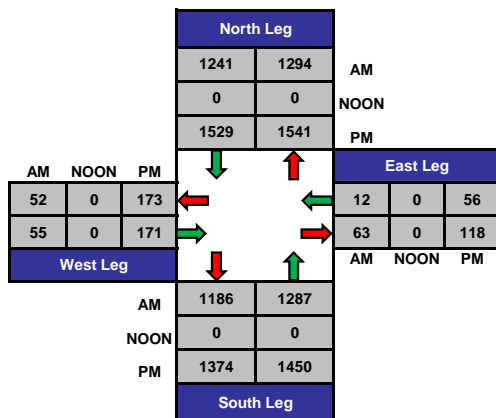
SR-75 (Silver Strand Blvd) and Avenida De Las Arenas , City of Coronado

Date: 8/8/2012
Day: Wednesday

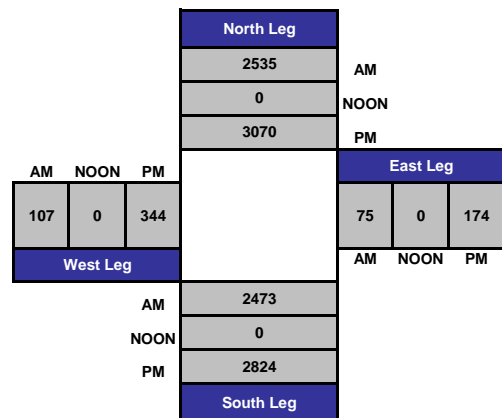
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Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

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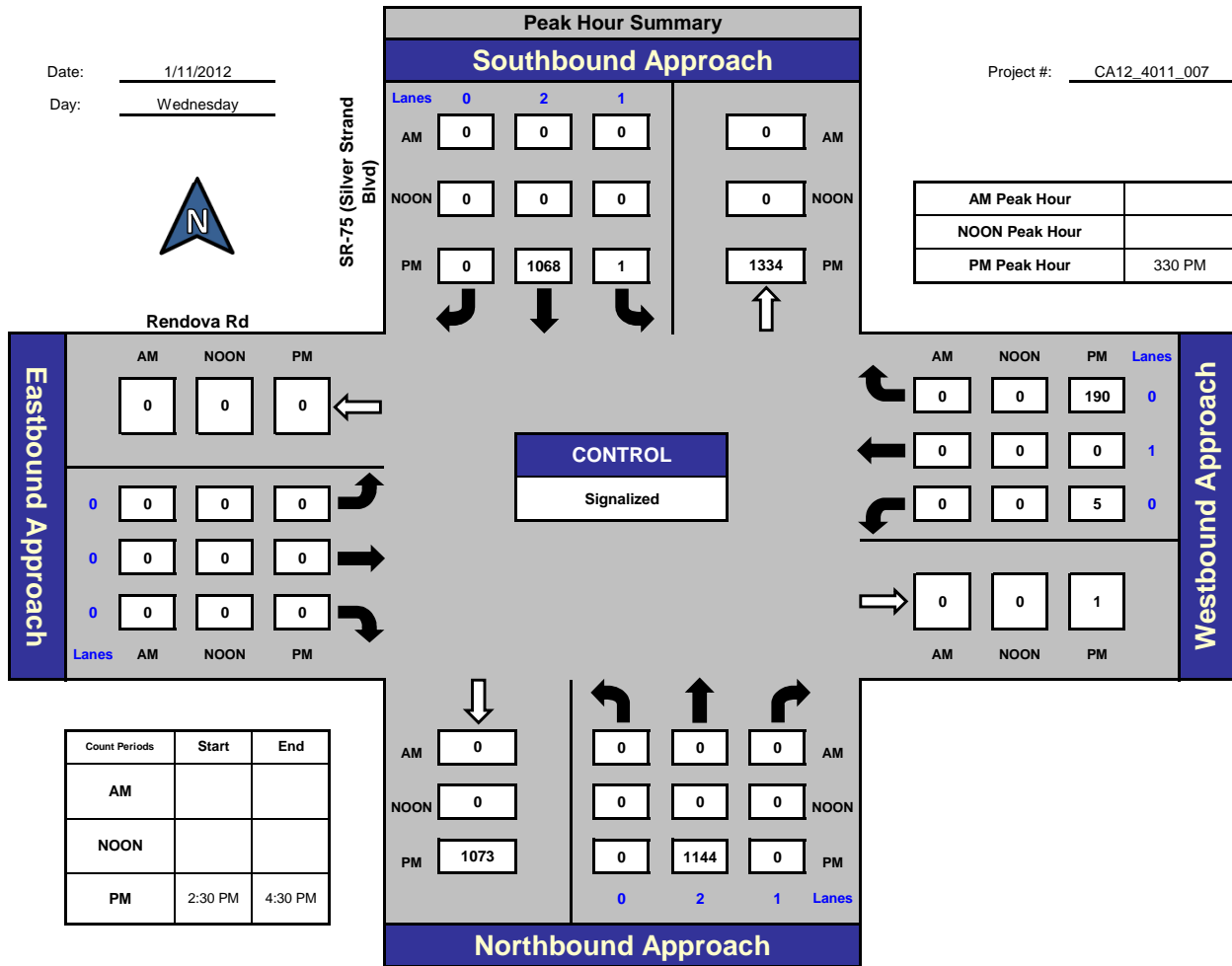


National Data & Surveying Services

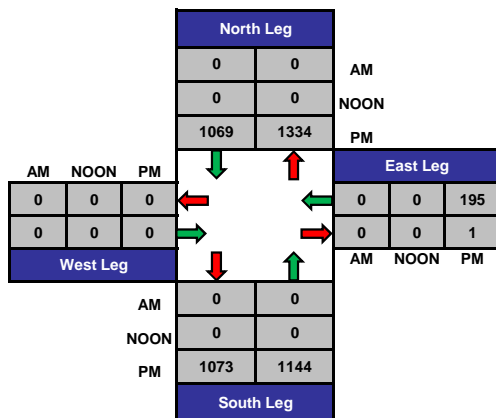
SR-75 (Silver Strand Blvd) and Rendova Rd, City of Coronado

Date: 1/11/2012
Day: Wednesday

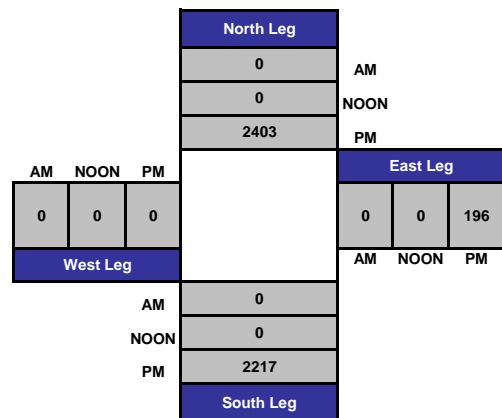
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Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

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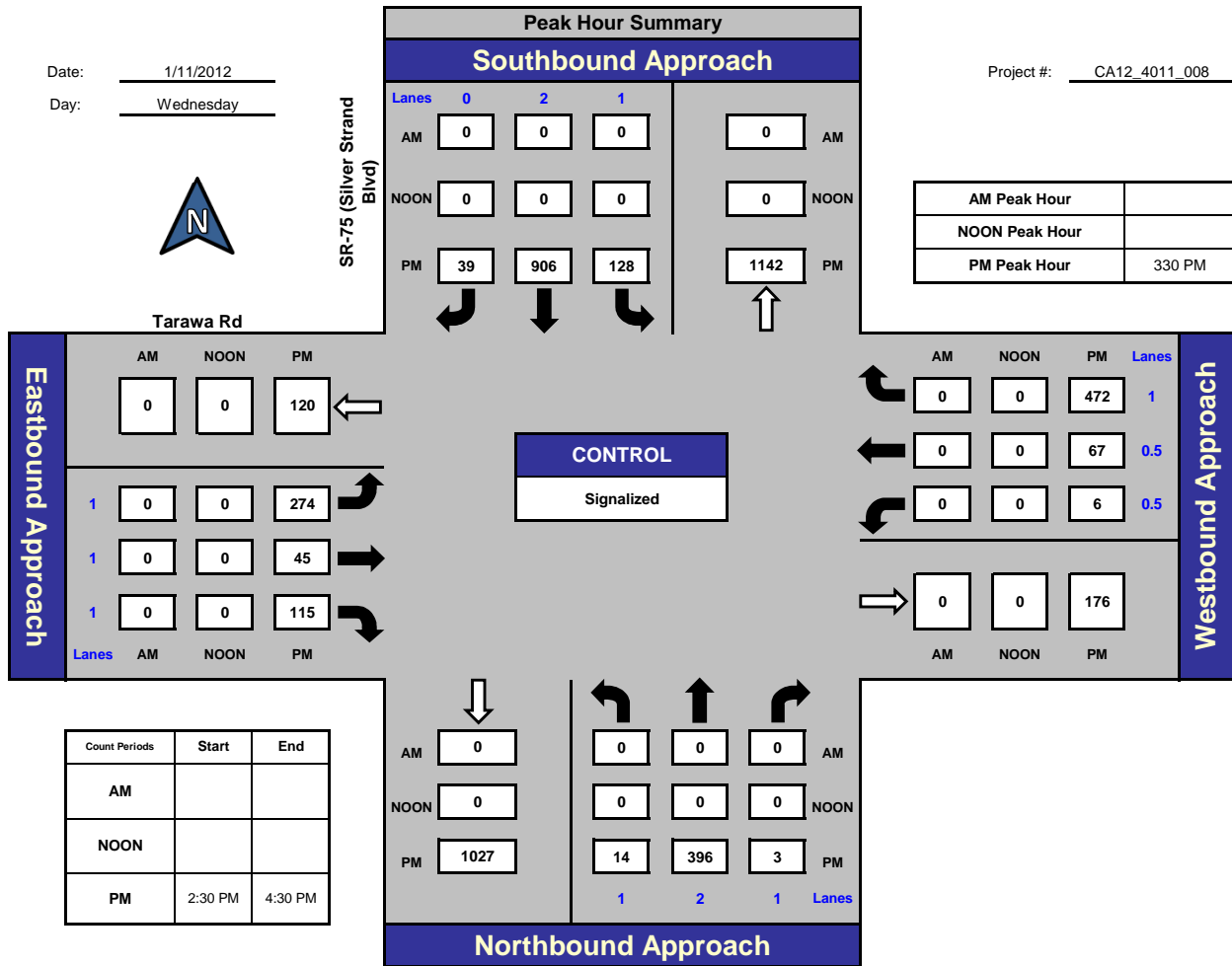


National Data & Surveying Services

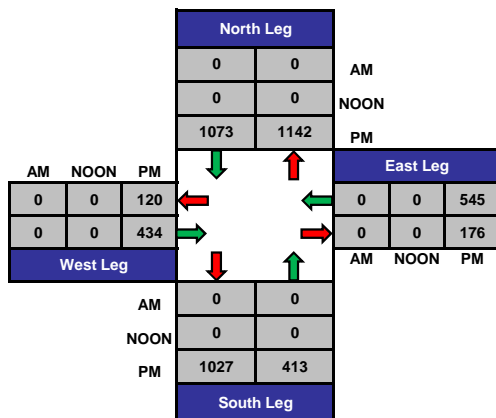
SR-75 (Silver Strand Blvd) and Tarawa Rd , City of Coronado

Date: 1/11/2012
Day: Wednesday

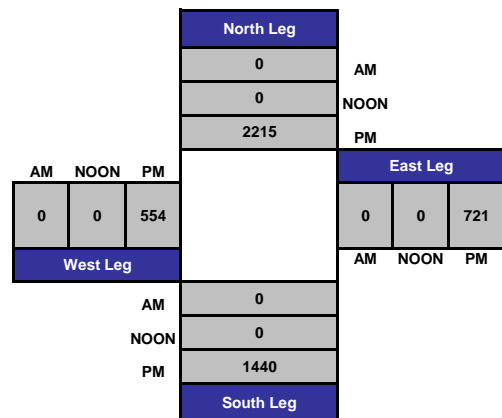
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Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



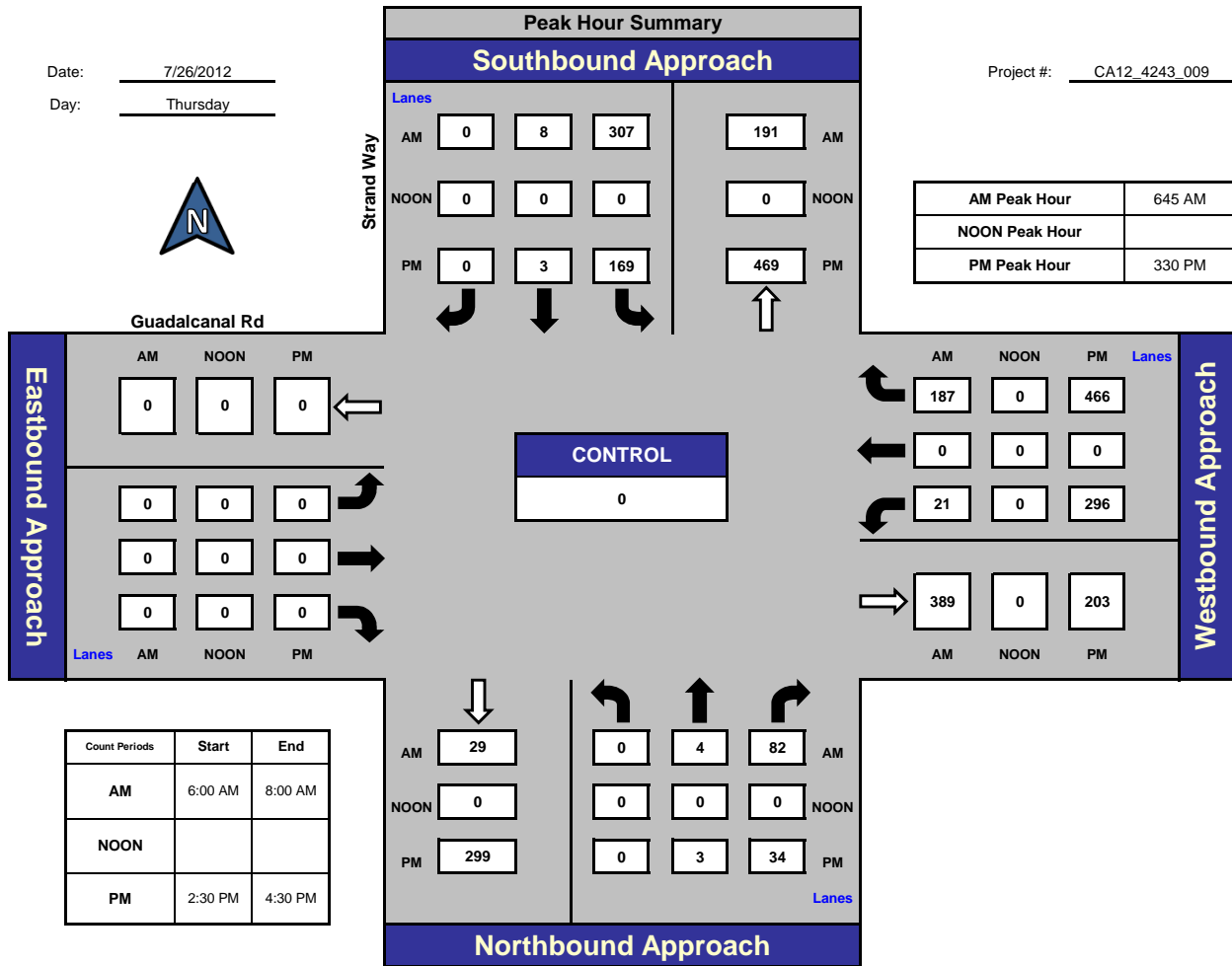
National Data & Surveying Services

Strand Way and Guadacanal Rd , City of San Diego

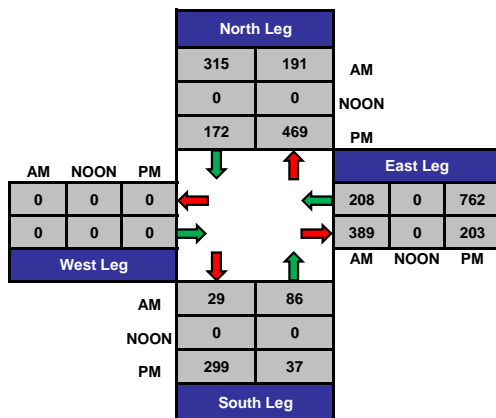
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Day: Thursday

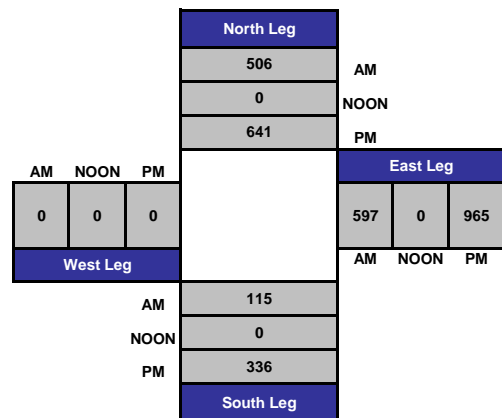
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Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

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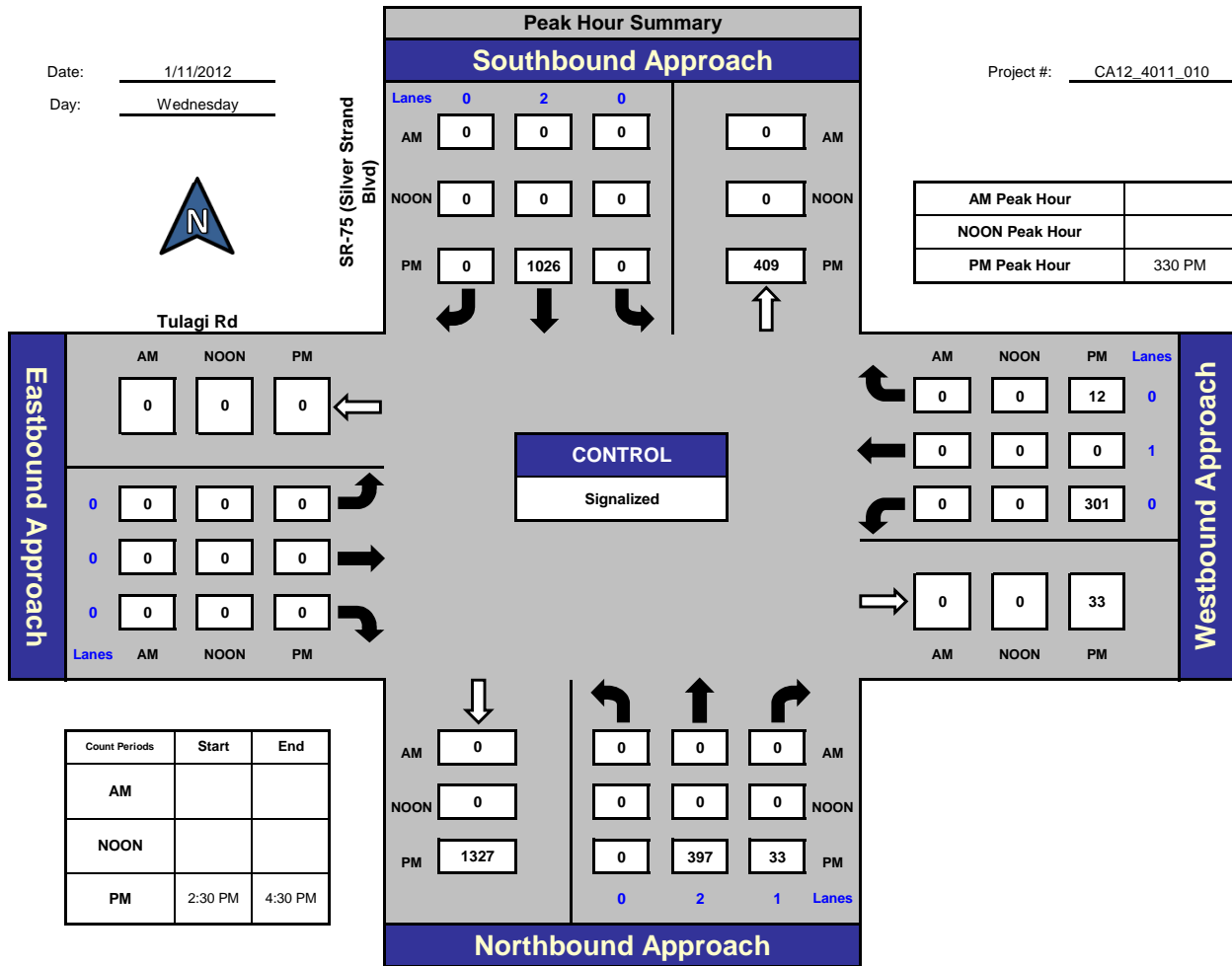


National Data & Surveying Services

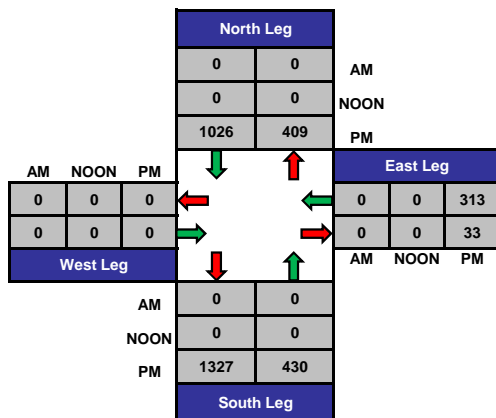
SR-75 (Silver Strand Blvd) and Tulagi Rd , City of Coronado

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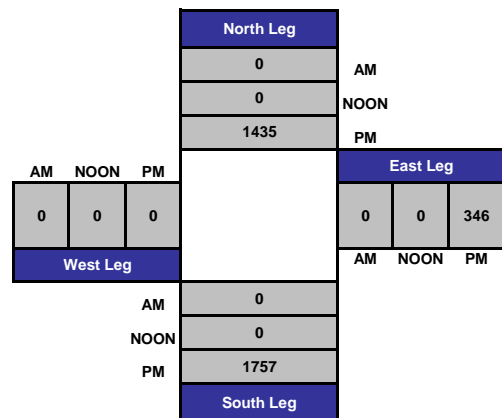
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Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



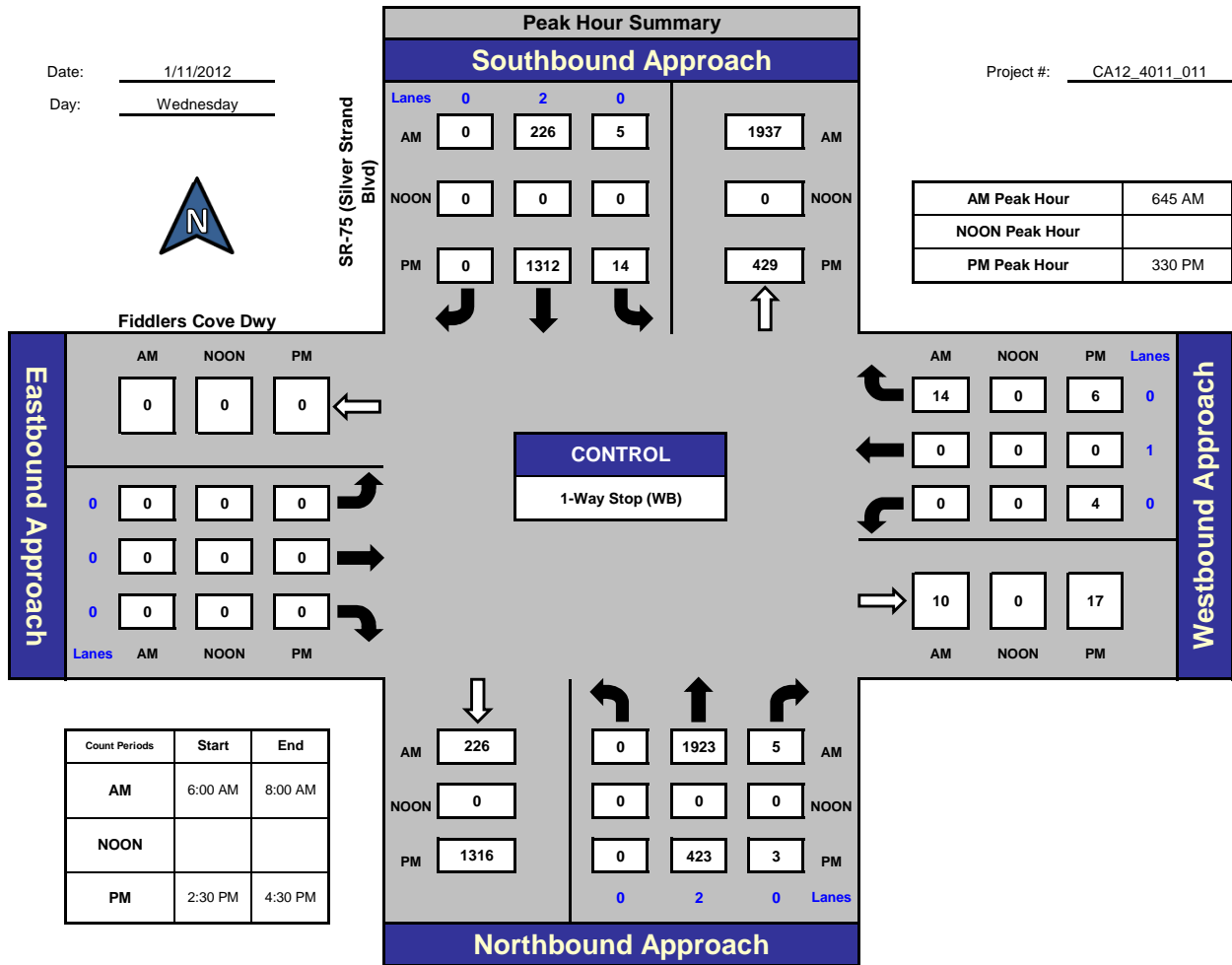
National Data & Surveying Services

SR-75 (Silver Strand Blvd) and Fiddlers Cove Dwy , City of Coronado

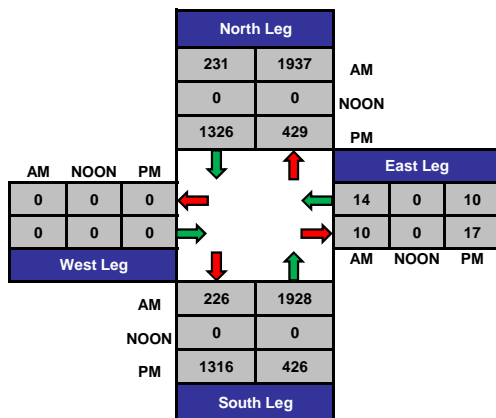
Date: 1/11/2012

Day: Wednesday

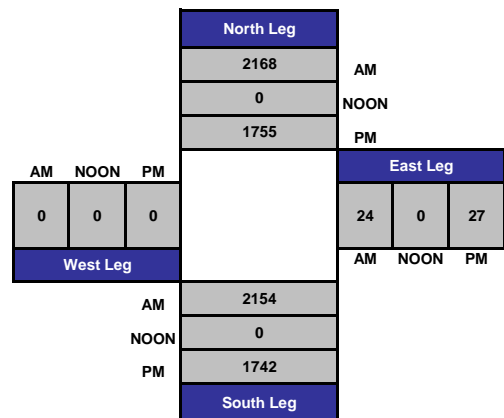
Project #: CA12_4011_011



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



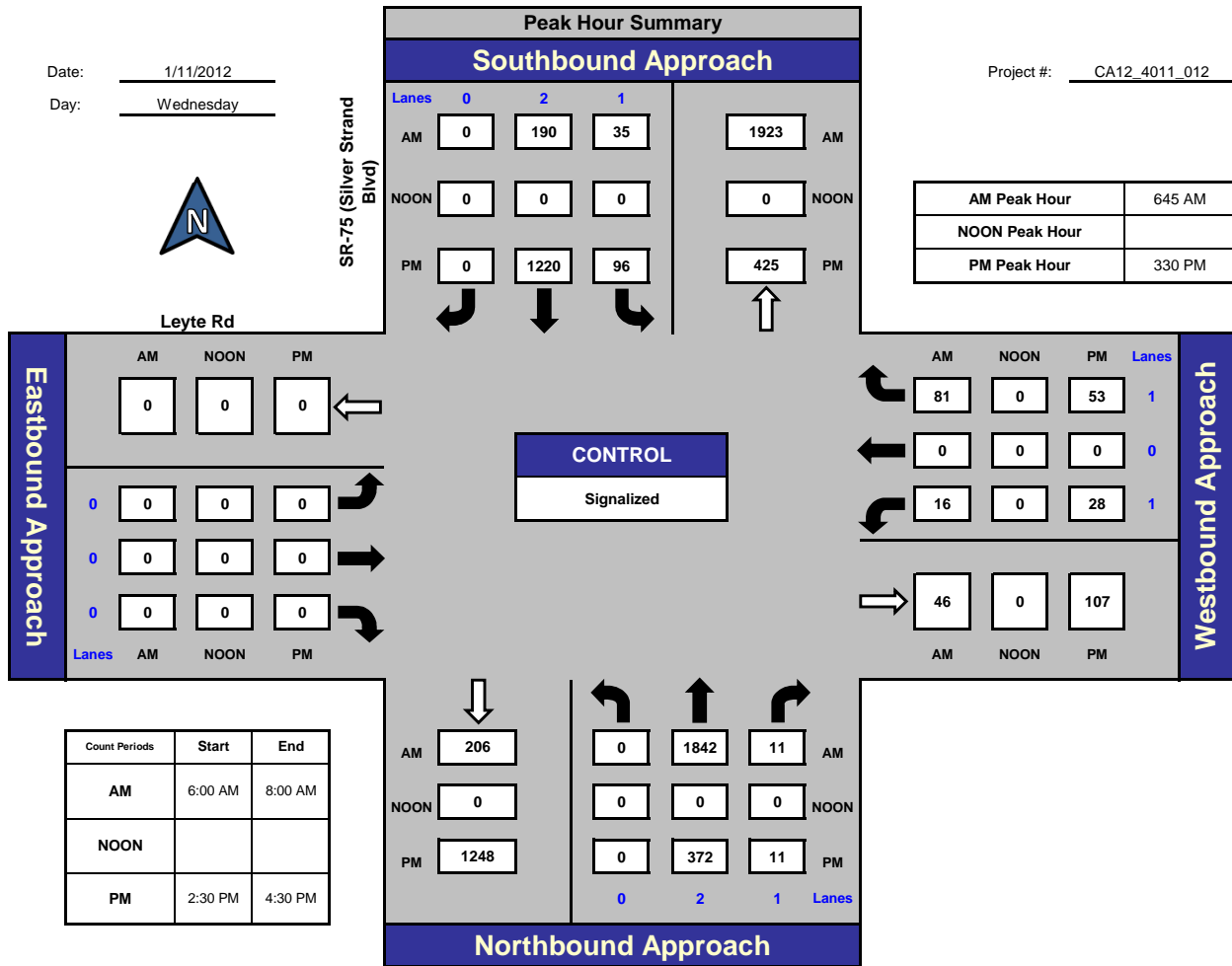
National Data & Surveying Services

SR-75 (Silver Strand Blvd) and Leyte Rd , City of Coronado

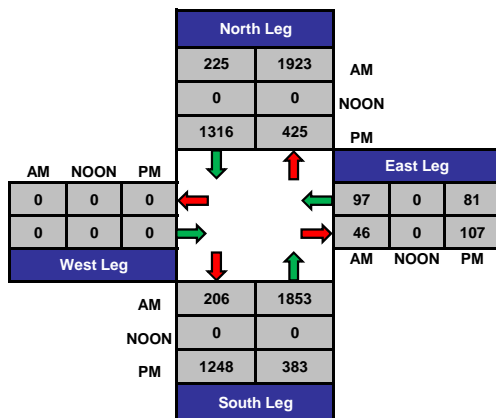
Date: 1/11/2012

Day: Wednesday

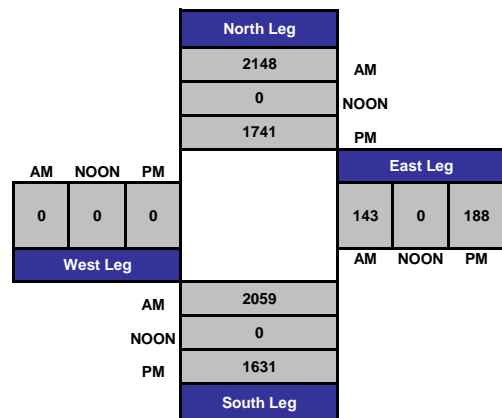
Project #: CA12_4011_012



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



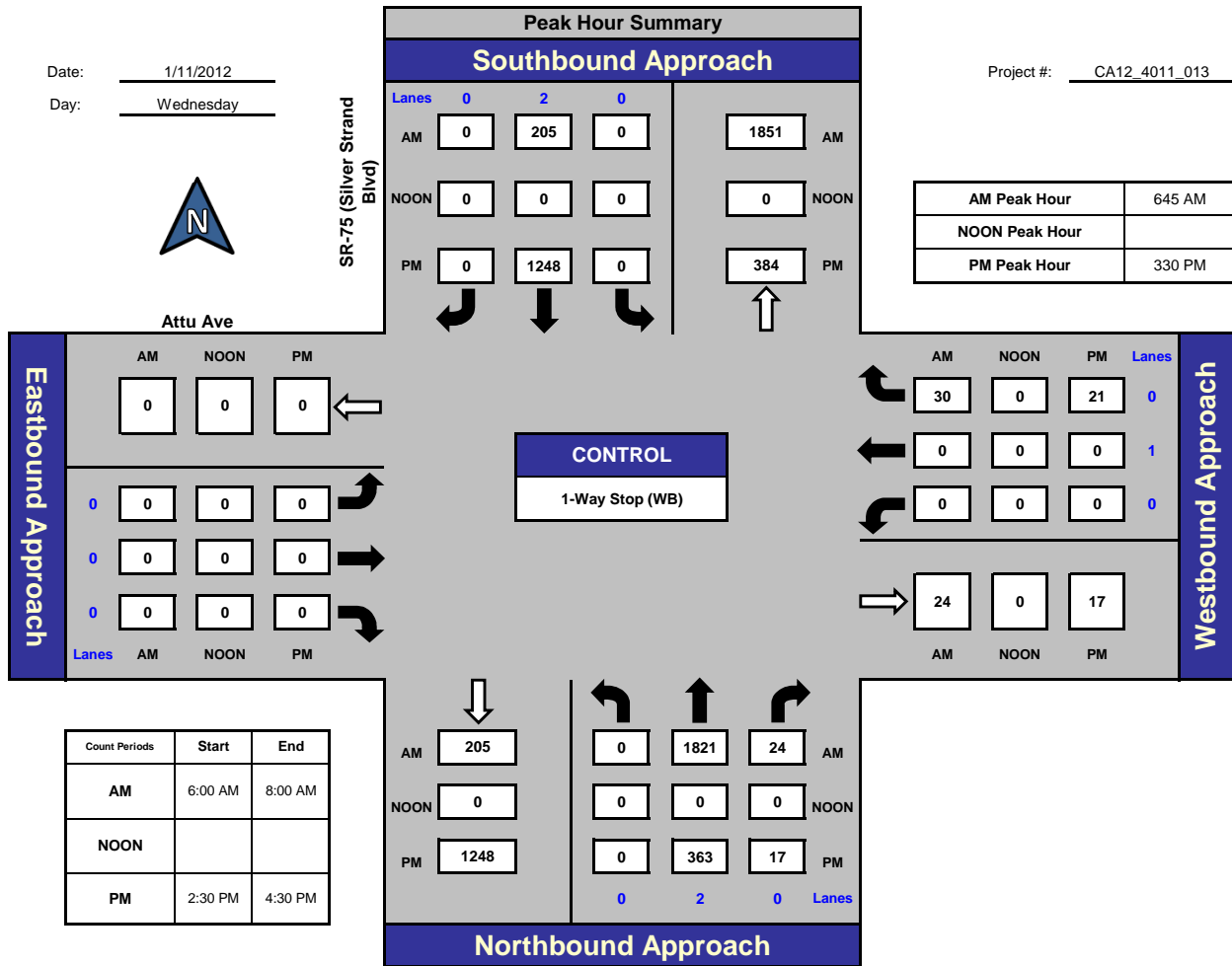
National Data & Surveying Services

SR-75 (Silver Strand Blvd) and Attu Ave, City of Coronado

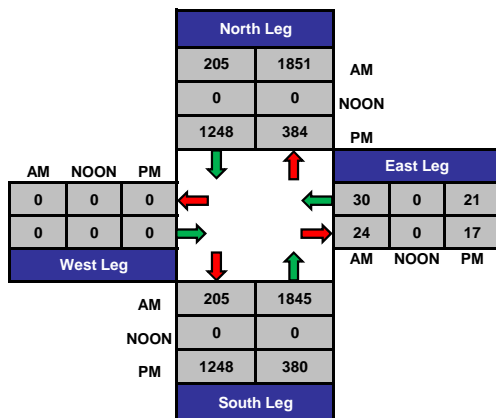
Date: 1/11/2012

Day: Wednesday

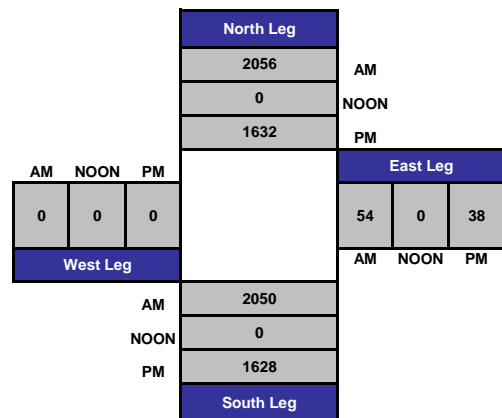
Project #: CA12_4011_013



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



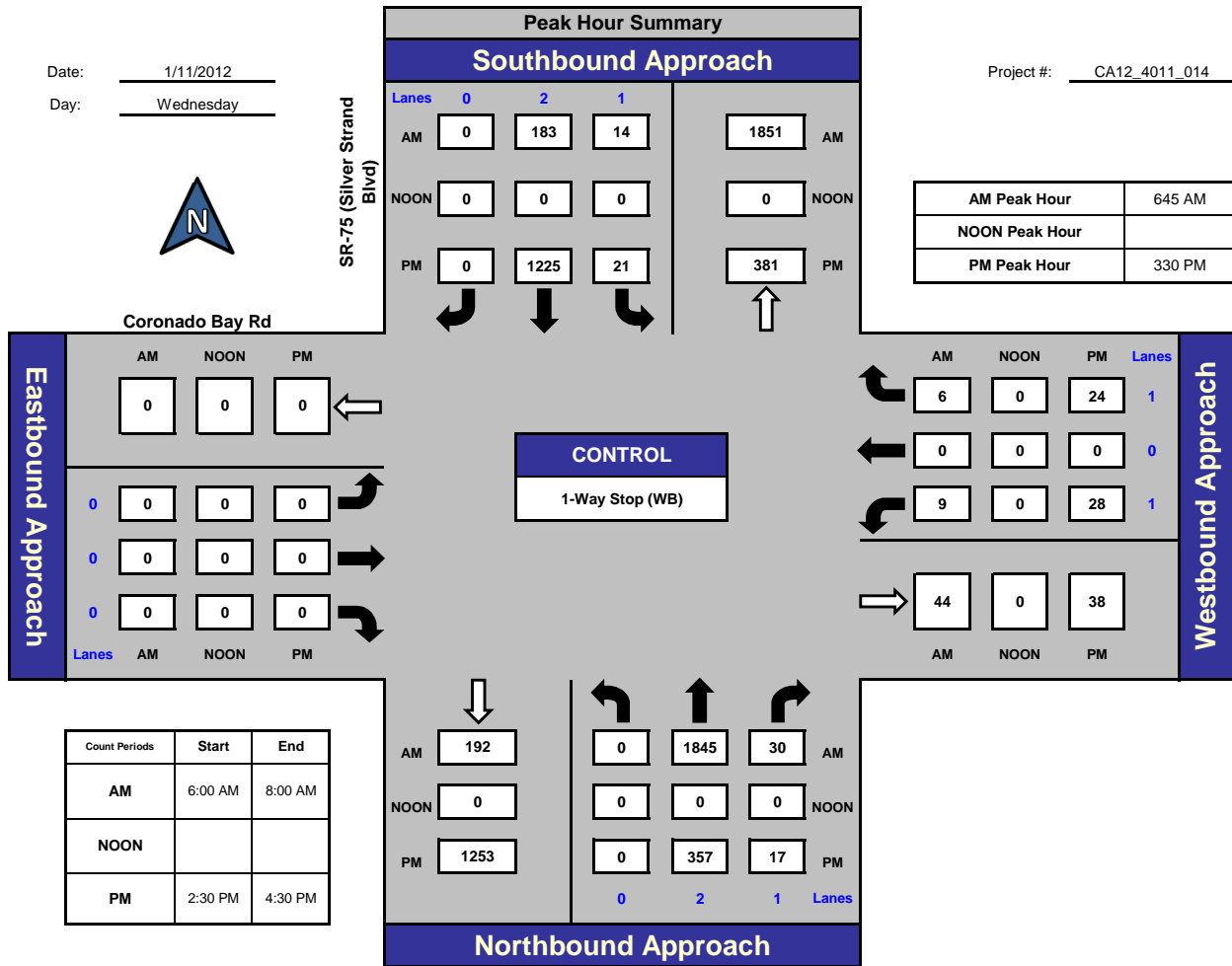
National Data & Surveying Services

SR-75 (Silver Strand Blvd) and Coronado Bay Rd , City of Coronado

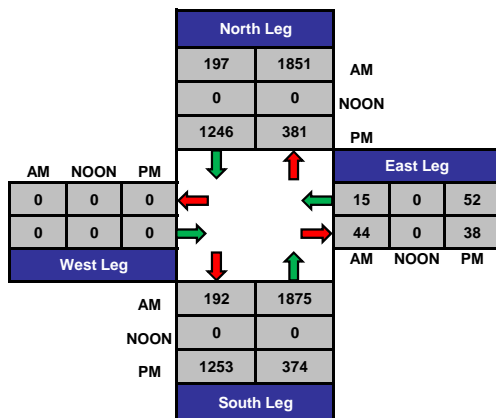
Date: 1/11/2012

Day: Wednesday

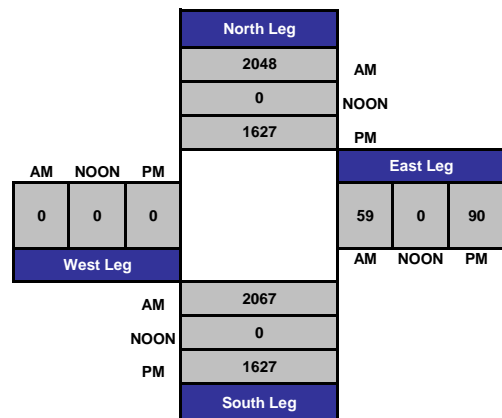
Project #: CA12_4011_014



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

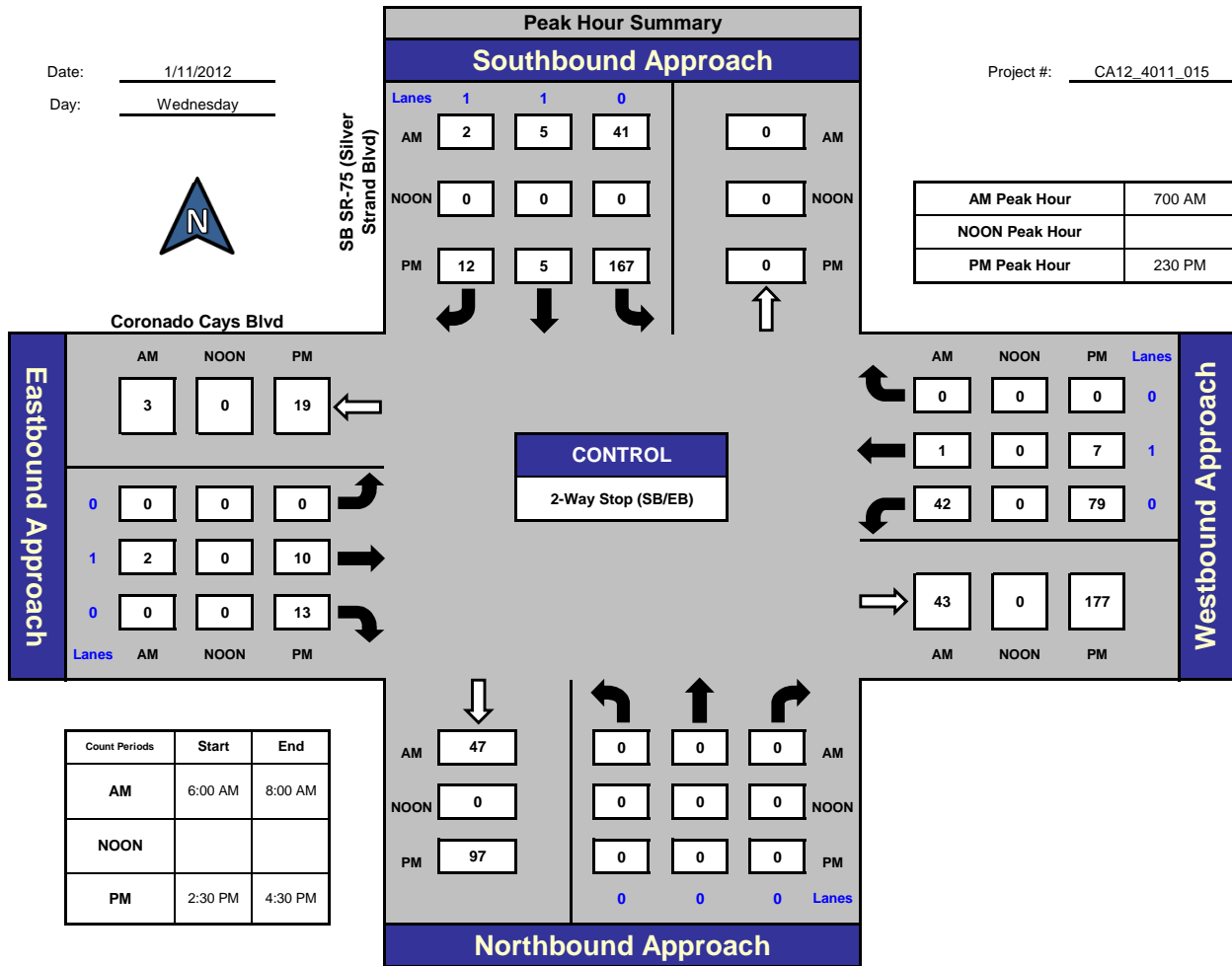


National Data & Surveying Services

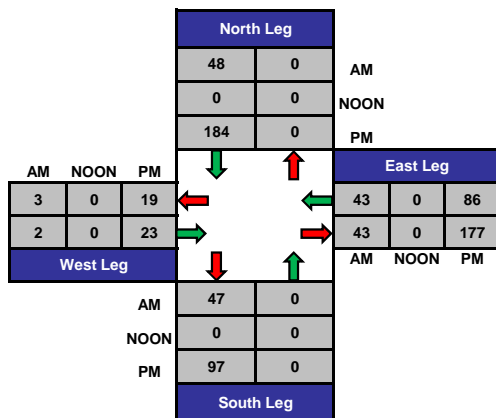
SB SR-75 (Silver Strand Blvd) and Coronado Cays Blvd, City of Coronado

Date: 1/11/2012
Day: Wednesday

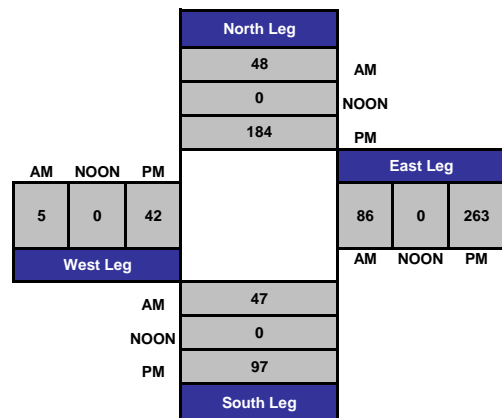
Project #: CA12_4011_015



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



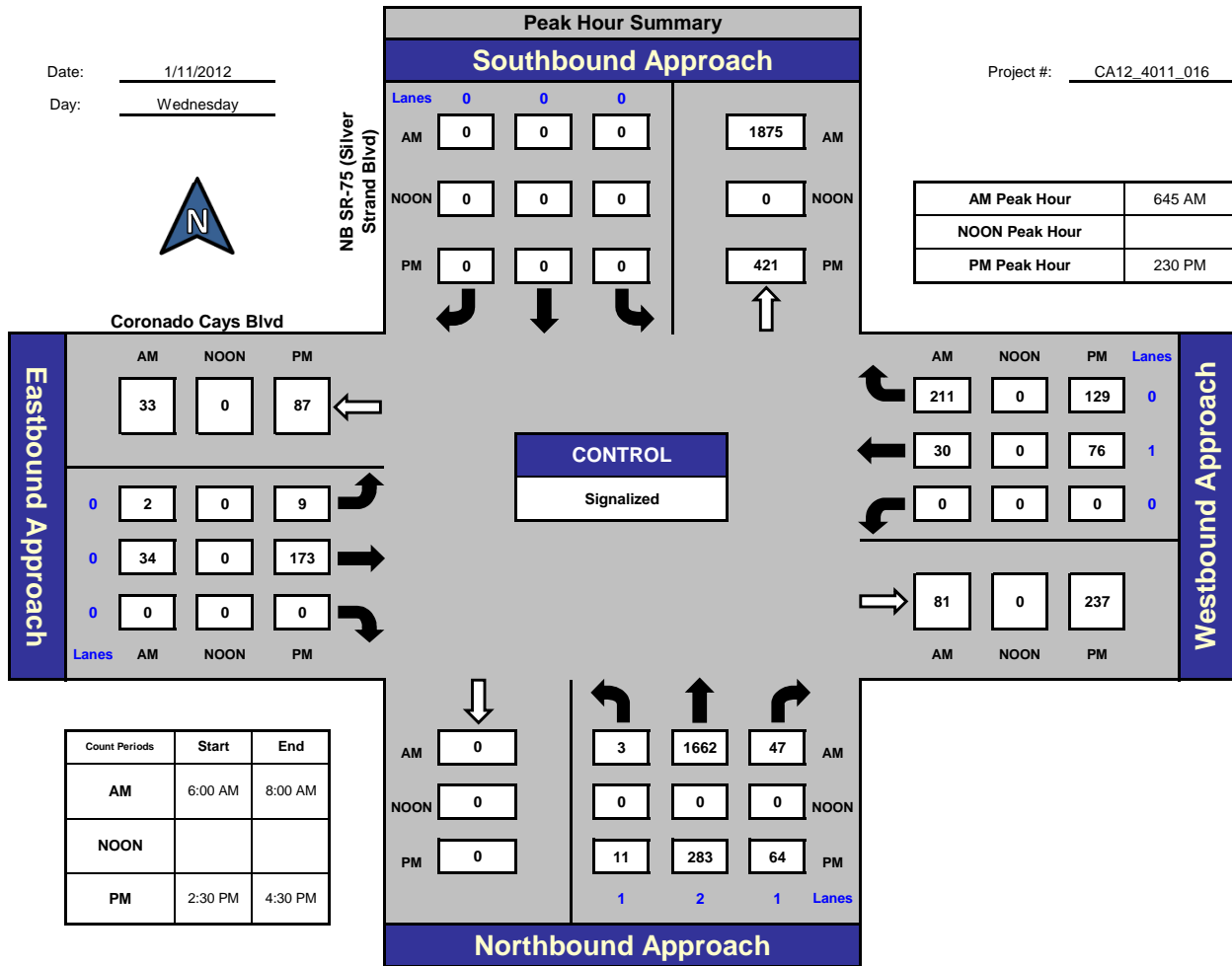
National Data & Surveying Services

NB SR-75 (Silver Strand Blvd) and Coronado Cays Blvd, City of Coronado

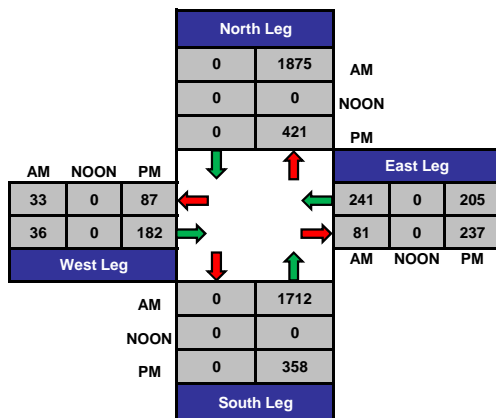
Date: 1/11/2012

Day: Wednesday

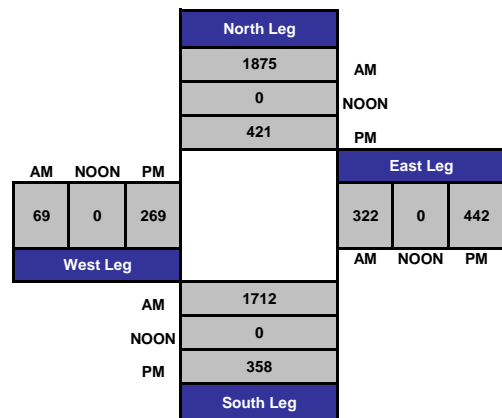
Project #: CA12_4011_016



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



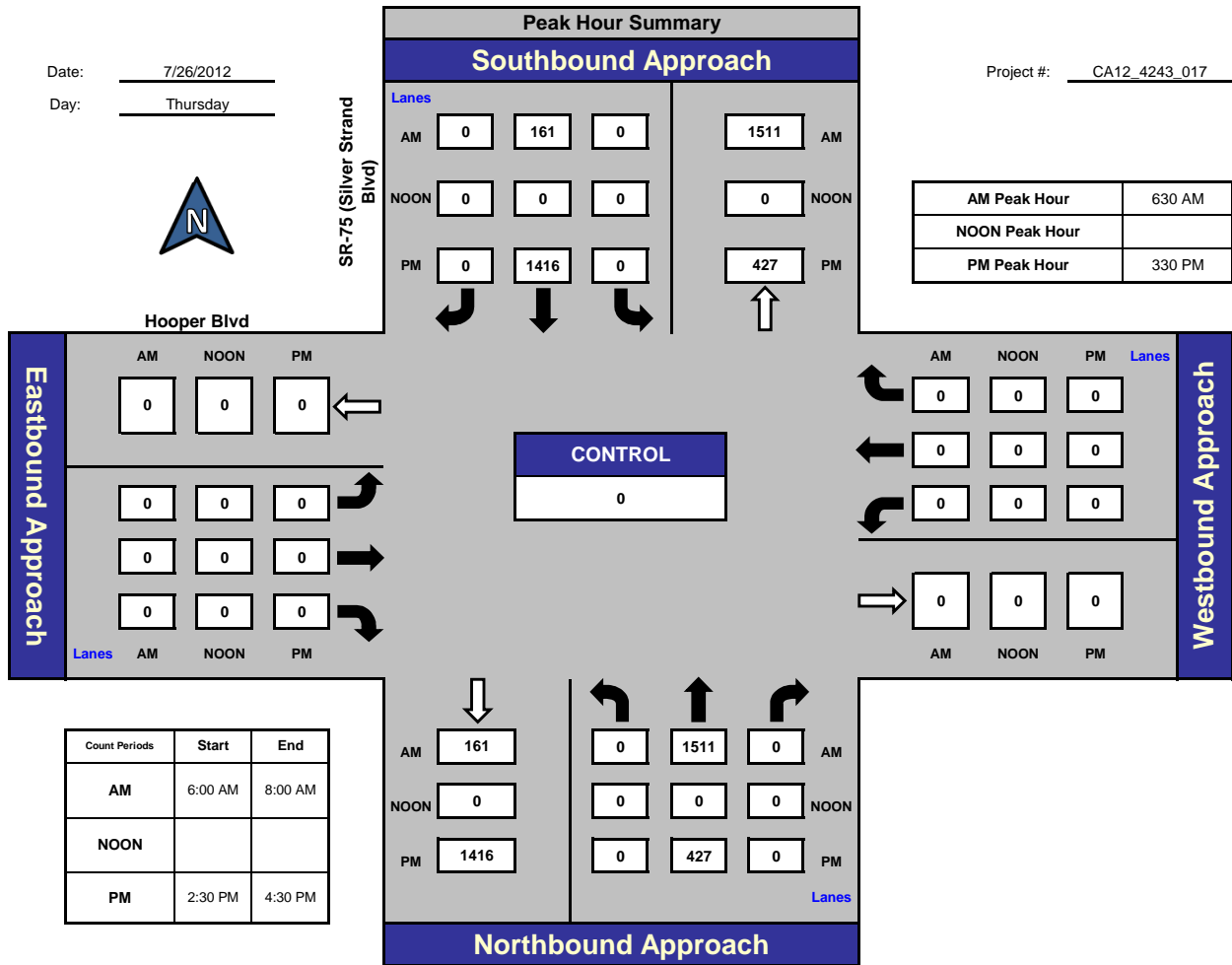
National Data & Surveying Services

SR-75 (Silver Strand Blvd) and Hooper Blvd, City of San Diego

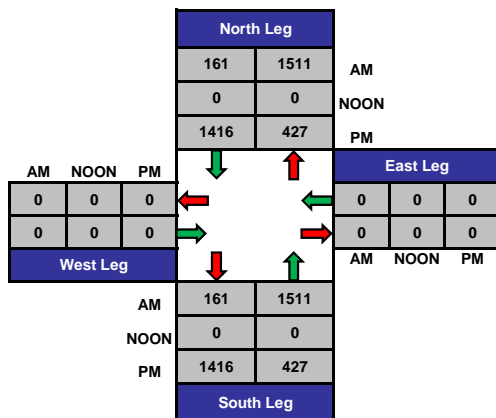
Date: 7/26/2012

Day: Thursday

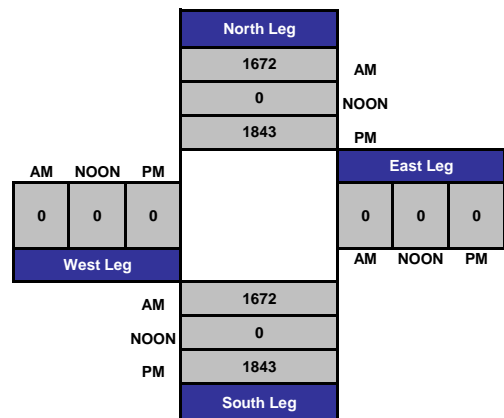
Project #: CA12_4243_017



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



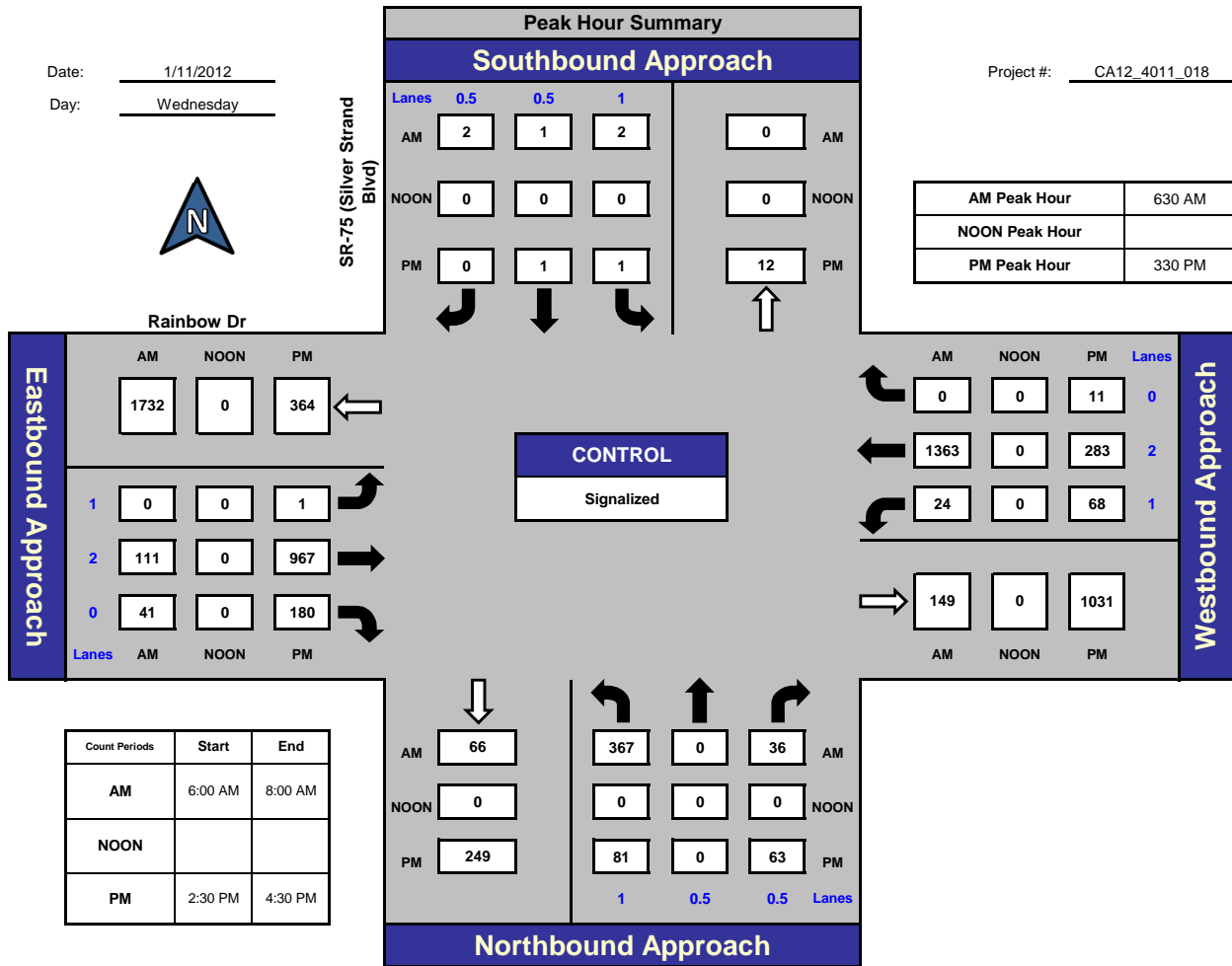
National Data & Surveying Services

SR-75 (Silver Strand Blvd) and Rainbow Dr., City of Coronado

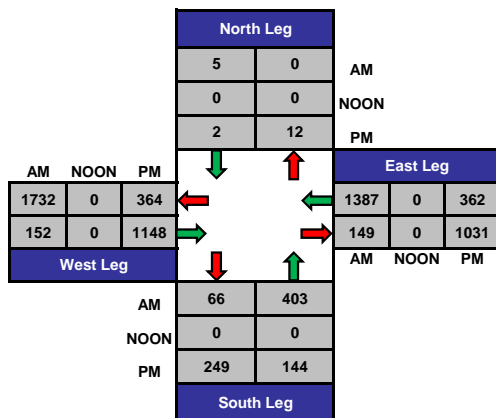
Date: 1/11/2012

Day: Wednesday

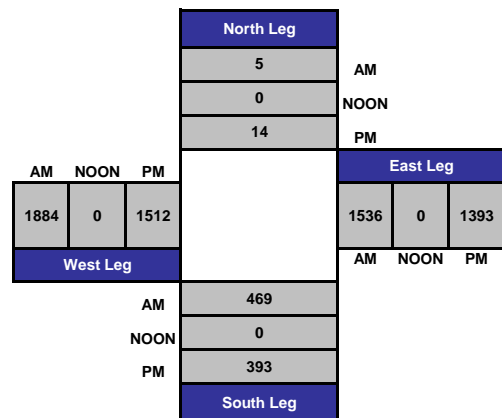
Project #: CA12_4011_018



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



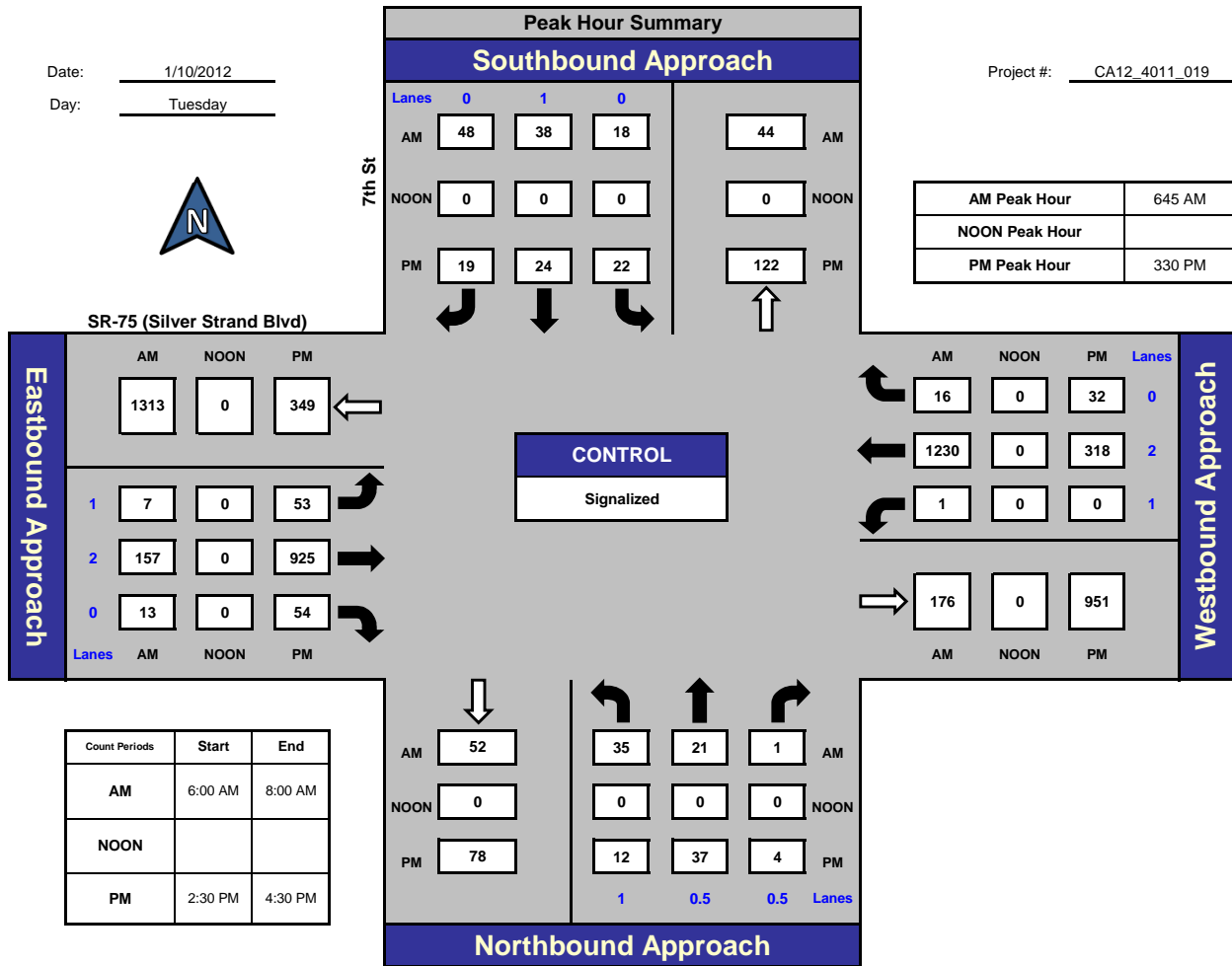
National Data & Surveying Services

7th St and SR-75 (Silver Strand Blvd), City of Coronado

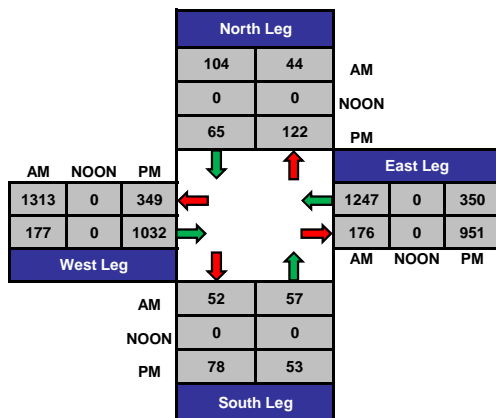
Date: 1/10/2012

Day: Tuesday

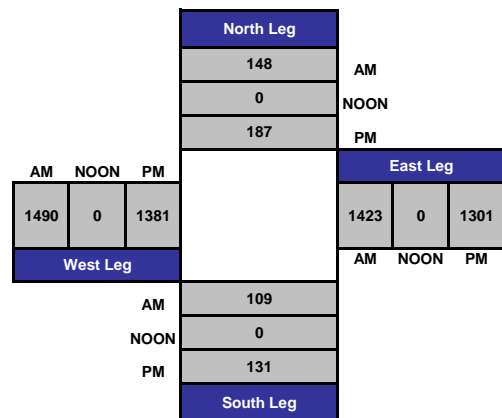
Project #: CA12_4011_019



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



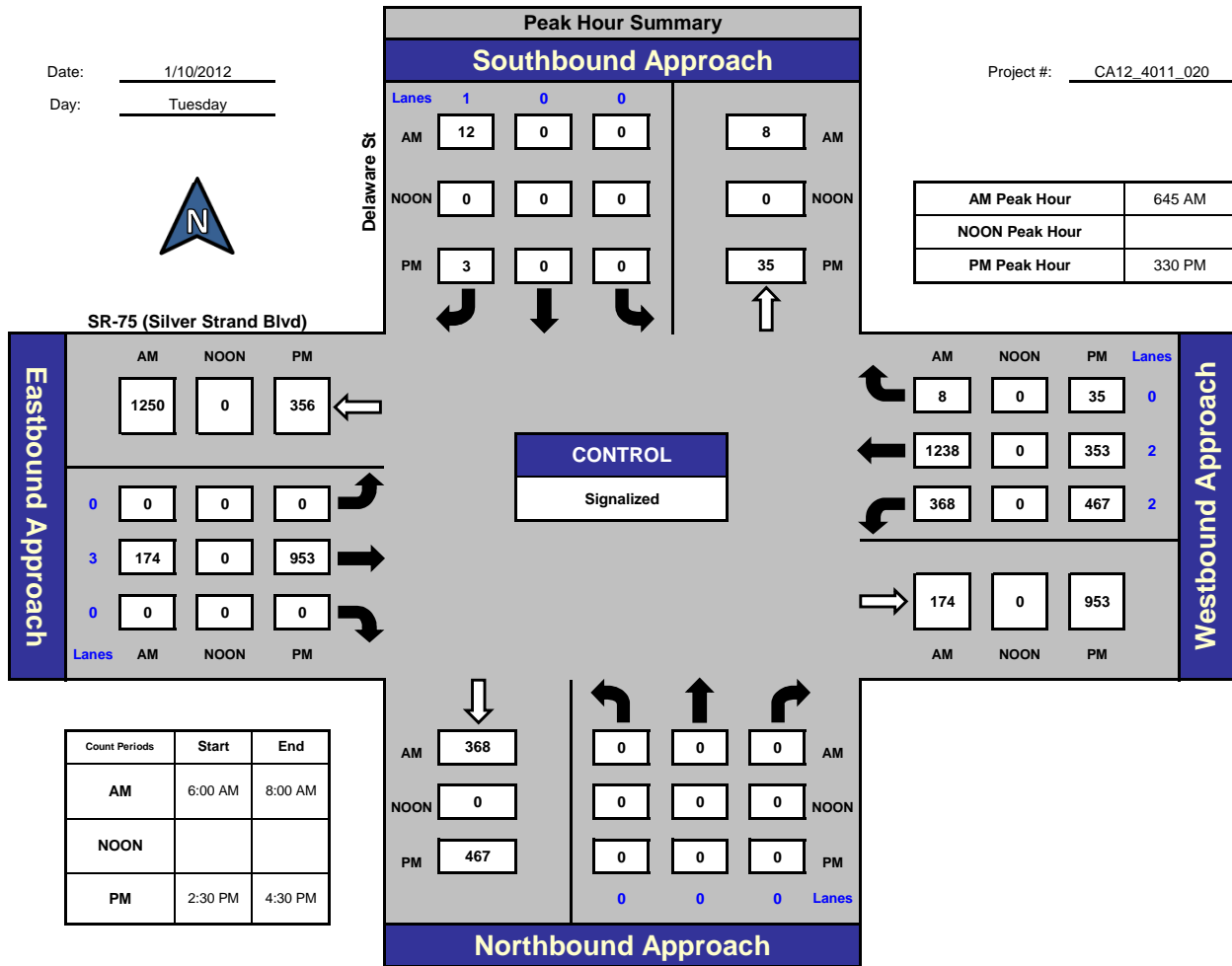
National Data & Surveying Services

Delaware St and SR-75 (Silver Strand Blvd), City of Coronado

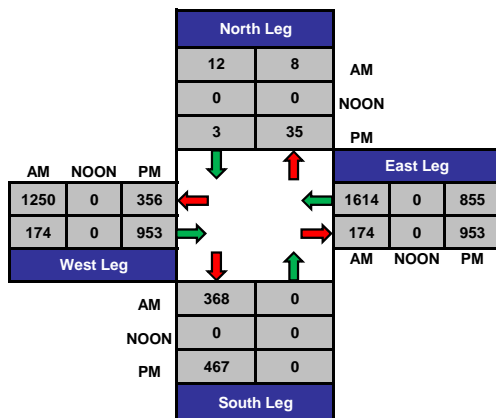
Date: 1/10/2012

Day: Tuesday

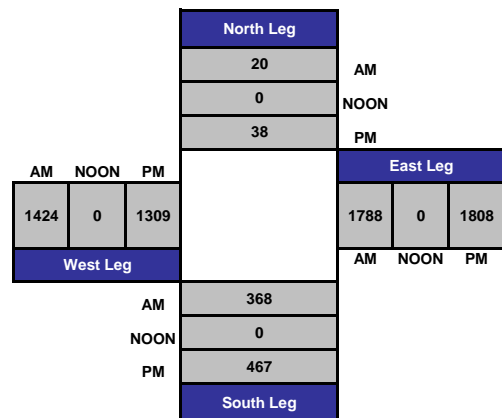
Project #: CA12_4011_020



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



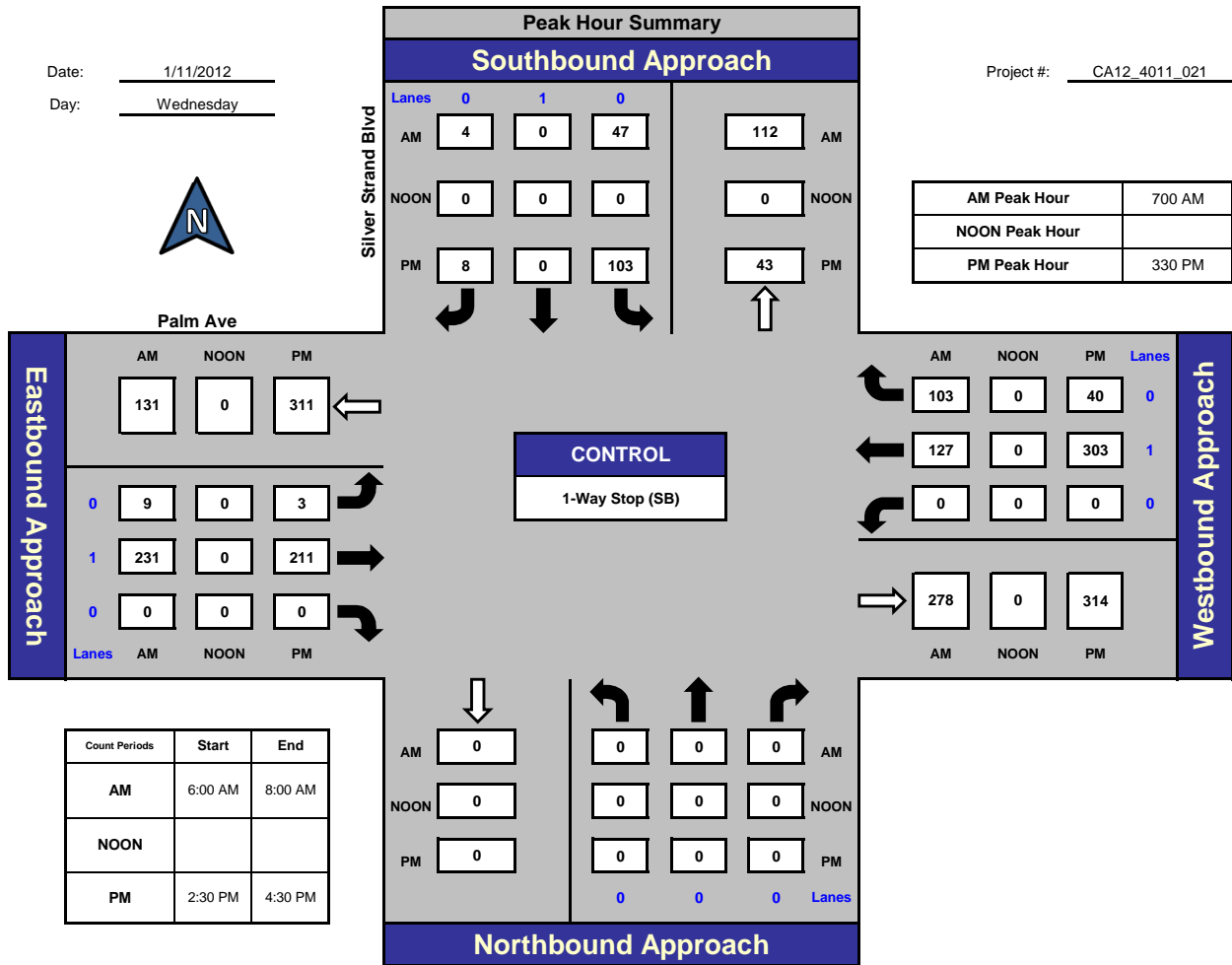
National Data & Surveying Services

Silver Strand Blvd and Palm Ave , City of Coronado

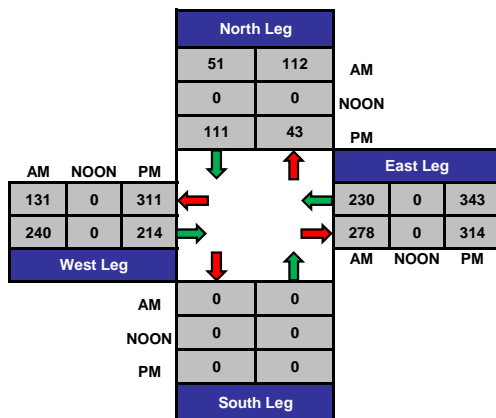
Date: 1/11/2012

Day: Wednesday

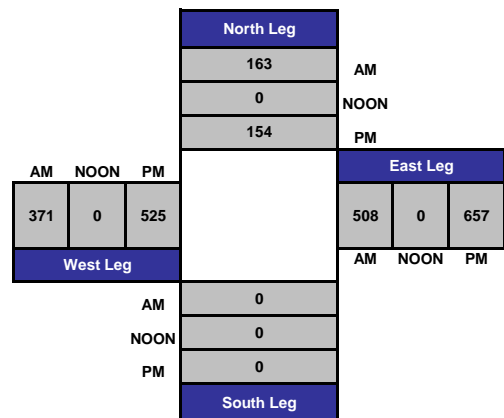
Project #: CA12_4011_021



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



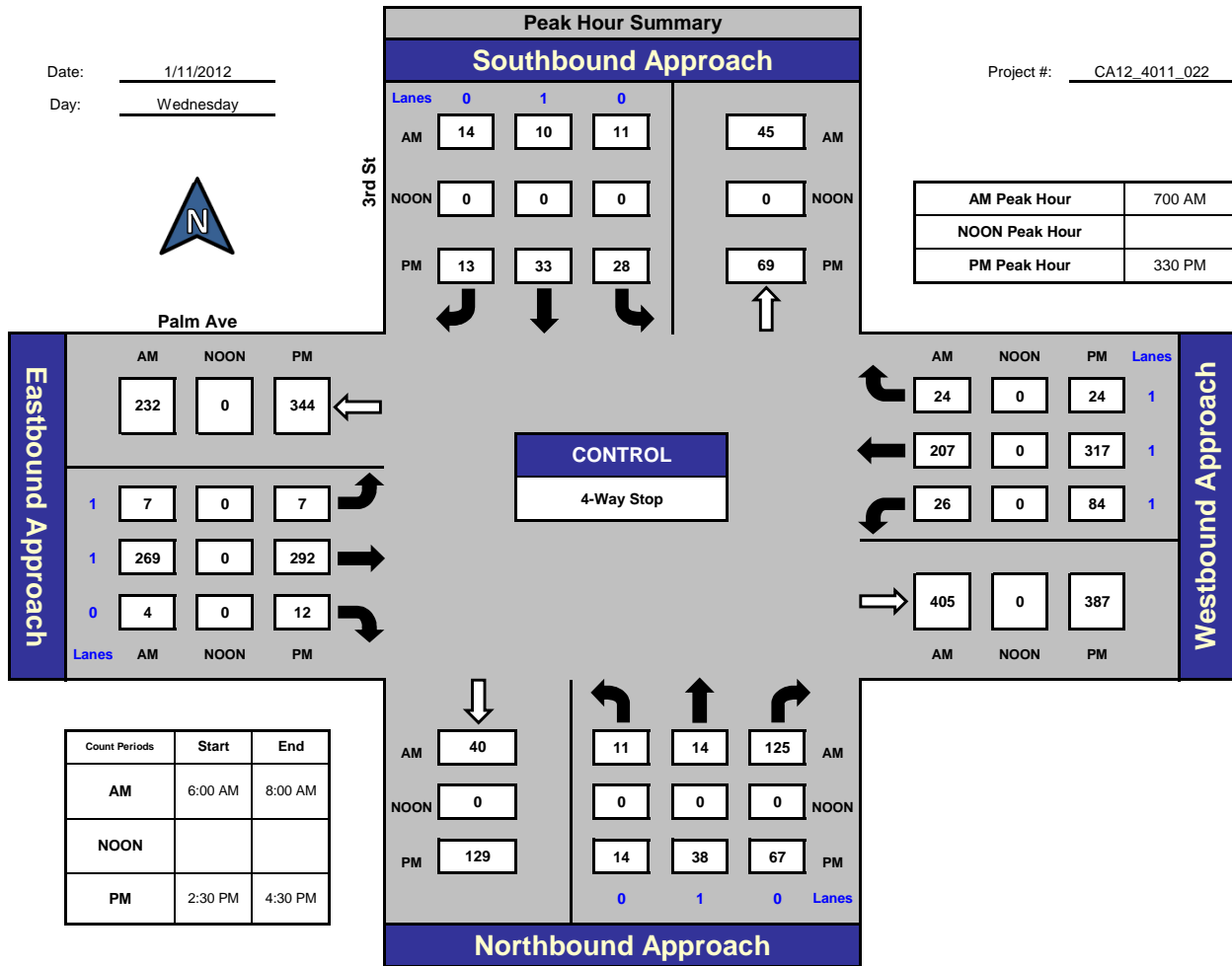
National Data & Surveying Services

3rd St and Palm Ave, City of Coronado

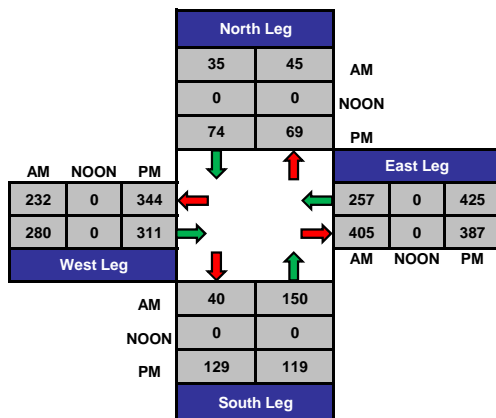
Date: 1/11/2012

Day: Wednesday

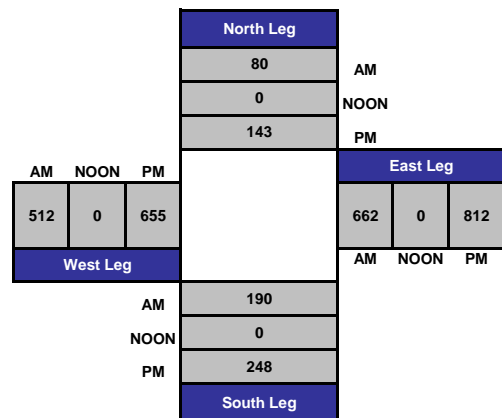
Project #: CA12_4011_022



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

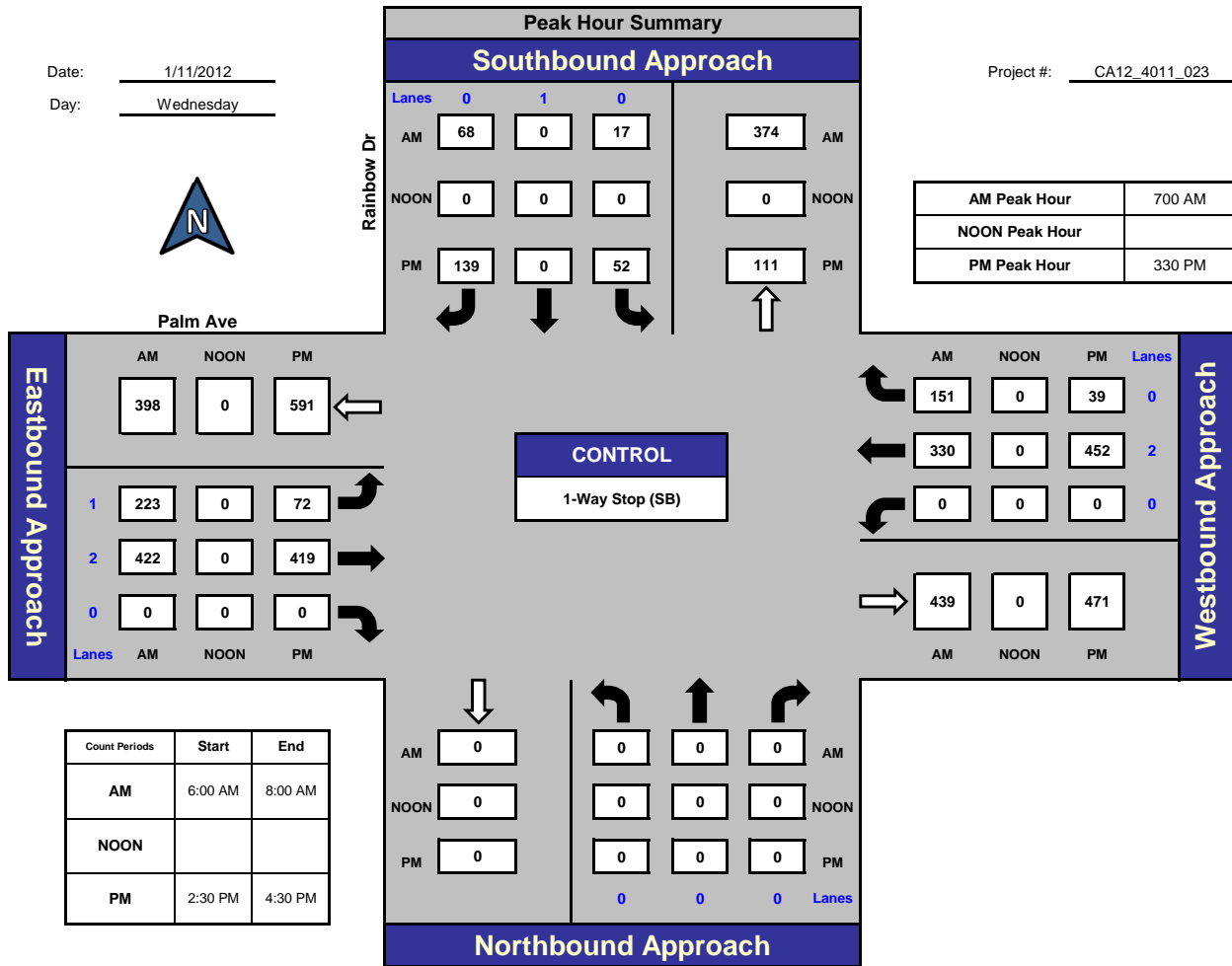


National Data & Surveying Services

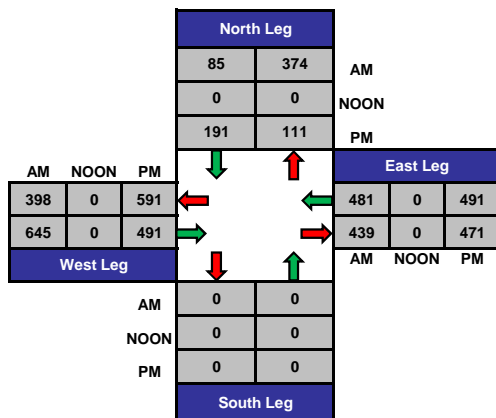
Rainbow Dr and Palm Ave, City of Coronado

Date: 1/11/2012
Day: Wednesday

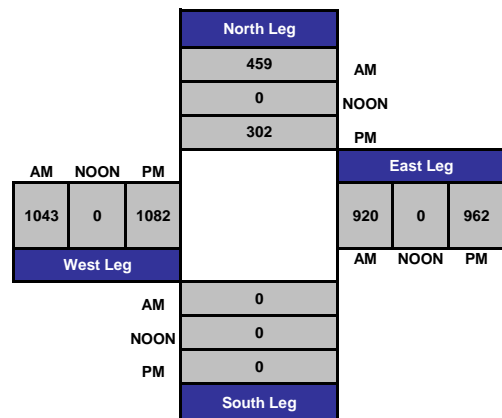
Project #: CA12_4011_023



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



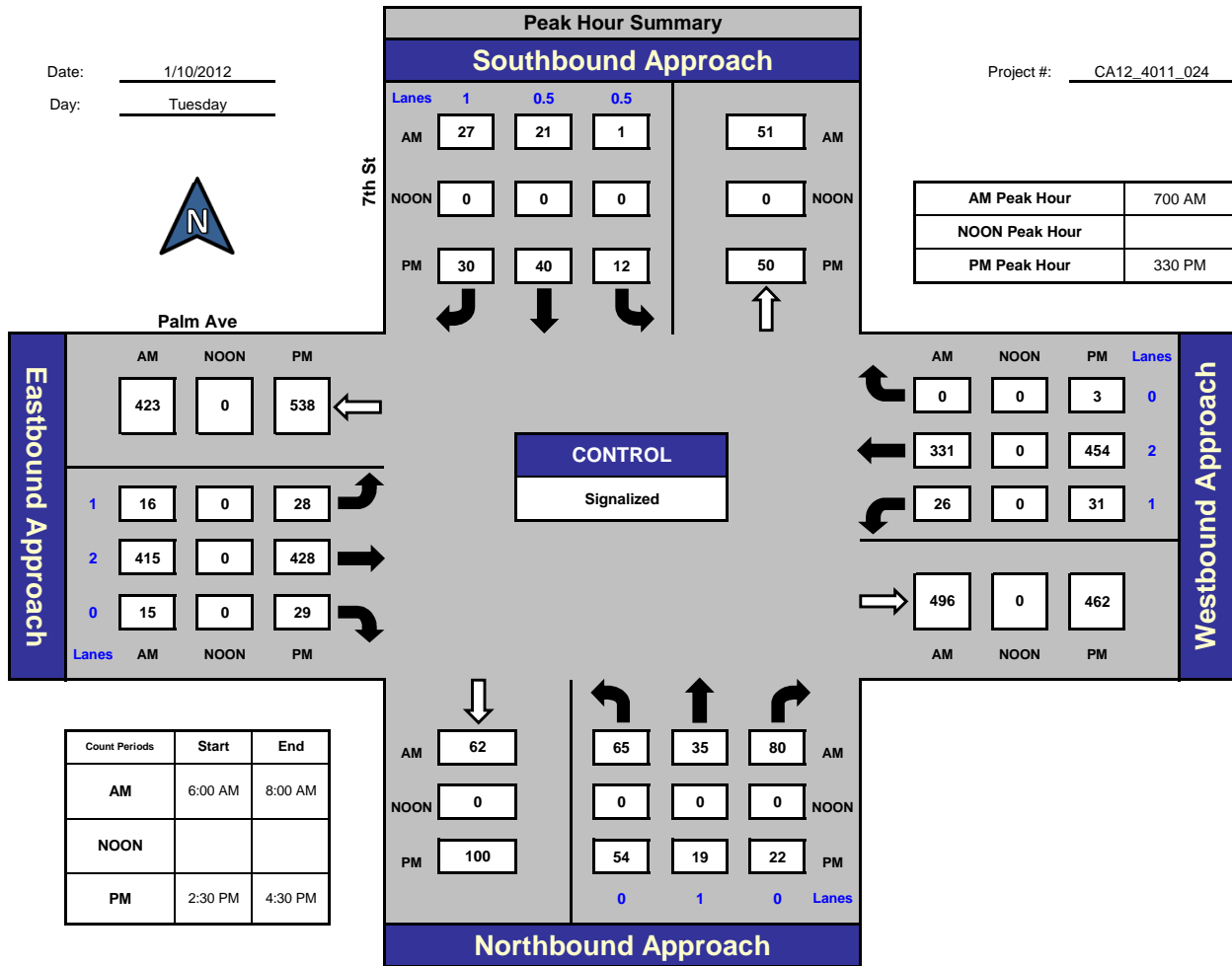
National Data & Surveying Services

7th St and Palm Ave, City of Coronado

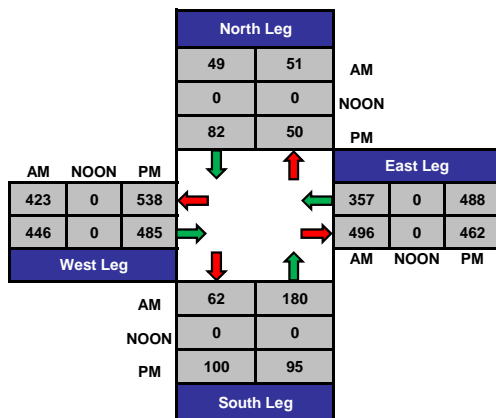
Date: 1/10/2012

Day: Tuesday

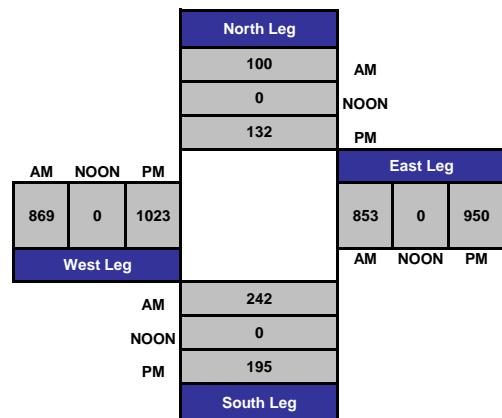
Project #: CA12_4011_024



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



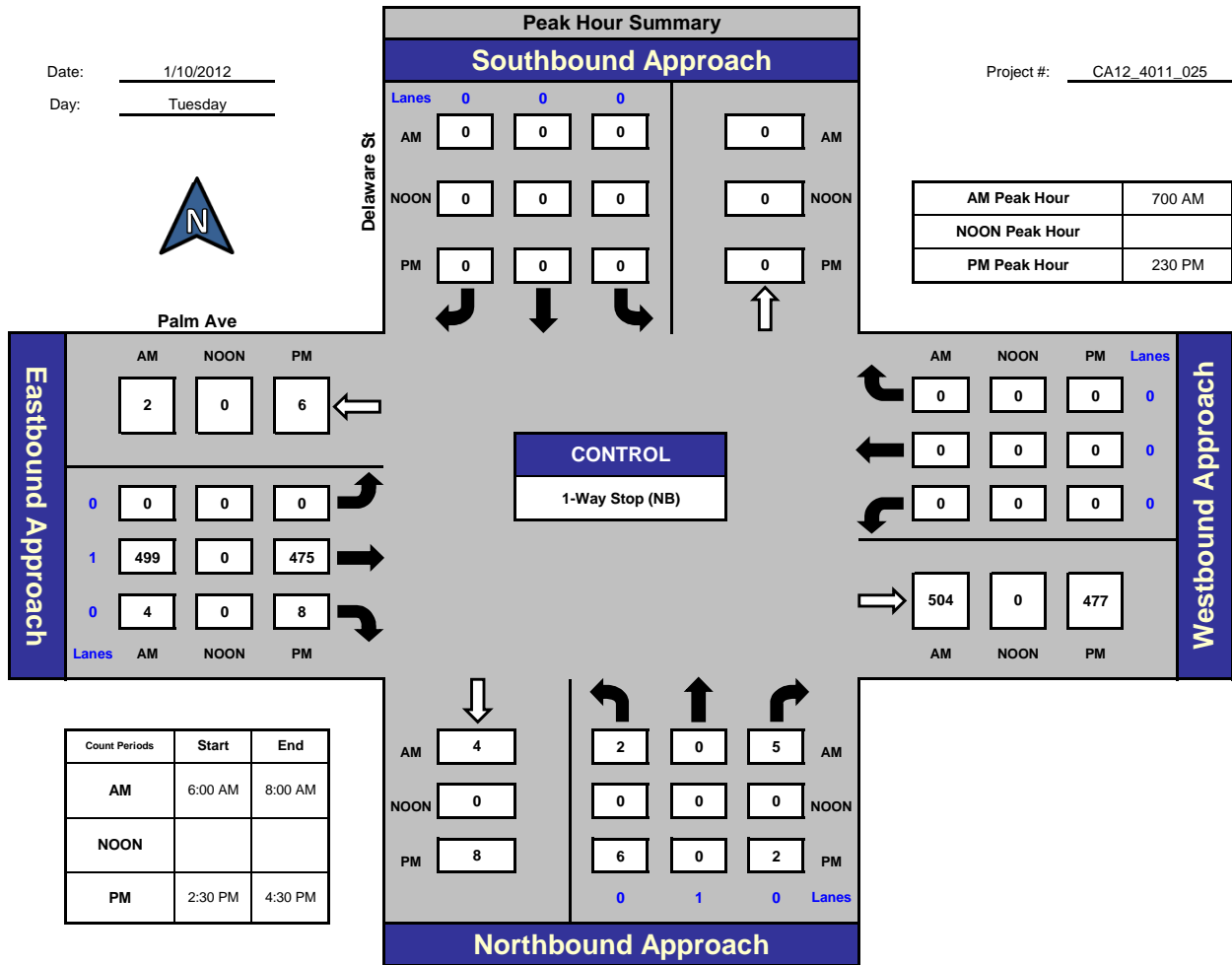
National Data & Surveying Services

Delaware St and Palm Ave, City of Coronado

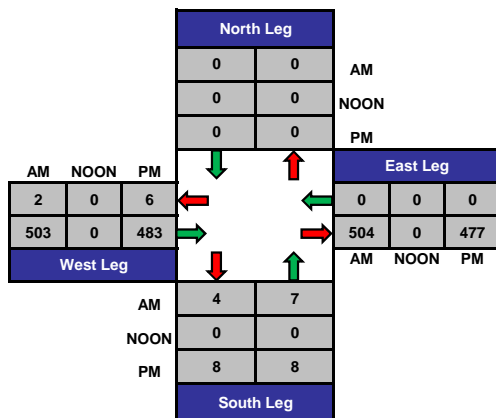
Date: 1/10/2012

Day: Tuesday

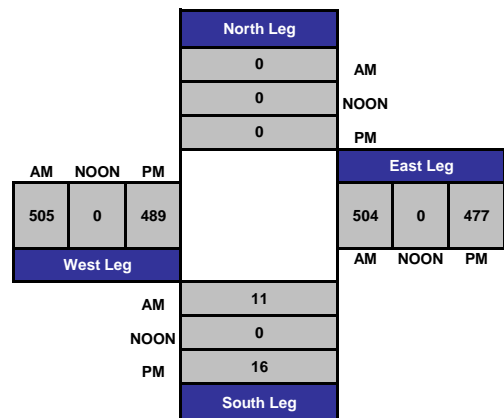
Project #: CA12_4011_025



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



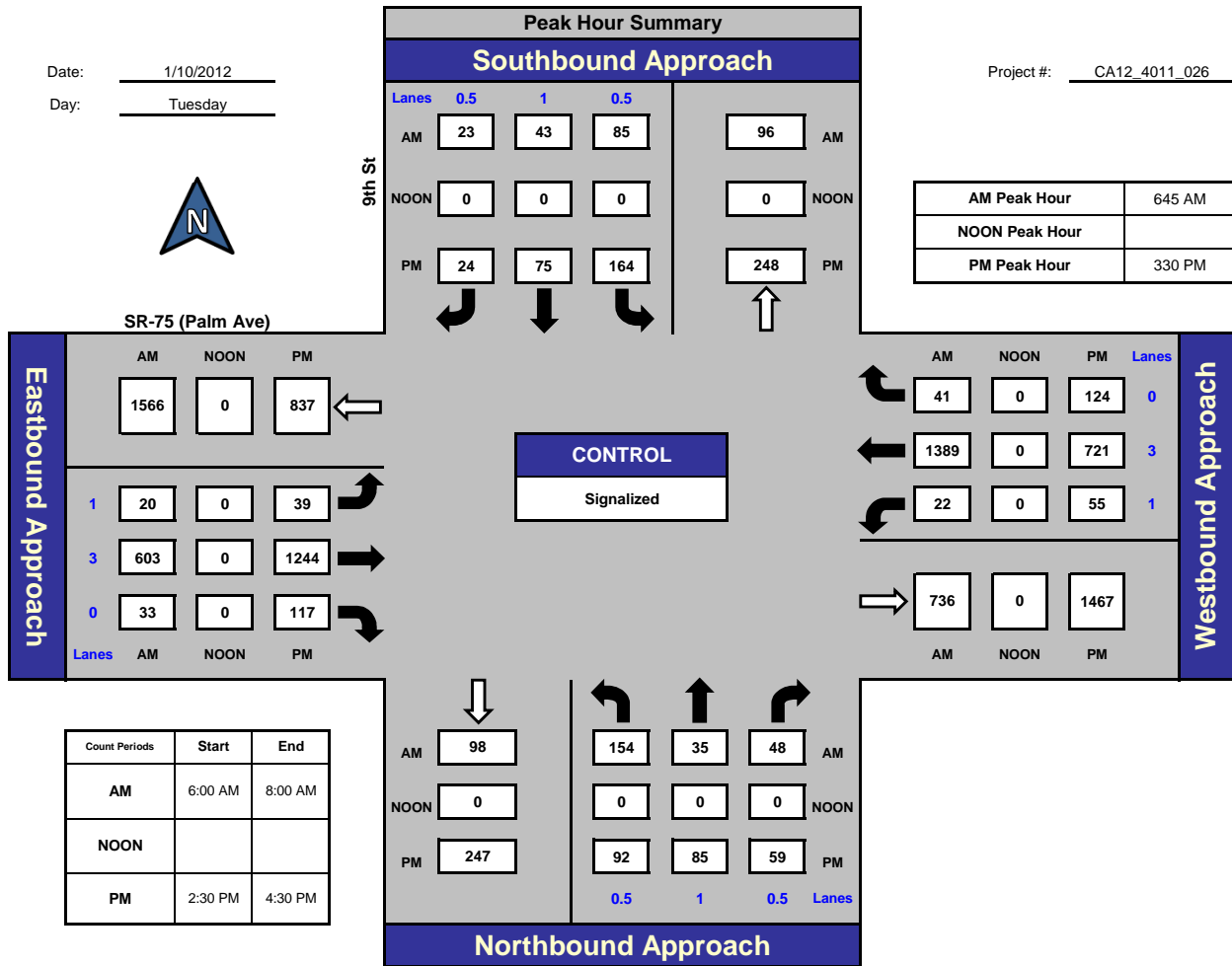
National Data & Surveying Services

9th St and SR-75 (Palm Ave), City of Coronado

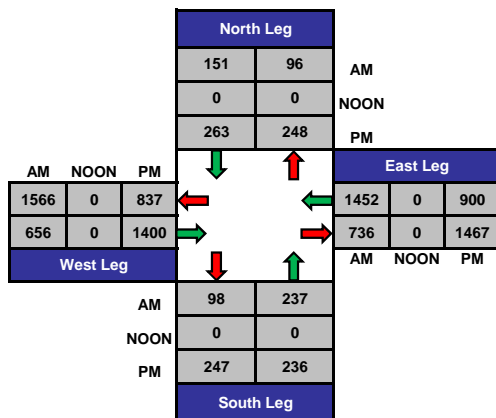
Date: 1/10/2012

Day: Tuesday

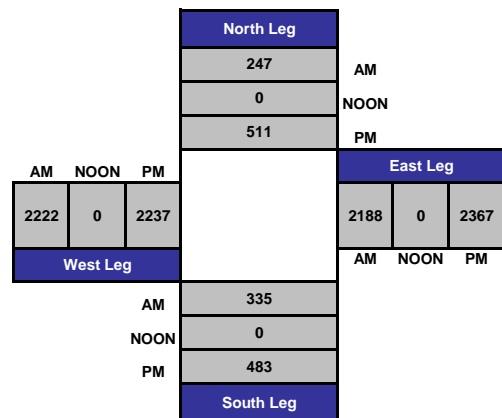
Project #: CA12_4011_026



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



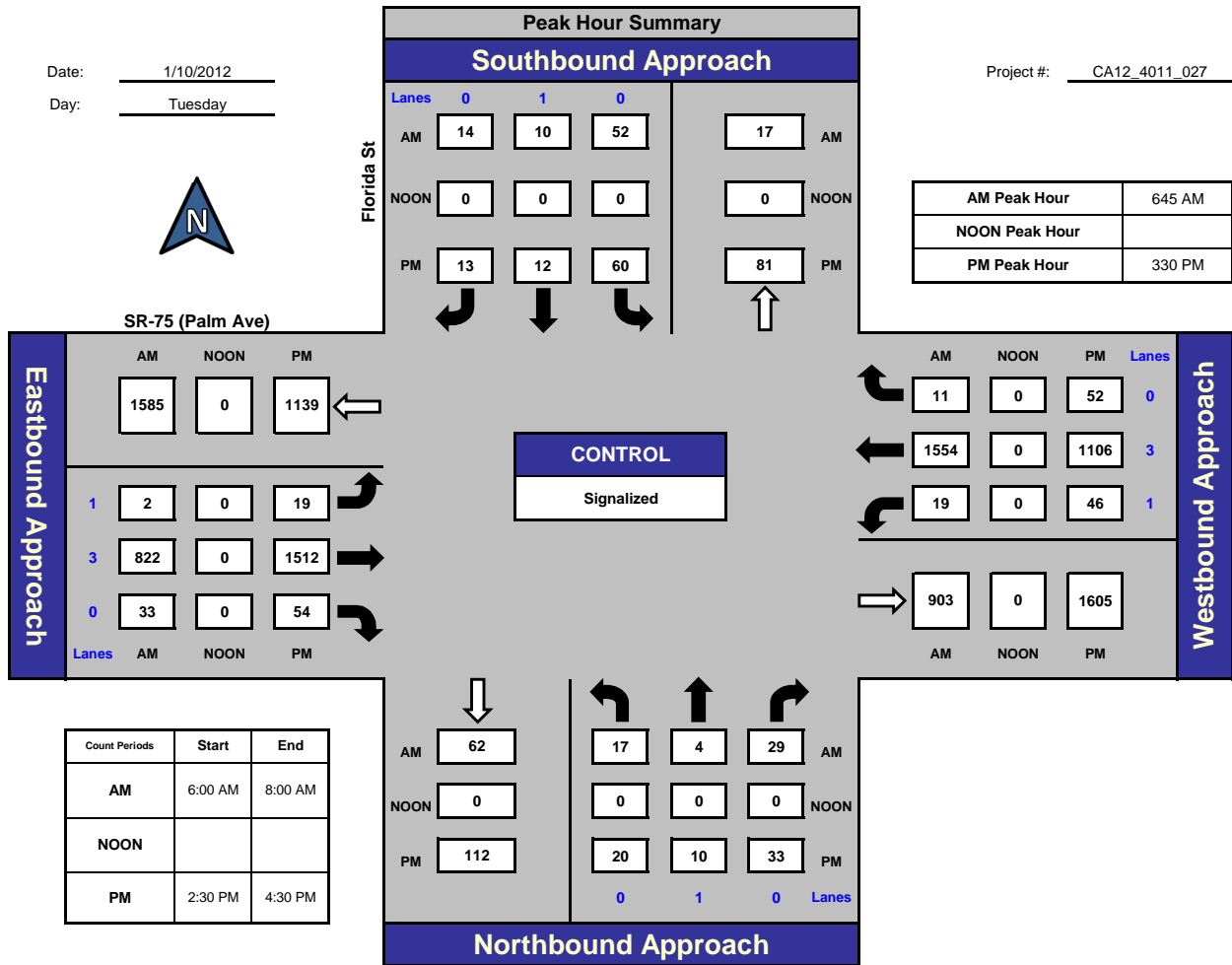
National Data & Surveying Services

Florida St and SR-75 (Palm Ave), City of Coronado

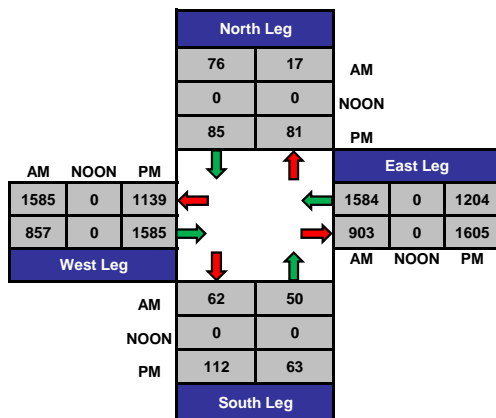
Date: 1/10/2012

Day: Tuesday

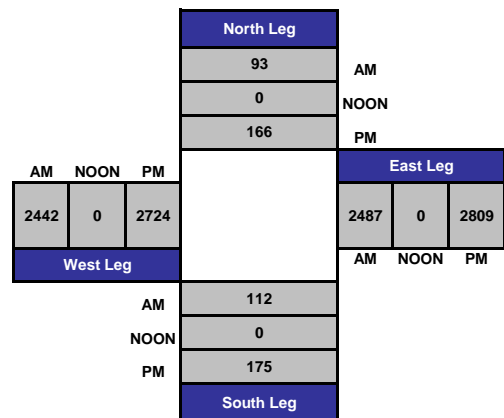
Project #: CA12_4011_027



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



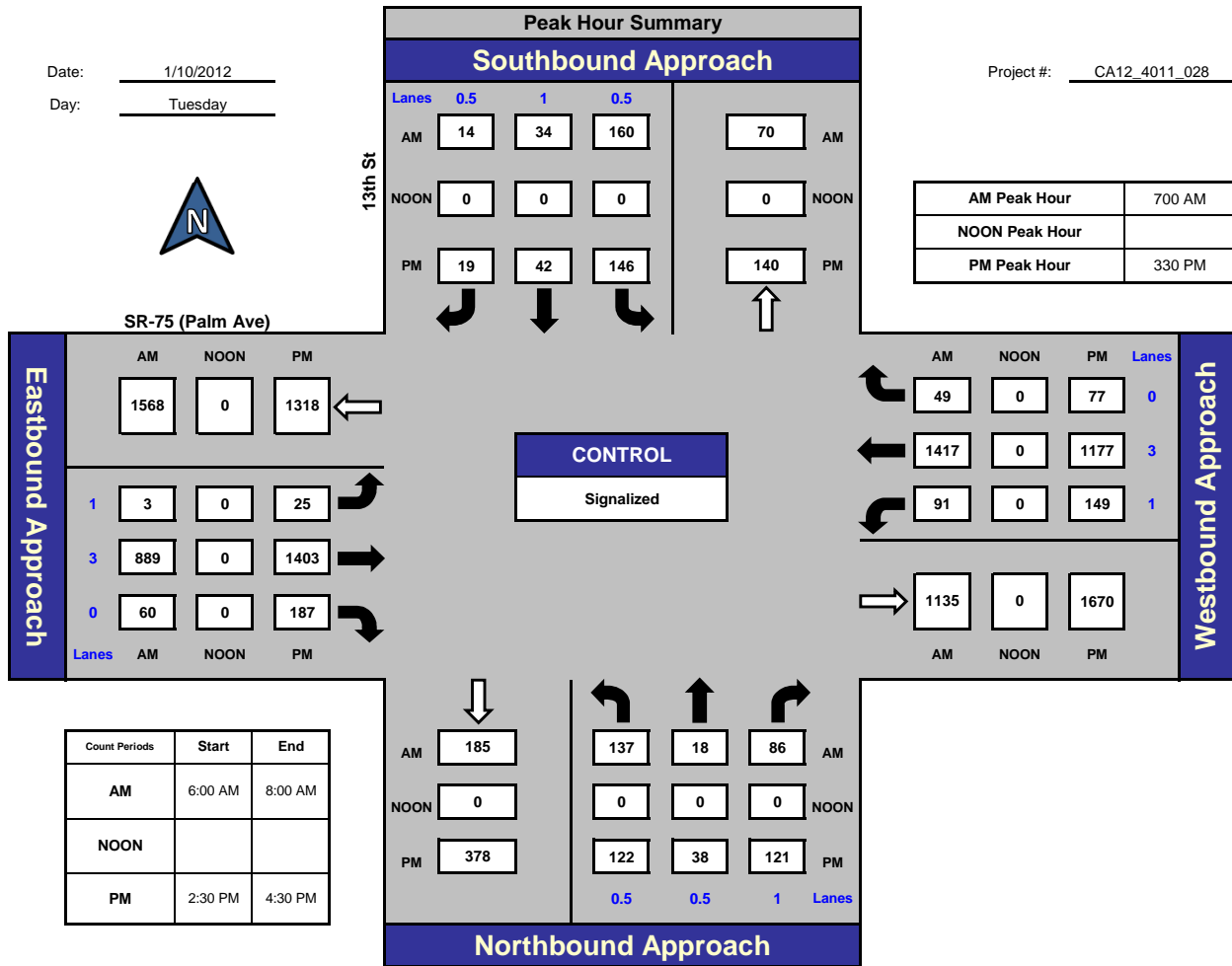
National Data & Surveying Services

13th St and SR-75 (Palm Ave), City of Coronado

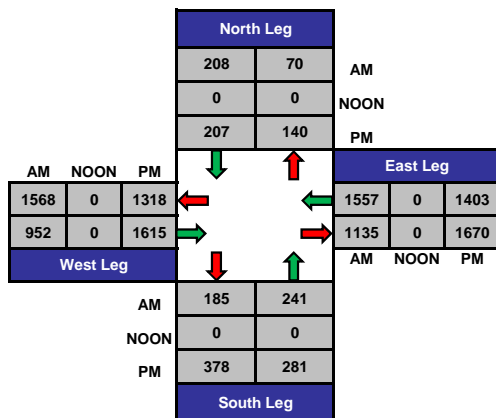
Date: 1/10/2012

Day: Tuesday

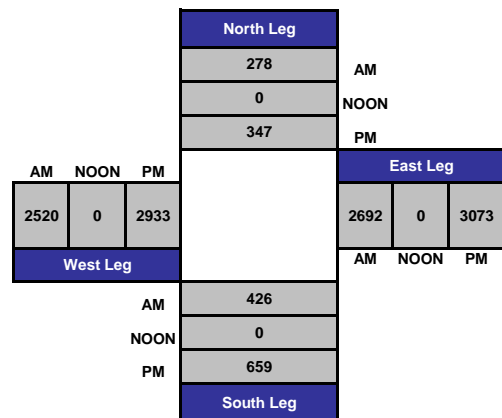
Project #: CA12_4011_028



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

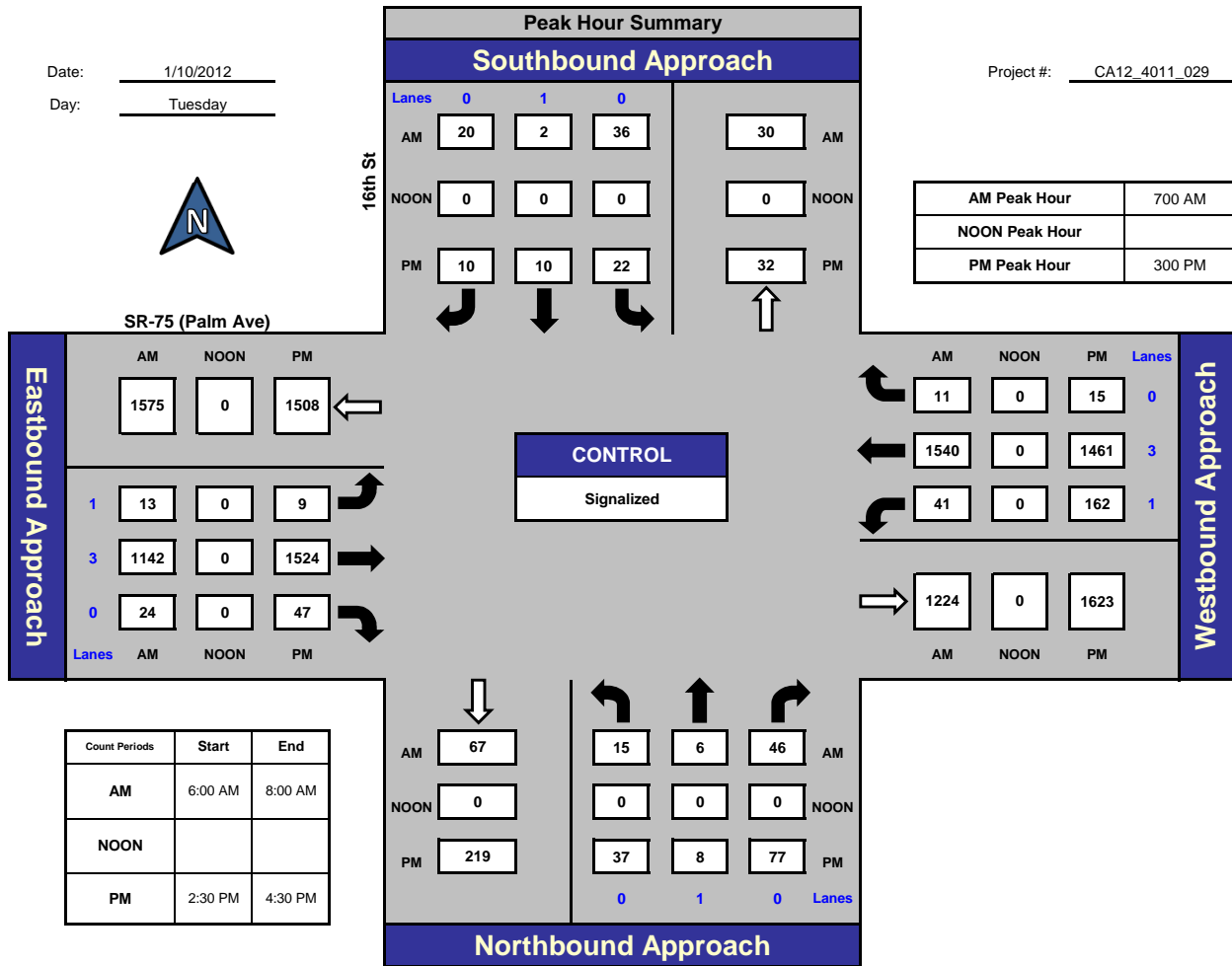


National Data & Surveying Services

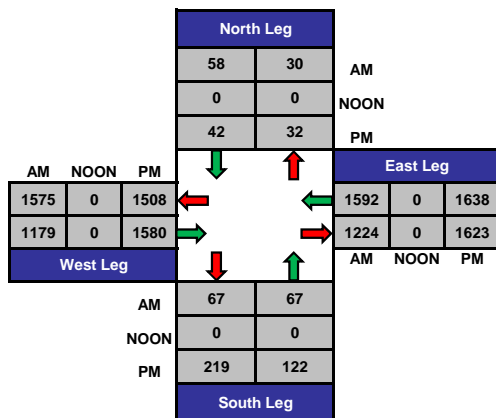
16th St and SR-75 (Palm Ave), City of Coronado

Date: 1/10/2012
Day: Tuesday

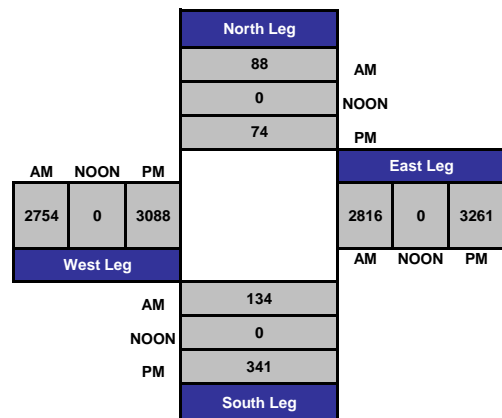
Project #: CA12_4011_029



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

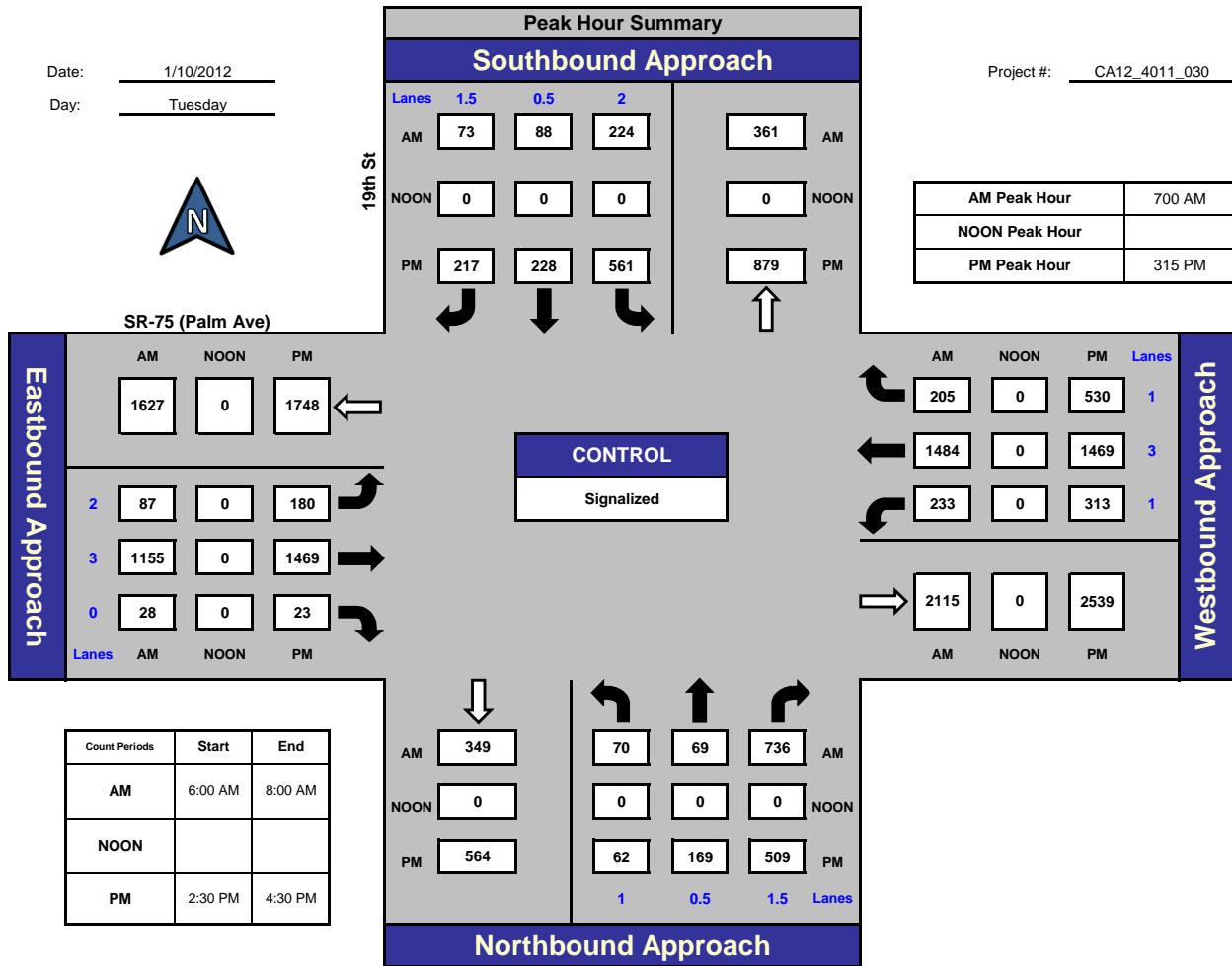


National Data & Surveying Services

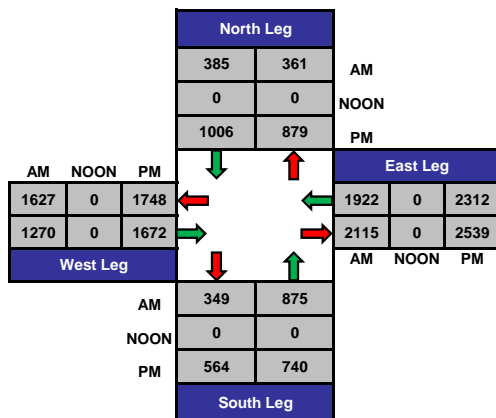
19th St and SR-75 (Palm Ave), City of Coronado

Date: 1/10/2012
Day: Tuesday

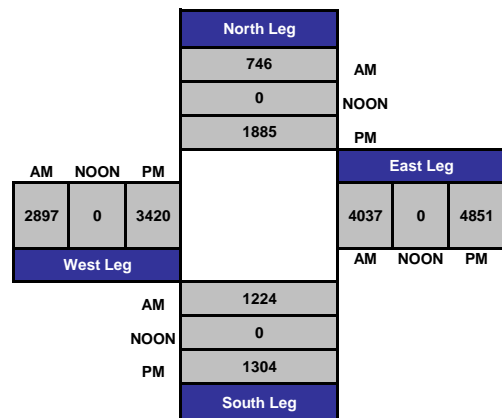
Project #: CA12_4011_030



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



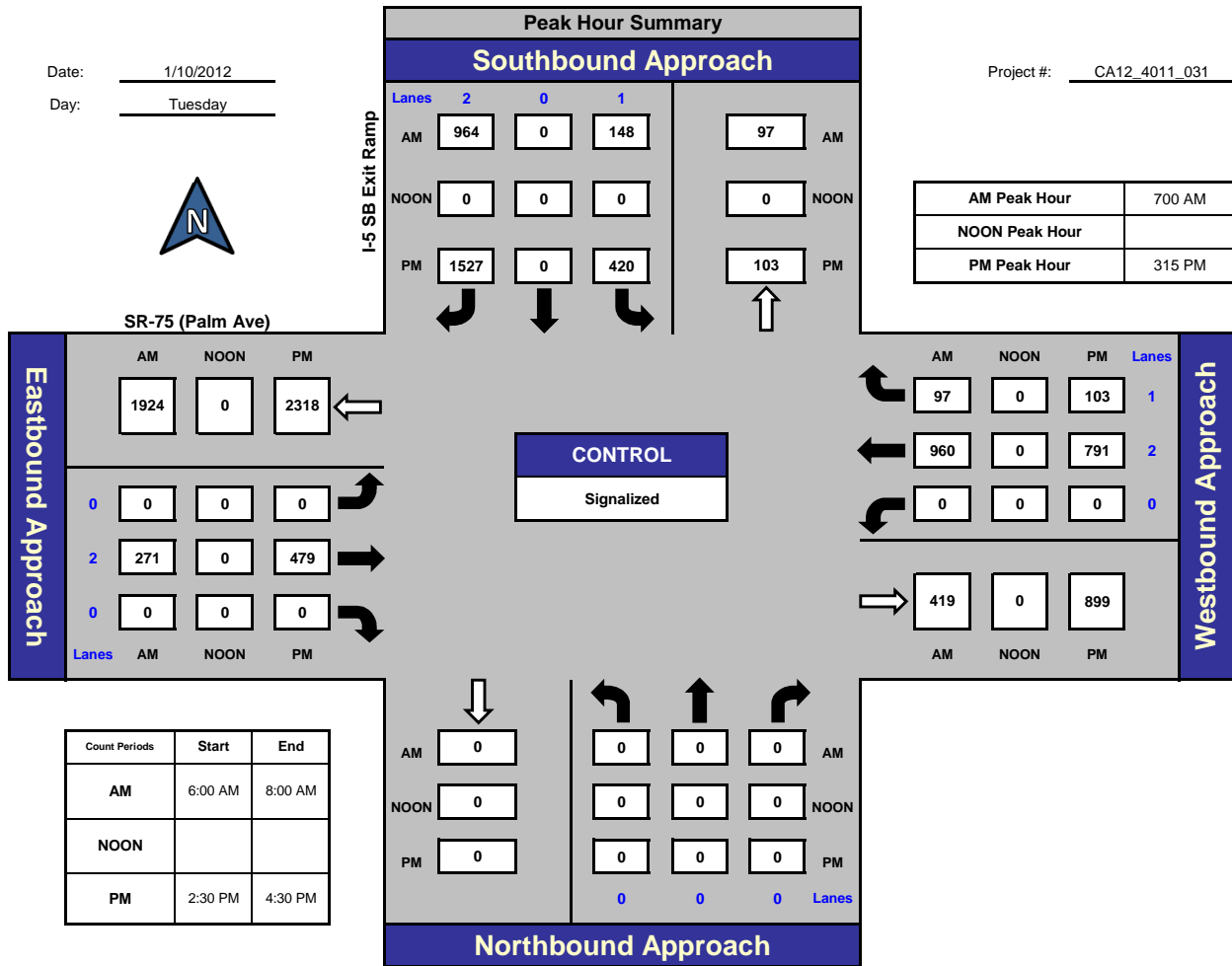
National Data & Surveying Services

I-5 SB Exit Ramp and SR-75 (Palm Ave) , City of Coronado

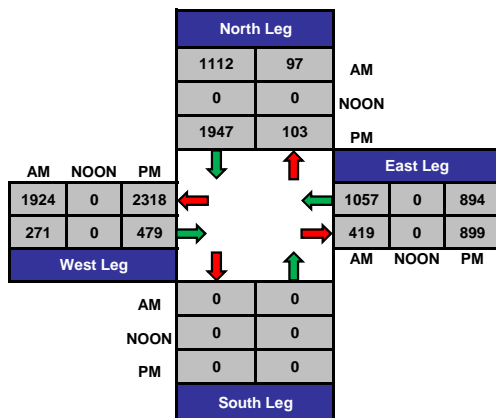
Date: 1/10/2012

Day: Tuesday

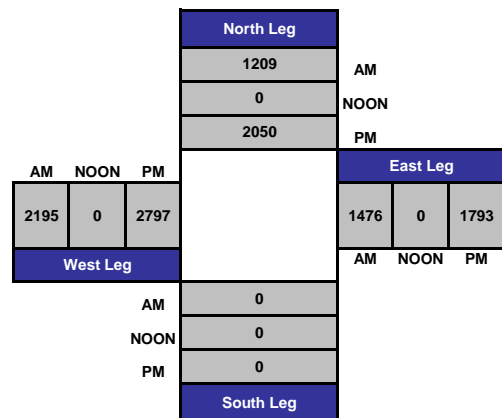
Project #: CA12_4011_031



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

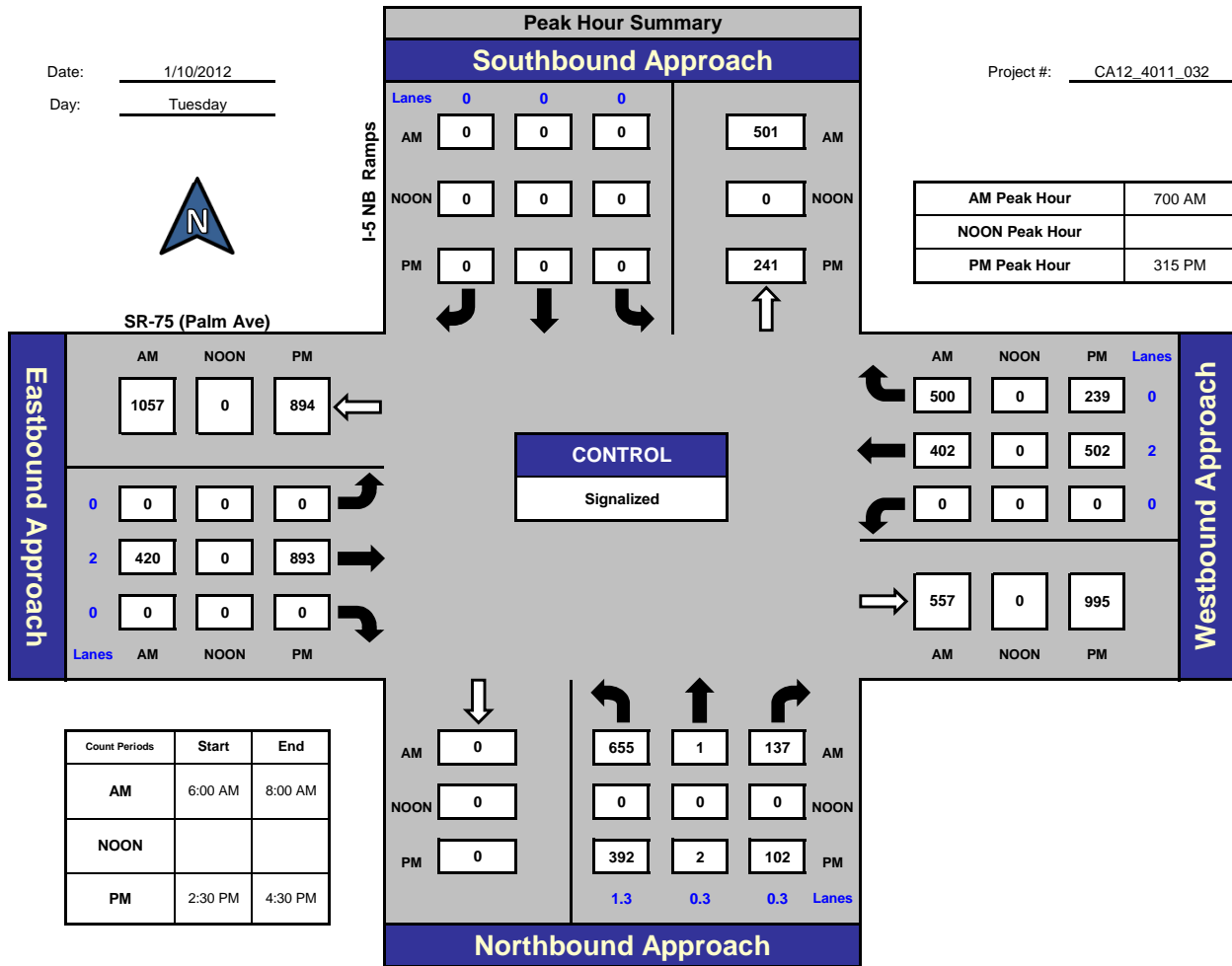


National Data & Surveying Services

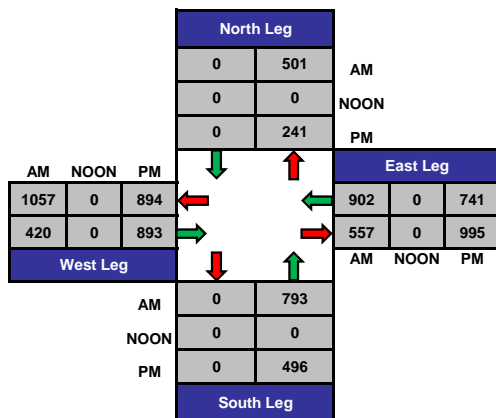
I-5 NB Ramps and SR-75 (Palm Ave), City of Coronado

Date: 1/10/2012
Day: Tuesday

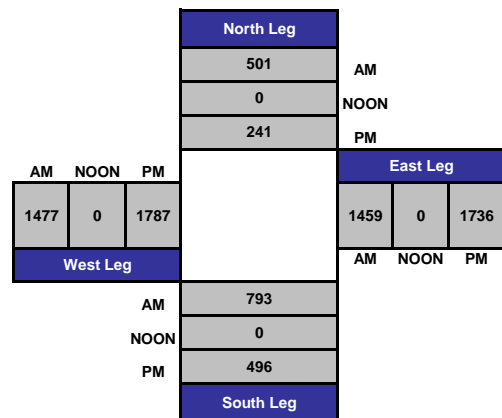
Project #: CA12_4011_032



Total Ins & Outs



Total Volume Per Leg





Kimley-Horn
and Associates, Inc.

Project Name: SSTC
Project Number: 95381020
Date: 8/8/2012

Initials: CHS
Time: 6:00 AM
Weather: Cloudy

Time	East Leg			West Leg			North Leg			South Leg			Observations
	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
6:00 to 6:15			0				2	4			2		
6:15 to 6:30			0				0	3			1		
6:30 to 6:45			0				0	8			8		1 NBR ped (to house)
6:45 to 7:00			0				0	14			1		1 NB U-turn bicyclist
7:00 to 7:15			0				2	21			2		
7:15 to 7:30			3				2	22			2		
7:30 to 7:45			3				4	6			3		3 NBL peds
7:45 to 8:00			2				3	9			1		1 NB U-turn vehicle; 1 NBT bicyclist (not counted in tally); 2 EBR peds



Kimley-Horn
and Associates, Inc.

Project Name: SSTC Initials: CHS
Project Number: 95381020 Time: 2:30 PM
Date: 8/8/2012 Weather: Sunny

Time	East Leg			West Leg			North Leg			South Leg			Observations
	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
14:30 to 14:45			1				6	5			10		1 EBR bicyclist (not counted in tally)
14:45 to 15:00			3				1	2			7		2 NBR bicyclists (not counted in tally)
15:00 to 15:15			3				1	0			4		11 NBL bicyclists (not counted in tally)
15:15 to 15:30			3				2	2			3		
15:30 to 15:45			4				3	0			13		1 NB U-turn vehicle
15:45 to 16:00			1				1	1			7		
16:00 to 16:15			3				2	1			8		1 NB U-turn vehicle
16:15 to 16:30			2				2	1			8		1 EBR bicyclist (not counted in tally)

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Location: Gate @ Strand Way & Guadalcanal Rd

Date: 7/26/2012

Day: Thursday

	Cars (by Occupancy)			Other Vehicles			
TIME	1	2	3+	Motorcycle	Van (3+)	Hvy Truck (3+)	Bus (3+)
6:00 AM	69	0	1	0	0	0	0
6:15 AM	75	1	2	6	1	0	1
6:30 AM	66	6	0	7	2	0	1
6:45 AM	77	9	2	5	0	0	0
7:00 AM	97	2	1	2	0	0	0
7:15 AM	93	6	0	0	0	0	1
7:30 AM	86	2	0	5	0	1	0
7:45 AM	82	2	2	1	1	0	0
2:30 PM	34	12	2	0	0	0	0
2:45 PM	35	10	0	1	0	0	0
3:00 PM	58	12	2	0	1	0	0
3:15 PM	45	13	3	0	3	2	0
3:30 PM	39	16	1	0	0	0	0
3:45 PM	40	12	0	1	0	0	0
4:00 PM	43	9	1	0	0	0	0
4:15 PM	35	6	0	0	0	0	0

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Location: Gate @ Strand Way & Guadalcanal Rd

Date: 7/26/2012

Day: Thursday

	Cars (by Occupancy)			Other Vehicles			
TIME	1	2	3+	Motorcycle	Van (3+)	Hvy Truck (3+)	Bus (3+)
6:00 AM	23	0	0	0	0	0	0
6:15 AM	34	3	1	0	0	0	0
6:30 AM	31	7	2	1	0	0	1
6:45 AM	42	4	1	1	0	0	2
7:00 AM	38	5	0	2	2	2	0
7:15 AM	53	5	2	0	0	1	0
7:30 AM	41	4	1	1	0	1	0
7:45 AM	36	7	0	0	1	2	0
2:30 PM	124	10	1	2	4	0	0
2:45 PM	135	12	3	3	1	1	0
3:00 PM	145	13	4	6	0	4	0
3:15 PM	111	7	2	6	4	0	0
3:30 PM	151	16	3	7	1	0	0
3:45 PM	148	11	1	1	2	0	0
4:00 PM	191	13	0	4	1	0	0
4:15 PM	189	13	0	10	0	0	0

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Location: Gate @ Strand Way & Guadalcanal Rd

Date: 1/11/2012

Day: Wednesday

	Cars (by Occupancy)			Other Vehicles			
TIME	1	2	3+	Motorcycle	Van (3+)	Hvy Truck (3+)	Bus (3+)
6:00 AM	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0
2:30 PM	53	21	1	1	4	2	0
2:45 PM	32	23	3	0	5	3	0
3:00 PM	39	11	1	1	0	2	0
3:15 PM	47	13	1	0	1	0	0
3:30 PM	38	9	2	2	3	0	0
3:45 PM	44	4	0	0	1	0	0
4:00 PM	29	6	2	1	2	1	0
4:15 PM	44	8	0	0	0	0	0

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Location: Gate @ Strand Way & Guadalcanal Rd

Date: 1/11/2012

Day: Wednesday

	Cars (by Occupancy)			Other Vehicles			
TIME	1	2	3+	Motorcycle	Van (3+)	Hvy Truck (3+)	Bus (3+)
6:00 AM	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0
2:30 PM	102	16	2	2	4	2	0
2:45 PM	97	14	3	3	8	0	0
3:00 PM	141	15	1	3	1	2	0
3:15 PM	154	24	2	3	5	0	0
3:30 PM	148	11	2	8	7	0	0
3:45 PM	224	15	0	4	1	0	0
4:00 PM	196	11	1	8	1	0	0
4:15 PM	133	7	1	2	1	0	0

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Location: West Gate @ SR-75 (Silver Strand Blvd) & Rendova Rd

Date: 7/26/2012

Day: Thursday

	Cars (by Occupancy)			Other Vehicles			
TIME	1	2	3+	Motorcycle	Van (3+)	Hvy Truck (3+)	Bus (3+)
6:00 AM	72	8	0	1	1	0	0
6:15 AM	79	4	0	5	2	0	0
6:30 AM	70	6	0	2	0	0	0
6:45 AM	101	6	0	4	0	0	0
7:00 AM	103	6	0	4	0	0	0
7:15 AM	101	5	0	4	0	0	0
7:30 AM	72	3	0	0	0	0	0
7:45 AM	61	2	0	3	0	0	0
2:30 PM	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Location: West Gate @ SR-75 (Silver Strand Blvd) & Rendova Rd

Date: 7/26/2012

Day: Thursday

	Cars (by Occupancy)			Other Vehicles			
TIME	1	2	3+	Motorcycle	Van (3+)	Hvy Truck (3+)	Bus (3+)
6:00 AM	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0
2:30 PM	6	2	0	0	0	0	0
2:45 PM	11	0	0	0	0	0	0
3:00 PM	23	1	0	0	0	0	0
3:15 PM	15	1	0	1	0	0	0
3:30 PM	27	0	1	1	0	0	0
3:45 PM	25	2	0	1	1	0	0
4:00 PM	47	2	0	3	0	0	0
4:15 PM	29	1	1	2	0	0	0

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Location: West Gate @ SR-75 (Silver Strand Blvd) & Rendova Rd

Date: 1/11/2012

Day: Wednesday

	Cars (by Occupancy)			Other Vehicles			
TIME	1	2	3+	Motorcycle	Van (3+)	Hvy Truck (3+)	Bus (3+)
6:00 AM	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Location: West Gate @ SR-75 (Silver Strand Blvd) & Rendova Rd

Date: 1/11/2012

Day: Wednesday

	Cars (by Occupancy)			Other Vehicles			
TIME	1	2	3+	Motorcycle	Van (3+)	Hvy Truck (3+)	Bus (3+)
6:00 AM	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Location: East Gate @ SR-75 (Silver Strand Blvd) & Rendova Rd

Date: 1/11/2012

Day: Wednesday

	Cars (by Occupancy)			Other Vehicles			
TIME	1	2	3+	Motorcycle	Van (3+)	Hvy Truck (3+)	Bus (3+)
6:00 AM	75	1	0	3	3	1	0
6:15 AM	105	0	1	2	2	0	0
6:30 AM	77	0	0	0	1	0	0
6:45 AM	117	0	0	4	2	0	0
7:00 AM	119	4	0	3	1	0	0
7:15 AM	65	3	0	2	0	0	0
7:30 AM	71	3	0	1	0	0	0
7:45 AM	63	1	0	4	0	0	0
2:30 PM	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Location: East Gate @ SR-75 (Silver Strand Blvd) & Rendova Rd

Date: 1/11/2012

Day: Wednesday

	Cars (by Occupancy)			Other Vehicles			
TIME	1	2	3+	Motorcycle	Van (3+)	Hvy Truck (3+)	Bus (3+)
6:00 AM	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0
2:30 PM	5	0	0	1	0	0	0
2:45 PM	7	1	0	0	0	0	0
3:00 PM	13	0	0	0	0	0	0
3:15 PM	17	3	0	2	0	0	0
3:30 PM	21	36	0	3	2	0	0
3:45 PM	39	0	0	2	1	0	0
4:00 PM	75	1	0	1	1	0	0
4:15 PM	28	0	0	1	1	0	0

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Location: East Gate @ SR-75 (Silver Strand Blvd) & Tarawa Rd

Date: 7/26/2012

Day: Thursday

	Cars (by Occupancy)			Other Vehicles			
TIME	1	2	3+	Motorcycle	Van (3+)	Hvy Truck (3+)	Bus (3+)
6:00 AM	62	2	0	1	1	1	0
6:15 AM	77	4	1	1	0	0	0
6:30 AM	86	6	1	3	0	0	0
6:45 AM	110	3	0	4	0	0	0
7:00 AM	111	0	1	4	0	0	0
7:15 AM	122	5	1	5	0	1	0
7:30 AM	131	2	0	4	0	1	0
7:45 AM	88	5	0	0	1	1	0
2:30 PM	38	6	0	1	0	0	0
2:45 PM	31	4	0	1	1	0	0
3:00 PM	29	3	0	1	0	2	1
3:15 PM	26	3	1	1	0	0	0
3:30 PM	31	7	3	0	0	1	0
3:45 PM	31	10	1	1	0	0	0
4:00 PM	28	3	1	0	0	0	0
4:15 PM	25	7	3	1	0	0	0

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Location: East Gate @ SR-75 (Silver Strand Blvd) & Tarawa Rd

Date: 7/26/2012

Day: Thursday

	Cars (by Occupancy)			Other Vehicles			
TIME	1	2	3+	Motorcycle	Van (3+)	Hvy Truck (3+)	Bus (3+)
6:00 AM	11	1	0	0	0	0	0
6:15 AM	12	1	2	0	0	1	0
6:30 AM	10	0	0	1	0	0	0
6:45 AM	19	1	0	2	0	0	1
7:00 AM	9	0	0	0	0	0	0
7:15 AM	17	1	0	0	0	0	1
7:30 AM	31	1	0	1	0	1	0
7:45 AM	21	3	1	0	0	2	0
2:30 PM	65	7	0	2	0	0	0
2:45 PM	68	4	0	4	0	0	0
3:00 PM	73	3	0	2	0	1	0
3:15 PM	74	4	0	1	1	1	0
3:30 PM	96	11	0	3	0	0	0
3:45 PM	76	4	0	3	0	1	0
4:00 PM	129	8	0	5	0	0	0
4:15 PM	90	3	0	5	0	0	0

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Location: West Gate @ SR-75 (Silver Strand Blvd) & Tarawa Rd

Date: 1/11/2012

Day: Wednesday

	Cars (by Occupancy)			Other Vehicles			
TIME	1	2	3+	Motorcycle	Van (3+)	Hvy Truck (3+)	Bus (3+)
6:00 AM	39	4	2	0	1	1	0
6:15 AM	61	1	0	1	0	2	0
6:30 AM	100	3	0	1	2	0	0
6:45 AM	112	1	0	3	0	0	0
7:00 AM	132	5	0	5	0	0	0
7:15 AM	177	0	1	3	0	1	0
7:30 AM	135	7	2	5	0	0	0
7:45 AM	97	8	4	4	0	2	0
2:30 PM	28	9	0	1	0	0	0
2:45 PM	33	9	0	0	0	0	0
3:00 PM	29	7	0	0	0	0	0
3:15 PM	24	12	0	1	0	0	0
3:30 PM	29	3	1	2	0	0	0
3:45 PM	37	6	0	1	1	0	0
4:00 PM	25	1	2	0	0	1	0
4:15 PM	23	1	2	2	0	0	0

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Location: West Gate @ SR-75 (Silver Strand Blvd) & Tarawa Rd

Date: 1/11/2012

Day: Wednesday

	Cars (by Occupancy)			Other Vehicles			
TIME	1	2	3+	Motorcycle	Van (3+)	Hvy Truck (3+)	Bus (3+)
6:00 AM	9	0	0	0	0	1	0
6:15 AM	9	0	0	0	0	1	0
6:30 AM	17	0	0	1	0	0	0
6:45 AM	17	0	0	0	0	0	0
7:00 AM	15	0	0	0	0	1	0
7:15 AM	24	0	0	0	0	0	0
7:30 AM	21	0	0	0	0	0	0
7:45 AM	28	0	0	0	0	0	0
2:30 PM	60	3	0	3	0	1	0
2:45 PM	74	3	1	3	0	0	0
3:00 PM	92	0	2	2	0	0	0
3:15 PM	88	12	0	4	0	0	0
3:30 PM	103	2	0	5	0	0	0
3:45 PM	106	2	0	3	0	0	0
4:00 PM	95	2	0	3	0	0	0
4:15 PM	127	2	0	5	0	0	0

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Location: East Gate @ SR-75 (Silver Strand Blvd) & Tarawa Rd

Date: 1/11/2012

Day: Wednesday

	Cars (by Occupancy)			Other Vehicles			
TIME	1	2	3+	Motorcycle	Van (3+)	Hvy Truck (3+)	Bus (3+)
6:00 AM	26	3	3	0	1	0	0
6:15 AM	42	2	0	1	1	1	0
6:30 AM	36	2	0	1	0	0	0
6:45 AM	47	4	1	0	1	0	0
7:00 AM	43	10	2	1	0	0	0
7:15 AM	69	5	0	1	0	0	1
7:30 AM	54	20	7	2	0	1	0
7:45 AM	58	16	2	0	0	1	0
2:30 PM	84	18	2	2	0	1	0
2:45 PM	89	14	0	2	0	0	0
3:00 PM	106	7	5	2	0	1	0
3:15 PM	108	21	2	2	0	0	0
3:30 PM	98	4	1	5	0	0	0
3:45 PM	120	11	2	2	0	0	0
4:00 PM	126	10	1	8	0	0	0
4:15 PM	112	6	2	1	0	0	0

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Location: East Gate @ SR-75 (Silver Strand Blvd) & Tarawa Rd

Date: 1/11/2012

Day: Wednesday

	Cars (by Occupancy)			Other Vehicles			
TIME	1	2	3+	Motorcycle	Van (3+)	Hvy Truck (3+)	Bus (3+)
6:00 AM	64	2	0	0	0	0	0
6:15 AM	81	3	0	3	0	2	0
6:30 AM	74	4	0	4	0	0	0
6:45 AM	74	6	0	2	0	0	0
7:00 AM	57	8	2	3	0	1	0
7:15 AM	57	6	0	2	0	1	0
7:30 AM	54	1	0	3	0	0	0
7:45 AM	58	6	2	0	0	1	0
2:30 PM	43	11	0	0	0	0	0
2:45 PM	33	21	2	0	0	0	0
3:00 PM	31	8	2	1	0	0	0
3:15 PM	40	10	0	0	0	0	0
3:30 PM	37	6	4	2	0	0	0
3:45 PM	40	4	0	0	0	0	0
4:00 PM	29	5	0	0	2	0	0
4:15 PM	40	4	1	0	0	0	0

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Location: Gate @ SR-75 (Silver Strand Blvd) & Tulagi Rd

Date: 7/26/2012

Day: Thursday

	Cars (by Occupancy)			Other Vehicles			
TIME	1	2	3+	Motorcycle	Van (3+)	Hvy Truck (3+)	Bus (3+)
6:00 AM	46	1	0	2	0	1	0
6:15 AM	95	0	0	1	0	1	0
6:30 AM	93	1	0	2	0	0	0
6:45 AM	98	1	0	1	0	2	0
7:00 AM	72	0	0	3	0	3	0
7:15 AM	15	0	0	1	0	0	0
7:30 AM	8	0	0	0	0	0	0
7:45 AM	17	0	0	0	0	2	0
2:30 PM							
2:45 PM							
3:00 PM							
3:15 PM							
3:30 PM							
3:45 PM							
4:00 PM							
4:15 PM							

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Location: Gate @ SR-75 (Silver Strand Blvd) & Tulagi Rd

Date: 1/11/2012

Day: Wednesday

	Cars (by Occupancy)			Other Vehicles			
TIME	1	2	3+	Motorcycle	Van (3+)	Hvy Truck (3+)	Bus (3+)
6:00 AM	66	1	0	1	0	0	0
6:15 AM	107	2	0	1	0	1	0
6:30 AM	94	5	0	3	0	1	0
6:45 AM	79	7	0	2	0	1	0
7:00 AM	62	6	1	3	0	3	0
7:15 AM	86	2	0	1	0	2	1
7:30 AM	43	0	0	0	0	0	0
7:45 AM	26	1	0	0	0	3	0
2:30 PM	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Location: Gate @ SR-75 (Silver Strand Blvd) & Tulagi Rd

Date: 1/11/2012

Day: Wednesday












	Cars (by Occupancy)			Other Vehicles			
TIME	1	2	3+	Motorcycle	Van (3+)	Hvy Truck (3+)	Bus (3+)
6:00 AM	1	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0
6:45 AM	1	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0

APPENDIX G

- Synchro Analysis Worksheets

NBC Coastal Campus
1: Glorietta Blvd & Fourth St







Existing (1 CVN)
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1290	34	0	3254	529	0	0	474	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1554	41	0	3537	575	0	0	592	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4132			1615			2806	5727	579	4383	5460	1506
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4132			1615			2806	5727	579	4383	5460	1506
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	55	100	100	89
cM capacity (veh/h)	38			393			7	0	1331	0	0	106
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	622	622	352	1415	1415	1282	592	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	575	592	12				
cSH	1700	1700	1700	1700	1700	1700	1331	106				
Volume to Capacity	0.37	0.37	0.21	0.83	0.83	0.75	0.45	0.11				
Queue Length 95th (ft)	0	0	0	0	0	0	59	9				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.9	43.1				
Lane LOS							A	E				
Approach Delay (s)	0.0			0.0			9.9	43.1				
Approach LOS							A	E				
Intersection Summary												
Average Delay				1.0								
Intersection Capacity Utilization				89.8%	ICU Level of Service			E				
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Existing (1 CVN)
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑↑			↑↑↑↑		↑	
Volume (veh/h)	1151	201	0	3154	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1308	228	0	3504	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1556	2630		590	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1556	2630		590	
tC, single (s)			4.1	6.8		6.9	
tC, 2 stage (s)							
tF (s)			2.2	3.5		3.3	
p0 queue free %			100	100		42	
cM capacity (veh/h)			414	19		436	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	523	523	490	1168	1168	1168	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	228	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	436
Volume to Capacity	0.31	0.31	0.29	0.69	0.69	0.69	0.58
Queue Length 95th (ft)	0	0	0	0	0	0	88
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	23.9
Lane LOS							C
Approach Delay (s)	0.0				0.0	23.9	
Approach LOS							C
Intersection Summary							
Average Delay				1.1			
Intersection Capacity Utilization				75.8%	ICU Level of Service		D
Analysis Period (min)				15			

NBC Coastal Campus
3: Orange Ave & Third St

Existing (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↔↔↔	↔↔↔		↔	↔↔			↔↔	
Volume (vph)	0	0	0	1527	1529	248	40	93	0	0	257	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4641		1770	3539			3524	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4641		1770	3539			3524	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1642	1644	267	54	126	0	0	295	6
RTOR Reduction (vph)	0	0	0	0	6	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	870	2677	0	54	126	0	0	300	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.5	131.5		15.5	41.8			21.1	
Effective Green, g (s)				131.5	131.5		15.5	41.8			21.1	
Actuated g/C Ratio				0.71	0.71		0.08	0.23			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1082	3300		148	800			402	
v/s Ratio Prot				0.57	c0.58		c0.03	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.80	0.81		0.36	0.16			0.75	
Uniform Delay, d1				18.0	18.2		80.0	57.4			79.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				4.4	1.6		1.5	0.1			7.4	
Delay (s)				22.4	19.8		81.6	57.5			86.7	
Level of Service				C	B		F	E			F	
Approach Delay (s)		0.0			20.5			64.7			86.7	
Approach LOS		A			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		27.4		HCM 2000 Level of Service					C			
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		184.9		Sum of lost time (s)					16.8			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Existing (1 CVN)
Timing Plan: AM PEAK







Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔↔	↔					↔↔	↔	↔↔	↔↔	
Volume (vph)	0	498	51	0	0	0	0	125	194	432	1409	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3184	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3184	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	0	541	55	0	0	0	0	145	211	470	1468	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	59	67	0	0	0
Lane Group Flow (vph)	0	541	26	0	0	0	0	185	45	470	1468	0
Turn Type		NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		60.0	60.0					62.2	62.2	35.0	100.0	
Effective Green, g (s)		60.0	60.0					62.2	62.2	35.0	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.20	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1154	522	700	2062	
v/s Ratio Prot		c0.11						0.06		0.14	c0.41	
v/s Ratio Perm			0.02						0.03			
v/c Ratio		0.30	0.05					0.16	0.09	0.67	0.71	
Uniform Delay, d1		40.6	36.9					37.0	36.0	63.0	25.5	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.0					0.1	0.1	2.5	1.2	
Delay (s)		40.7	36.9					37.1	36.1	65.5	26.7	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		40.4			0.0			36.8			36.1	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		37.1		HCM 2000 Level of Service					D			
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)					14.4			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Existing (1 CVN)

Timing Plan: AM PEAK













Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	204	6	1043	567	0	1037
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3310			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3310			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	237	7	1122	610	0	1092
RTOR Reduction (vph)	2	0	57	0	0	0
Lane Group Flow (vph)	242	0	1675	0	0	1092
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	16.4		42.3			42.3
Effective Green, g (s)	16.4		42.3			42.3
Actuated g/C Ratio	0.24		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	384		2065			2097
v/s Ratio Prot	c0.15		c0.51			0.32
v/s Ratio Perm						
v/c Ratio	0.63		0.81			0.52
Uniform Delay, d1	23.0		9.7			7.1
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	3.4		2.5			0.2
Delay (s)	26.4		12.2			7.3
Level of Service	C		B			A
Approach Delay (s)	26.4		12.2			7.3
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			11.6		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.80			
Actuated Cycle Length (s)			67.8		Sum of lost time (s)	12.1
Intersection Capacity Utilization			73.0%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Existing (1 CVN)

Timing Plan: AM PEAK



















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	2	9	7	0	5	18	1245		24	37	1170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1692	1583		1708		1770	3529		1770	3524	
Frt Permitted	0.74	0.79	1.00		0.87		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1312	1390	1583		1526		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	51	2	10	14	0	10	21	1482	29	40	1272	37
RTOR Reduction (vph)	0	0	8	0	20	0	0	1	0	0	1	0
Lane Group Flow (vph)	27	26	2	0	4	0	21	1510	0	40	1308	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	14.2	14.2	14.2		14.2		2.3	55.8		2.7	56.2	
Effective Green, g (s)	14.2	14.2	14.2		14.2		2.3	55.8		2.7	56.2	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.64		0.03	0.65	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	214	227	258		249		46	2268		55	2281	
v/s Ratio Prot							0.01	c0.43		c0.02	0.37	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.13	0.11	0.01		0.02		0.46	0.67		0.73	0.57	
Uniform Delay, d1	31.0	30.9	30.4		30.4		41.6	9.7		41.7	8.6	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.2	0.0		0.0		7.0	0.7		37.9	0.4	
Delay (s)	31.3	31.2	30.4		30.5		48.7	10.4		79.6	8.9	
Level of Service	C	C	C		C		D	B		E	A	
Approach Delay (s)		31.1			30.5			11.0			11.0	
Approach LOS		C			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			11.6		HCM 2000 Level of Service					B		
HCM 2000 Volume to Capacity ratio			0.56									
Actuated Cycle Length (s)			86.8		Sum of lost time (s)					14.1		
Intersection Capacity Utilization			53.8%		ICU Level of Service					A		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Existing (1 CVN)

Timing Plan: AM PEAK
























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	21	0	1193	7	402	760	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Frt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.66	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	32	0	1311	8	410	776	0
RTOR Reduction (vph)	0	0	0	0	29	0	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1311	4	410	776	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.37		c0.23	0.22	
v/s Ratio Perm									0.00			
v/c Ratio					0.02			0.79	0.01	0.67	0.26	
Uniform Delay, d1					60.6			32.4	20.4	40.5	2.3	
Progression Factor					1.00			0.38	1.00	1.00	1.00	
Incremental Delay, d2					0.1			2.8	0.0	2.9	0.2	
Delay (s)					60.6			15.2	20.4	43.4	2.5	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			15.2			16.6	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay			16.5		HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio			0.69									
Actuated Cycle Length (s)			145.0		Sum of lost time (s)				18.9			
Intersection Capacity Utilization			74.1%		ICU Level of Service				D			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Existing (1 CVN)

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	47	13	1	61	121	129	1040	5	274	230	293
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.98	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3187	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3187	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	45	72	20	1	69	138	143	1156	6	315	264	337
RTOR Reduction (vph)	0	0	19	0	0	116	0	0	3	0	161	0
Lane Group Flow (vph)	45	72	1	0	70	22	143	1156	3	315	440	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1046	
v/s Ratio Prot	0.03	c0.04			c0.04		0.08	c0.33		c0.18	0.14	
v/s Ratio Perm			0.00			0.01			0.00			
v/c Ratio	0.37	0.56	0.01		0.24	0.09	0.26	0.73	0.00	0.92	0.42	
Uniform Delay, d1	64.5	65.4	62.9		53.3	52.1	37.5	33.1	22.3	57.5	38.0	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.93	
Incremental Delay, d2	1.9	5.6	0.1		0.4	0.2	0.3	3.1	0.0	29.6	1.2	
Delay (s)	66.4	70.9	63.0		53.7	52.2	37.8	36.2	22.3	84.8	36.5	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		68.3			52.8			36.3			53.1	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay		45.3			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		79.4%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Existing (1 CVN)
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖		↖	↗
Volume (veh/h)	21	187	4	82	307	8
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	25	220	5	102	334	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	732	56			108	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	732	56			108	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	78			78	
cM capacity (veh/h)	301	1010			1483	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	245	108	342			
Volume Left	25	0	334			
Volume Right	220	102	0			
cSH	1124	1700	1483			
Volume to Capacity	0.22	0.06	0.22			
Queue Length 95th (ft)	21	0	22			
Control Delay (s)	10.4	0.0	8.0			
Lane LOS	B		A			
Approach Delay (s)	10.4	0.0	8.0			
Approach LOS	B					
Intersection Summary						
Average Delay		7.6				
Intersection Capacity Utilization		34.1%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Existing (1 CVN)
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖	↖		↖
Volume (vph)	24	3	1185	385	0	207
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.98		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.98		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1729		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1729		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	32	4	1247	405	0	323
RTOR Reduction (vph)	4	0	0	112	0	0
Lane Group Flow (vph)	32	0	1247	293	0	323
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	1.9		31.0	31.0		31.0
Effective Green, g (s)	1.9		31.0	31.0		31.0
Actuated g/C Ratio	0.04		0.72	0.72		0.72
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	76		2563	1100		2563
v/s Ratio Prot	c0.02		c0.35			0.09
v/s Ratio Perm				0.19		
v/c Ratio	0.42		0.49	0.27		0.13
Uniform Delay, d1	19.9		2.5	2.0		1.8
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	3.8		0.1	0.1		0.0
Delay (s)	23.7		2.7	2.1		1.8
Level of Service	C		A	A		A
Approach Delay (s)	23.7		2.5			1.8
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		2.8		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.48				
Actuated Cycle Length (s)		42.8		Sum of lost time (s)		9.9
Intersection Capacity Utilization		45.2%		ICU Level of Service		A
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Existing (1 CVN)

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖↗		↖	↖↗
Volume (veh/h)	0	14	1959	5	5	233
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	24	2106	5	7	343
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2295	1056			2112	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2295	1056			2112	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	89			97	
cM capacity (veh/h)	32	222			256	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	24	1404	708	7	171	171
Volume Left	0	0	0	7	0	0
Volume Right	24	0	5	0	0	0
cSH	222	1700	1700	256	1700	1700
Volume to Capacity	0.11	0.83	0.42	0.03	0.10	0.10
Queue Length 95th (ft)	9	0	0	2	0	0
Control Delay (s)	23.2	0.0	0.0	19.5	0.0	0.0
Lane LOS	C			C		
Approach Delay (s)	23.2	0.0		0.4		
Approach LOS	C					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			64.3%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

Existing (1 CVN)

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖↗	↖	↖	↖↗
Volume (vph)	16	81	1878	11	35	197
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	20	100	2019	12	51	286
RTOR Reduction (vph)	0	6	0	1	0	0
Lane Group Flow (vph)	20	94	2019	11	51	286
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases				2		
Actuated Green, G (s)	15.4	25.5	67.3	67.3	5.0	81.1
Effective Green, g (s)	15.4	20.4	67.3	67.3	5.0	81.1
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	257	305	2251	1006	83	2712
v/s Ratio Prot	0.01	c0.06	c0.57		c0.03	0.08
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.31	0.90	0.01	0.61	0.11
Uniform Delay, d1	39.1	36.6	16.3	7.1	49.5	3.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	5.2	0.0	12.8	0.0
Delay (s)	39.2	37.2	21.5	7.1	62.2	3.2
Level of Service	D	D	C	A	E	A
Approach Delay (s)	37.5		21.4			12.1
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay			20.9		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.78			
Actuated Cycle Length (s)			105.8		Sum of lost time (s)	18.1
Intersection Capacity Utilization			67.8%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Existing (1 CVN)
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↖↗			↖↗
Volume (veh/h)	0	30	1857	24	0	212
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	48	1955	25	0	286
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2111	990			1980	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2111	990			1980	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	80			100	
cM capacity (veh/h)	44	245			288	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	48	1303	677	143	143	
Volume Left	0	0	0	0	0	
Volume Right	48	0	25	0	0	
cSH	245	1700	1700	1700	1700	
Volume to Capacity	0.20	0.77	0.40	0.08	0.08	
Queue Length 95th (ft)	18	0	0	0	0	
Control Delay (s)	23.3	0.0	0.0	0.0	0.0	
Lane LOS	C					
Approach Delay (s)	23.3	0.0		0.0		
Approach LOS	C					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		62.1%		ICU Level of Service	B	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Existing (1 CVN)
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖↗	↖	↖	↖↗
Volume (vph)	9	6	1881	30	14	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	15	10	1959	31	17	235
RTOR Reduction (vph)	0	7	0	7	0	0
Lane Group Flow (vph)	15	3	1959	24	17	235
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	58.6	58.6	2.0	68.1
Effective Green, g (s)	1.4	3.4	58.6	58.6	2.0	68.1
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.89
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	70	2725	1218	46	3166
v/s Ratio Prot	c0.01	0.00	c0.55		c0.01	0.07
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.47	0.05	0.72	0.02	0.37	0.07
Uniform Delay, d1	37.0	34.8	4.5	2.0	36.4	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.5	0.3	0.9	0.0	5.0	0.0
Delay (s)	47.4	35.1	5.4	2.0	41.4	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	42.5		5.4			3.2
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		5.6		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.70				
Actuated Cycle Length (s)		76.1		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		64.8%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Existing (1 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL2	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑			↑	↑		
Sign Control		Stop			Yield			Stop		Stop	
Volume (vph)	0	2	0	42	1	0	41	5	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	78	2	0	65	8	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2						
Volume Total (vph)	8	0	80	73	3						
Volume Left (vph)	0	0	78	65	0						
Volume Right (vph)	0	0	0	0	3						
Hadj (s)	0.03	0.00	0.23	0.21	-0.57						
Departure Headway (s)	4.2	3.2	4.3	4.3	3.2						
Degree Utilization, x	0.01	0.00	0.10	0.09	0.00						
Capacity (veh/h)	831	1121	812	810	1121						
Control Delay (s)	7.2	6.2	7.8	7.7	6.2						
Approach Delay (s)	7.2		7.8	7.7							
Approach LOS	A		A	A							
Intersection Summary											
Delay			7.7								
Level of Service			A								
Intersection Capacity Utilization			19.0%		ICU Level of Service				A		
Analysis Period (min)			15								

NBC Coastal Campus

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd








Existing (1 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑			↑	↑	↑	↑	↑			
Volume (vph)	2	34	0	0	30	211	3	1698	47	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1359	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	45	0	0	42	293	3	1806	50	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	0	21	0	0	0
Lane Group Flow (vph)	3	45	0	0	42	237	3	1806	29	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	15.4	15.4			15.4	15.4	45.5	41.4	41.4			
Effective Green, g (s)	15.4	15.4			15.4	15.4	45.5	41.4	41.4			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	298	408			408	347	1147	2087	933			
v/s Ratio Prot		0.02			0.02		0.00	c0.51				
v/s Ratio Perm	0.00					c0.15			0.02			
v/c Ratio	0.01	0.11			0.10	0.68	0.00	0.87	0.03			
Uniform Delay, d1	21.4	21.9			21.9	25.2	4.4	12.1	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	5.5	0.0	4.0	0.0			
Delay (s)	21.5	22.0			22.0	30.6	4.4	16.1	6.0			
Level of Service	C	C			C	C	A	B	A			
Approach Delay (s)		22.0				29.5		15.8			0.0	
Approach LOS		C				C		B			A	
Intersection Summary												
HCM 2000 Control Delay		18.0				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		70.2				Sum of lost time (s)		13.4				
Intersection Capacity Utilization		79.6%				ICU Level of Service		D				
Analysis Period (min)		15										
c Critical Lane Group												













NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Existing (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	0	1511	0	161	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	0	1574	0	204	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	991	102	204		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	991	102	204		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	243	933	1365		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	787	787	136	68	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.46	0.46	0.08	0.04	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			45.1%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Existing (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	367	0	36	2	1	2	24	1399	0	0	118	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3403	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3403	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	417	0	41	6	3	6	25	1473	0	0	171	59
RTOR Reduction (vph)	0	29	0	0	6	0	0	0	0	0	29	0
Lane Group Flow (vph)	417	12	0	6	3	0	25	1473	0	0	201	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	24.6	24.6		1.7	1.7		1.9	43.7			37.6	
Effective Green, g (s)	24.6	24.6		1.7	1.7		1.9	43.7			37.6	
Actuated g/C Ratio	0.29	0.29		0.02	0.02		0.02	0.52			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	514	459		35	33		39	1825			1510	
v/s Ratio Prot	c0.24	0.01		c0.00	0.00		0.01	c0.42			0.06	
v/s Ratio Perm												
v/c Ratio	0.81	0.03		0.17	0.09		0.64	0.81			0.13	
Uniform Delay, d1	27.9	21.5		40.8	40.7		41.1	17.0			13.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	9.4	0.0		2.3	1.2		30.7	2.7			0.0	
Delay (s)	37.3	21.5		43.1	42.0		71.8	19.7			14.0	
Level of Service	D	C		D	D		E	B			B	
Approach Delay (s)		35.9			42.4			20.6			14.0	
Approach LOS		D			D			C			B	
Intersection Summary												
HCM 2000 Control Delay			23.2				HCM 2000 Level of Service				C	
HCM 2000 Volume to Capacity ratio			0.84									
Actuated Cycle Length (s)			84.7				Sum of lost time (s)				18.9	
Intersection Capacity Utilization			74.1%				ICU Level of Service				D	
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Existing (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	7	164	13	0	1266	16	35	21	1	18	38	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5028			5076		1770	1852			1732	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.20	
Satd. Flow (perm)	1770	5028			5076		1250	1852			357	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	8	184	15	0	1391	18	42	25	1	23	49	62
RTOR Reduction (vph)	0	5	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	8	194	0	0	1408	0	42	25	0	0	117	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1902			2061		243	360			59	
v/s Ratio Prot	c0.00	0.04			c0.28			0.01				
v/s Ratio Perm							c0.03				c0.33	
v/c Ratio	0.04	0.10			0.68		0.17	0.07			1.97	
Uniform Delay, d1	71.4	36.2			43.9		60.4	59.2			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			1.8		0.3	0.1			493.5	
Delay (s)	71.5	36.3			45.7		60.8	59.3			568.5	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		37.6			45.7			60.2			568.5	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		83.9			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		63.2%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Existing (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	181	0	368	1274	8	0	0	0	0	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	221	0	391	1355	9	0	0	0	0	0	16
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	10
Lane Group Flow (vph)	0	221	0	391	1364	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.04		0.11	c0.39							
v/s Ratio Perm												0.00
v/c Ratio		0.11		0.23	0.42							0.01
Uniform Delay, d1		36.4		25.4	1.2							34.9
Progression Factor		0.44		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.1	0.1							0.0
Delay (s)		16.1		25.5	1.3							34.9
Level of Service		B		C	A							C
Approach Delay (s)		16.1			6.7			0.0				34.9
Approach LOS		B			A			A				C
Intersection Summary												
HCM 2000 Control Delay		8.0			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.44										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		57.1%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

Existing (1 CVN)

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	9	231	0	0	127	103	0	0	0	47	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	11	275	0	0	137	111	0	0	0	52	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	247			275			493	544	275	488	488	192
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	247			275			493	544	275	488	488	192
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1319			1288			481	443	764	487	476	850
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	286	247	0	56								
Volume Left	11	0	0	52								
Volume Right	0	111	0	4								
cSH	1319	1288	1700	504								
Volume to Capacity	0.01	0.00	0.00	0.11								
Queue Length 95th (ft)	1	0	0	9								
Control Delay (s)	0.4	0.0	0.0	13.0								
Lane LOS	A			A	B							
Approach Delay (s)	0.4	0.0	0.0	13.0								
Approach LOS				A	B							
Intersection Summary												
Average Delay				1.4								
Intersection Capacity Utilization				29.4%								
Analysis Period (min)				15								
ICU Level of Service												

NBC Coastal Campus

22: 3rd St & Palm Ave











Existing (1 CVN)

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations	↕	↕		↕	↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	269	4	26	207	24	11	14	125	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	313	5	28	223	26	14	17	154	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	317	28	248	185	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	154	18						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.0	5.5	5.1	5.6						
Degree Utilization, x	0.01	0.48	0.05	0.38	0.26	0.07						
Capacity (veh/h)	579	636	567	632	638	551						
Control Delay (s)	7.9	12.3	8.1	10.5	9.8	9.0						
Approach Delay (s)	12.2		10.3		9.8	9.0						
Approach LOS	B		B		A	A						
Intersection Summary												
Delay				10.9								
Level of Service				B								
Intersection Capacity Utilization				37.2%								
Analysis Period (min)				15								
ICU Level of Service												

























NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Existing (1 CVN)
Timing Plan: AM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	223	422	330	151	17	68
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	282	534	402	184	24	96
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	587				1593	293
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	587				1593	293
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	71				66	86
cM capacity (veh/h)	984				70	703
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	282	534	268	318	120	
Volume Left	282	0	0	0	24	
Volume Right	0	0	0	184	96	
cSH	984	1700	1700	1700	250	
Volume to Capacity	0.29	0.31	0.16	0.19	0.48	
Queue Length 95th (ft)	30	0	0	0	60	
Control Delay (s)	10.1	0.0	0.0	0.0	32.0	
Lane LOS	B				D	
Approach Delay (s)	3.5		0.0		32.0	
Approach LOS					D	
Intersection Summary						
Average Delay			4.4			
Intersection Capacity Utilization			41.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Existing (1 CVN)
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	415	15	26	331	1900	65	35	1900	1	21	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1720			1858	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.88			0.98	1.00
Satd. Flow (perm)	934	3521		825	3539			1534			1830	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	539	19	34	430	0	98	53	121	2	36	47
RTOR Reduction (vph)	0	4	0	0	0	0	0	33	0	0	0	30
Lane Group Flow (vph)	21	554	0	34	430	0	0	239	0	0	38	17
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.1	13.1		13.1	13.1			13.1			13.1	13.1
Effective Green, g (s)	13.1	13.1		13.1	13.1			13.1			13.1	13.1
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	345	1302		305	1309			567			677	585
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.16			0.02	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.42			0.06	0.03
Uniform Delay, d1	7.2	8.3		7.3	8.0			8.3			7.2	7.1
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.1			0.5			0.0	0.0
Delay (s)	7.3	8.6		7.5	8.1			8.8			7.2	7.1
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.5			8.1			8.8			7.2	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.4							A		
HCM 2000 Volume to Capacity ratio			0.42									
Actuated Cycle Length (s)			35.4						9.2			
Intersection Capacity Utilization			46.3%							A		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Existing (1 CVN)
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	499	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	542	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			547		542	542
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			547		542	542
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1023		501	540
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	542	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	528			
Volume to Capacity	0.32	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	11.9			
Lane LOS			B			
Approach Delay (s)	0.0		11.9			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.3%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Existing (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑↑↑	↑	↑	↑↑	↑	↑	↑↑	↑
Volume (vph)	20	610	33	22	1425	41	154	35	1900	48	85	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6				4.6
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95				0.95
Frt	1.00	0.99		1.00	1.00			0.97				0.98
Flt Protected	0.95	1.00		0.95	1.00			0.97				0.97
Satd. Flow (prot)	1770	5046		1770	5064			3323				3363
Flt Permitted	0.95	1.00		0.95	1.00			0.97				0.97
Satd. Flow (perm)	1770	5046		1770	5064			3323				3363
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	24	726	39	24	1566	45	186	42	58	104	52	28
RTOR Reduction (vph)	0	3	0	0	2	0	0	12	0	0	8	0
Lane Group Flow (vph)	24	762	0	24	1609	0	0	274	0	0	176	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0				35.0
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0				35.0
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19				0.19
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6				4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0				3.0
Lane Grp Cap (vph)	147	2234		118	2157			646				653
v/s Ratio Prot	0.01	c0.15		c0.01	c0.32			c0.08				c0.05
v/s Ratio Perm												
v/c Ratio	0.16	0.34		0.20	0.75			0.42				0.27
Uniform Delay, d1	76.7	32.9		79.5	43.5			63.7				61.6
Progression Factor	1.00	1.00		1.34	0.69			1.00				1.00
Incremental Delay, d2	0.5	0.4		0.8	2.2			0.5				0.2
Delay (s)	77.2	33.3		107.1	32.1			64.1				61.9
Level of Service	E	C		F	C			E				E
Approach Delay (s)		34.7			33.2			64.1				61.9
Approach LOS		C			C			E				E
Intersection Summary												
HCM 2000 Control Delay		38.5			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.52										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		65.5%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Existing (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	2	829	33	19	1590	11	17	4	29	52	10	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5056		1770	5080			1686		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.67	1.00	
Satd. Flow (perm)	1770	5056		1770	5080			1550		1247	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	931	37	22	1807	12	23	5	40	74	14	20
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	17	0
Lane Group Flow (vph)	2	966	0	22	1819	0	0	40	0	74	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases						4				8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3474		118	3716			258		207	283	
v/s Ratio Prot	0.00	0.19		c0.01	c0.36						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.28		0.19	0.49			0.15		0.36	0.06	
Uniform Delay, d1	86.1	10.9		79.4	10.1			64.1		66.5	63.1	
Progression Factor	1.67	0.29		1.39	0.32			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.6	0.4			0.3		1.1	0.1	
Delay (s)	144.4	3.3		111.0	3.6			64.4		67.5	63.2	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.6			4.8			64.4			66.2	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.0			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.46										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		64.4%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Existing (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	3	896	60	91	1453	49	137	18	86	160	34	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5038		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5038		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1007	67	110	1751	59	154	20	97	213	45	19
RTOR Reduction (vph)	0	4	0	0	0	28	0	0	80	0	3	0
Lane Group Flow (vph)	3	1070	0	110	1751	31	0	174	17	0	274	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.21		c0.06	c0.34			c0.10			c0.08	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.48		0.56	0.65	0.04		0.57	0.06		0.47	
Uniform Delay, d1	86.2	35.5		75.8	30.1	20.1		68.3	62.3		67.1	
Progression Factor	1.21	0.64		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.7		3.6	1.2	0.1		2.4	0.1		0.6	
Delay (s)	105.0	23.4		79.5	31.3	20.2		70.7	62.4		67.7	
Level of Service	F	C		E	C	C		E	E		E	
Approach Delay (s)		23.6			33.7			67.8			67.7	
Approach LOS		C			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		35.9			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		82.1%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Existing (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱↱↱		↰	↱↱↱			↱		↰	↱	↱
Volume (vph)	13	1149	24	41	1576		15	6	46	36	2	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5080			1671			1723	
Flt Permitted	0.95	1.00		0.95	1.00			0.93			0.78	
Satd. Flow (perm)	1770	5070		1770	5080			1566			1387	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	14	1249	26	48	1833	13	18	7	55	47	3	26
RTOR Reduction (vph)	0	2	0	0	0	0	0	43	0	0	20	0
Lane Group Flow (vph)	14	1273	0	48	1846	0	0	37	0	0	56	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.3		2.9	39.5			15.0			15.0	
Effective Green, g (s)	0.7	37.3		2.9	39.5			15.0			15.0	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2667		72	2830			331			293	
v/s Ratio Prot	0.01	0.25		c0.03	c0.36							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.82	0.48		0.67	0.65			0.11			0.19	
Uniform Delay, d1	35.0	10.6		33.5	10.9			22.6			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	132.1	0.1		20.9	0.5			0.1			0.3	
Delay (s)	167.1	10.8		54.4	11.5			22.7			23.3	
Level of Service	F	B		D	B			C			C	
Approach Delay (s)		12.5			12.6			22.7			23.3	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		13.0			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		70.9			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		50.6%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Existing (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱↱↱		↰	↱↱↱		↰	↱	↱	↰	↱	↱
Volume (vph)	87	1162	28	233	1520	205	70	69	736	224	88	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	101	1351	33	248	1617	218	78	77	818	267	105	87
RTOR Reduction (vph)	0	2	0	0	0	67	0	154	183	0	3	55
Lane Group Flow (vph)	101	1382	0	248	1617	151	78	299	259	267	111	23
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.3		17.9	47.2	47.2	6.7	29.7	29.7	10.4	33.4	33.4
Effective Green, g (s)	6.0	35.3		17.9	47.2	47.2	6.7	29.7	29.7	10.4	33.4	33.4
Actuated g/C Ratio	0.05	0.31		0.16	0.41	0.41	0.06	0.26	0.26	0.09	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	178	1552		275	2083	648	102	399	387	309	507	436
v/s Ratio Prot	0.03	c0.27		c0.14	0.32		0.04	c0.19		c0.08	c0.06	
v/s Ratio Perm						0.10			0.17			0.02
v/c Ratio	0.57	0.89		0.90	0.78	0.23	0.76	0.75	0.67	0.86	0.22	0.05
Uniform Delay, d1	53.3	38.1		47.8	29.4	22.2	53.5	39.3	38.3	51.7	31.0	29.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.1	6.8		30.1	1.9	0.2	28.3	7.7	4.3	21.3	0.2	0.0
Delay (s)	57.4	44.9		77.8	31.3	22.4	81.7	47.1	42.7	73.0	31.2	29.5
Level of Service	E	D		E	C	C	F	D	D	E	C	C
Approach Delay (s)		45.8			35.9			47.9			55.2	
Approach LOS		D			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		42.9			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.84										
Actuated Cycle Length (s)		115.2			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		79.4%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Existing (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	271	996	0	148	964
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	304	1071	0	164	1071
RTOR Reduction (vph)	0	0	0	0	0	10
Lane Group Flow (vph)	0	304	1071	0	164	1061
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.30		0.09	c0.38
v/s Ratio Perm						
v/c Ratio		0.11	0.92		0.79	0.69
Uniform Delay, d1		2.5	25.8		34.3	13.1
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	11.3		18.4	1.4
Delay (s)		2.5	37.0		52.8	14.5
Level of Service		A	D		D	B
Approach Delay (s)		2.5	37.0		19.5	
Approach LOS		A	D		B	
Intersection Summary						
HCM 2000 Control Delay			24.7		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.83			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			55.9%		ICU Level of Service	B
Analysis Period (min)			15			
c Critical Lane Group						










NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Existing (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	420	0	0	402	500	691	1	137	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3245		1681	1627				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3245		1681	1627				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	483	0	0	437	543	751	1	149	0	0	0
RTOR Reduction (vph)	0	0	0	0	338	0	0	34	0	0	0	0
Lane Group Flow (vph)	0	483	0	0	642	0	458	409	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.1			16.1		18.6	18.6				
Effective Green, g (s)		16.1			16.1		18.6	18.6				
Actuated g/C Ratio		0.38			0.38		0.44	0.44				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1334			1223		732	708				
v/s Ratio Prot		0.14			c0.20							
v/s Ratio Perm							c0.27	0.25				
v/c Ratio		0.36			0.52		0.63	0.58				
Uniform Delay, d1		9.6			10.3		9.3	9.1				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.4		1.7	1.1				
Delay (s)		9.8			10.7		11.0	10.2				
Level of Service		A			B		B	B				
Approach Delay (s)		9.8			10.7		10.6				0.0	
Approach LOS		A			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					10.5		HCM 2000 Level of Service			B		
HCM 2000 Volume to Capacity ratio					0.58							
Actuated Cycle Length (s)					42.7		Sum of lost time (s)			8.0		
Intersection Capacity Utilization					57.2%		ICU Level of Service			B		
Analysis Period (min)					15							
c Critical Lane Group												

















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Existing (1 CVN)
Timing Plan: AM PEAK

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	3	4	65	13	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	90	32	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	133	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	133	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	858	1042	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	96	32			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	1042	1581	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		1.0				
Intersection Capacity Utilization		16.7%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St







Existing (1 CVN)
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	3516	17	0	1667	238	0	0	899	0	0	55
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	3662	18	0	1719	245	0	0	999	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1984			3700			4368	5675	1270	3102	5561	736
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1984			3700			4368	5675	1270	3102	5561	736
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	42	100	100	76
cM capacity (veh/h)	282			58			0	0	1718	2	0	350
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1465	1465	750	687	687	589	999	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	245	999	83				
cSH	1700	1700	1700	1700	1700	1700	1718	350				
Volume to Capacity	0.86	0.86	0.44	0.40	0.40	0.35	0.58	0.24				
Queue Length 95th (ft)	0	0	0	0	0	0	100	23				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	10.0	18.5				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			10.0	18.5				
Approach LOS							A	C				
Intersection Summary												
Average Delay			1.7									
Intersection Capacity Utilization			132.6%	ICU Level of Service					H			
Analysis Period (min)			15									

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Existing (1 CVN)
Timing Plan: PM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↑	
Volume (veh/h)	3282	130	0	1704	0	200	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3384	134	0	1775	0	244	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			3538		4082	1235	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			3538		4082	1235	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			67		2	162	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1353	1353	811	592	592	592	244
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	244
cSH	1700	1700	1700	1700	1700	1700	162
Volume to Capacity	0.80	0.80	0.48	0.35	0.35	0.35	1.50
Queue Length 95th (ft)	0	0	0	0	0	0	398
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	306.3
Lane LOS							F
Approach Delay (s)	0.0			0.0			306.3
Approach LOS							F
Intersection Summary							
Average Delay			13.5				
Intersection Capacity Utilization			87.4%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Existing (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↑	↑↑↑		↑	↑↑			↑↑	
Volume (vph)	0	0	0	955	534	86	70	242		0	0	763
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4636		1770	3539				3528
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4636		1770	3539				3528
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1005	562	91	72	249	0	0	0	787
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	0	0	0	1
Lane Group Flow (vph)	0	0	0	502	1146	0	72	249	0	0	0	800
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA				NA
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.9	27.9		3.9	49.6				40.1
Effective Green, g (s)				27.9	27.9		3.9	49.6				40.1
Actuated g/C Ratio				0.31	0.31		0.04	0.56				0.45
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				476	1451		77	1970				1587
v/s Ratio Prot				c0.33	0.25		c0.04	0.07				c0.23
v/s Ratio Perm												
v/c Ratio				1.05	0.93dl		0.94	0.13				0.50
Uniform Delay, d1				30.6	27.9		42.5	9.4				17.4
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				56.4	2.9		80.0	0.0				0.3
Delay (s)				87.0	30.9		122.5	9.4				17.7
Level of Service				F	C		F	A				B
Approach Delay (s)		0.0			47.9			34.8				17.7
Approach LOS		A			D			C				B
Intersection Summary												
HCM 2000 Control Delay			37.7			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			0.74									
Actuated Cycle Length (s)			89.1			Sum of lost time (s)			17.2			
Intersection Capacity Utilization		133.5%				ICU Level of Service			H			
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Existing (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	0	1693	44	0	0	0	0	320	412	669	1071	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3129	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3129	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	0	1860	48	0	0	0	0	372	479	697	1116	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	9	28	0	0	0
Lane Group Flow (vph)	0	1860	19	0	0	0	0	579	235	697	1116	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm				NA	Perm	Prot	NA		
Protected Phases	4	4					2		1	6		
Permitted Phases			4					2				
Actuated Green, G (s)		63.4	63.4				56.3	56.3	40.9	100.0		
Effective Green, g (s)		63.4	63.4				56.3	56.3	40.9	100.0		
Actuated g/C Ratio		0.36	0.36				0.32	0.32	0.23	0.57		
Clearance Time (s)		5.6	5.6				4.6	4.6	4.2	6.0		
Vehicle Extension (s)		3.0	3.0				3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)		1842	573				1006	433	802	2022		
v/s Ratio Prot		c0.37					c0.19		c0.20	0.32		
v/s Ratio Perm			0.01					0.17				
v/c Ratio		1.01	0.03				0.58	0.54	0.87	0.55		
Uniform Delay, d1		55.8	36.0				49.4	48.8	64.5	23.5		
Progression Factor		1.00	1.00				1.00	1.00	1.00	1.00		
Incremental Delay, d2		23.4	0.0				0.8	1.4	9.9	0.3		
Delay (s)		79.2	36.0				50.2	50.1	74.4	23.8		
Level of Service		E	D				D	D	E	C		
Approach Delay (s)		78.1		0.0			50.2			43.2		
Approach LOS		E		A			D			D		
Intersection Summary												
HCM 2000 Control Delay		59.1		HCM 2000 Level of Service			E					
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)			14.4					
Intersection Capacity Utilization		133.5%		ICU Level of Service			H					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Existing (1 CVN)
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑		↑↑			↑↑
Volume (vph)	163	11	812	648	0	1112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3255			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3255			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	209	14	912	728	0	1196
RTOR Reduction (vph)	2	0	69	0	0	0
Lane Group Flow (vph)	221	0	1571	0	0	1196
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2		6	
Permitted Phases						
Actuated Green, G (s)	30.0		120.9		120.9	
Effective Green, g (s)	30.0		120.9		120.9	
Actuated g/C Ratio	0.19		0.76		0.76	
Clearance Time (s)	4.1		5.0		5.0	
Vehicle Extension (s)	3.0		3.0		3.0	
Lane Grp Cap (vph)	296		2459		2540	
v/s Ratio Prot	c0.14		c0.48		0.36	
v/s Ratio Perm						
v/c Ratio	0.75		0.64		0.47	
Uniform Delay, d1	61.4		9.2		7.4	
Progression Factor	1.00		1.00		1.00	
Incremental Delay, d2	9.9		1.3		0.6	
Delay (s)	71.3		10.5		8.0	
Level of Service	E		B		A	
Approach Delay (s)	71.3		10.5		8.0	
Approach LOS	E		B		A	
Intersection Summary						
HCM 2000 Control Delay		14.0		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.67				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		76.7%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Existing (1 CVN)

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	135	9	27	24	9	23	21	1383	46	63	1323	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1723		1770	3522		1770	3488	
Flt Permitted	0.70	0.70	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1246	1243	1583		1469		1770	3522		1770	3488	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92	0.92
Adj. Flow (vph)	173	12	35	38	14	36	23	1487	49	68	1438	155
RTOR Reduction (vph)	0	0	29	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	92	93	6	0	66	0	23	1535	0	68	1590	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	18.6	18.6	18.6		18.6		2.9	67.0		8.0	72.1	
Effective Green, g (s)	18.6	18.6	18.6		18.6		2.9	67.0		8.0	72.1	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.62		0.07	0.67	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	213	213	271		252		47	2176		130	2319	
v/s Ratio Prot							0.01	0.44		c0.04	c0.46	
v/s Ratio Perm	0.07	c0.07	0.00		0.04							
v/c Ratio	0.43	0.44	0.02		0.26		0.49	0.71		0.52	0.69	
Uniform Delay, d1	40.2	40.2	37.3		38.9		52.0	14.0		48.4	11.2	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.4	1.4	0.0		0.6		7.8	1.1		3.8	0.9	
Delay (s)	41.6	41.6	37.4		39.5		59.8	15.1		52.1	12.0	
Level of Service	D	D	D		D		E	B		D	B	
Approach Delay (s)		40.9			39.5			15.7			13.7	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		16.9			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		108.4			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		71.0%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Existing (1 CVN)

Timing Plan: PM PEAK
























	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	0	0	0	7	0	136	0	1200	0	30	1454	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	10	0	197	0	1277	0	32	1563	0
RTOR Reduction (vph)	0	0	0	0	160	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	47	0	0	1277	0	32	1563	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					14.1			45.8		1.7	51.7	
Effective Green, g (s)					14.1			45.8		1.7	51.7	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					300			2135		39	2410	
v/s Ratio Prot					c0.03			0.36		0.02	c0.44	
v/s Ratio Perm												
v/c Ratio					0.16			0.60		0.82	0.65	
Uniform Delay, d1					25.9			9.3		36.9	6.9	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.2			0.5		76.9	0.6	
Delay (s)					26.1			9.8		113.9	7.5	
Level of Service					C			A		F	A	
Approach Delay (s)		0.0			26.1			9.8			9.7	
Approach LOS		A			C			A			A	
Intersection Summary												
HCM 2000 Control Delay		10.8			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		75.9			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		57.4%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Existing (1 CVN)

Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	275	47	112	6	65	397	26	538	2	131	1287	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1517		1854	1512	1770	3539	1352	1770	3511	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1517		1854	1512	1770	3539	1352	1770	3511	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	362	62	147	7	71	432	29	591	2	139	1369	66
RTOR Reduction (vph)	0	0	118	0	0	236	0	0	1	0	2	0
Lane Group Flow (vph)	362	62	29	0	78	196	29	591	1	139	1433	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.8	27.8	27.8		21.1	21.1	2.9	56.7	56.7	16.2	70.0	
Effective Green, g (s)	27.8	27.8	27.8		21.1	21.1	2.9	56.7	56.7	16.2	70.0	
Actuated g/C Ratio	0.20	0.20	0.20		0.15	0.15	0.02	0.40	0.40	0.11	0.50	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	348	366	298		277	225	36	1421	542	203	1740	
v/s Ratio Prot	c0.20	0.03			0.04		0.02	0.17		c0.08	c0.41	
v/s Ratio Perm			0.02			c0.13		0.00				
v/c Ratio	1.04	0.17	0.10		0.28	0.87	0.81	0.42	0.00	0.68	0.82	
Uniform Delay, d1	56.7	47.1	46.4		53.3	58.7	68.9	30.4	25.3	60.0	30.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	59.1	0.2	0.1		0.6	28.9	75.6	0.9	0.0	9.2	4.6	
Delay (s)	115.8	47.3	46.6		53.9	87.6	144.4	31.3	25.3	69.2	34.9	
Level of Service	F	D	D		D	F	F	C	C	E	C	
Approach Delay (s)		90.5			82.5			36.5			37.9	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay			53.8	HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio			0.89									
Actuated Cycle Length (s)			141.2	Sum of lost time (s)				19.4				
Intersection Capacity Utilization			76.0%	ICU Level of Service				D				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

Existing (1 CVN)

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	296	466	3	34	169	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	329	518	4	48	192	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	416	28			52	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	416	28			52	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	37	51			88	
cM capacity (veh/h)	520	1047			1554	
Direction, Lane #						
Volume Total	847	52	195			
Volume Left	329	0	192			
Volume Right	518	48	0			
cSH	1143	1700	1554			
Volume to Capacity	0.74	0.03	0.12			
Queue Length 95th (ft)	180	0	11			
Control Delay (s)	16.6	0.0	7.5			
Lane LOS	C		A			
Approach Delay (s)	16.6	0.0	7.5			
Approach LOS	C					
Intersection Summary						
Average Delay		14.2				
Intersection Capacity Utilization		39.3%		ICU Level of Service		
Analysis Period (min)		15		A		

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Existing (1 CVN)
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	299	6	572	37	0	1407
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	378	8	636	41	0	1581
RTOR Reduction (vph)	1	0	0	23	0	0
Lane Group Flow (vph)	385	0	636	18	0	1581
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.22		0.18			c0.45
v/s Ratio Perm				0.01		
v/c Ratio	0.46		0.42	0.03		1.04
Uniform Delay, d1	18.4		20.8	17.3		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.2	0.0		34.2
Delay (s)	18.8		21.0	17.3		64.2
Level of Service	B		C	B		E
Approach Delay (s)	18.8		20.8			64.2
Approach LOS	B		C			E
Intersection Summary						
HCM 2000 Control Delay		46.5		HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio		0.73				
Actuated Cycle Length (s)		105.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		88.8%		ICU Level of Service		E
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Existing (1 CVN)
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗	↖	↗
Volume (veh/h)	4	6	432	3	14	1346
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	502	3	15	1479
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1274	253			506	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1274	253			506	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	95	98			99	
cM capacity (veh/h)	157	747			1055	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	20	335	171	15	740	740
Volume Left	8	0	0	15	0	0
Volume Right	12	0	3	0	0	0
cSH	298	1700	1700	1055	1700	1700
Volume to Capacity	0.07	0.20	0.10	0.01	0.44	0.44
Queue Length 95th (ft)	5	0	0	1	0	0
Control Delay (s)	18.0	0.0	0.0	8.5	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	18.0	0.0		0.1		
Approach LOS	C					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			47.2%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Existing (1 CVN)
Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↙	↘	↗	↖	↙	↘
Lane Configurations	↙	↘	↗	↖	↙	↘
Volume (vph)	28	53	381	11	96	1254
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	30	58	433	12	105	1378
RTOR Reduction (vph)	0	45	0	6	0	0
Lane Group Flow (vph)	30	13	433	6	105	1378
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	6.3	18.3	27.3	27.3	6.9	43.0
Effective Green, g (s)	6.3	13.2	27.3	27.3	6.9	43.0
Actuated g/C Ratio	0.11	0.23	0.47	0.47	0.12	0.73
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	190	356	1648	737	208	2596
v/s Ratio Prot	c0.02	0.01	0.12		0.06	c0.39
v/s Ratio Perm				0.00		
v/c Ratio	0.16	0.04	0.26	0.01	0.50	0.53
Uniform Delay, d1	23.7	17.7	9.5	8.4	24.2	3.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	0.0	0.1	0.0	1.9	0.2
Delay (s)	24.1	17.8	9.6	8.4	26.2	3.6
Level of Service	C	B	A	A	C	A
Approach Delay (s)	19.9		9.6			5.2
Approach LOS	B		A			A
Intersection Summary						
HCM 2000 Control Delay			6.8		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.59			
Actuated Cycle Length (s)			58.6		Sum of lost time (s)	18.1
Intersection Capacity Utilization			46.6%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Existing (1 CVN)
Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↙	↘	↗	↖	↙	↘
Lane Configurations		↘	↗			↗
Volume (veh/h)	0	21	372	17	0	1282
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	28	428	20	0	1393
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1134	224			447	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1134	224			447	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	196	780			1110	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	28	285	162	697	697	
Volume Left	0	0	0	0	0	
Volume Right	28	0	20	0	0	
cSH	780	1700	1700	1700	1700	
Volume to Capacity	0.04	0.17	0.10	0.41	0.41	
Queue Length 95th (ft)	3	0	0	0	0	
Control Delay (s)	9.8	0.0	0.0	0.0	0.0	
Lane LOS	A					
Approach Delay (s)	9.8	0.0		0.0		
Approach LOS	A					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			38.8%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Existing (1 CVN)

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	28	24	366	17	21	1259
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	39	33	389	18	23	1384
RTOR Reduction (vph)	0	30	0	7	0	0
Lane Group Flow (vph)	39	3	389	11	23	1384
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.4	27.2	27.2	1.8	36.5
Effective Green, g (s)	2.6	4.4	27.2	27.2	1.8	36.5
Actuated g/C Ratio	0.06	0.10	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	152	2106	942	69	2826
v/s Ratio Prot	c0.02	0.00	0.11		0.01	c0.39
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.39	0.02	0.18	0.01	0.33	0.49
Uniform Delay, d1	20.8	18.7	4.2	3.8	21.4	1.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.5	0.1	0.0	0.0	2.8	0.1
Delay (s)	23.3	18.8	4.2	3.8	24.2	1.7
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.2		4.2			2.0
Approach LOS	C		A			A

Intersection Summary

HCM 2000 Control Delay	3.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	45.7	Sum of lost time (s)	14.1
Intersection Capacity Utilization	45.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Existing (1 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	10	13	79	7	0	167	12	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	10	14	103	9	0	188	13	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	10	14	112	201						
Volume Left (vph)	0	0	103	0						
Volume Right (vph)	0	14	0	13						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.13	0.18						
Capacity (veh/h)	874	1121	860	1121						
Control Delay (s)	7.1	6.2	7.7	6.9						
Approach Delay (s)	6.6		7.7	6.9						
Approach LOS	A		A	A						

Intersection Summary

Delay	7.2		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

NBC Coastal Campus

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Existing (1 CVN)

Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱	↰	↱	↰			
Volume (vph)	9	173	0	0	76	129	11	292	64	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1305	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	10	197	0	0	87	148	12	321	70	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	117	0	0	38	0	0	0
Lane Group Flow (vph)	10	197	0	0	87	31	12	321	32	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.5	8.5			8.5	8.5	18.9	18.9	18.9			
Effective Green, g (s)	8.5	8.5			8.5	8.5	18.9	18.9	18.9			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	271	388			388	329	819	1639	733			
v/s Ratio Prot		c0.11			0.05		0.01	c0.09				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.51			0.22	0.09	0.01	0.20	0.04			
Uniform Delay, d1	12.9	14.3			13.4	13.0	5.9	6.5	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.0			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.9	15.3			13.7	13.2	5.9	6.5	6.0			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.2			13.4		6.4			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.5			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.29										
Actuated Cycle Length (s)		40.8			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		40.1%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd











Existing (1 CVN)

Timing Plan: PM PEAK

							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	0	427	0	1416	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	0	0	485	0	1573	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1816	787	1573		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1816	787	1573		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	69	335	415		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	243	243	1049	524	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.14	0.14	0.62	0.31	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			42.5%		ICU Level of Service		A
Analysis Period (min)			15				











NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Existing (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	81	0	63	1	1	0	68	292	11	1	1001	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.85		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3520		1770	3458	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3520		1770	3458	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	108	0	84	2	2	0	75	321	12	1	1112	200
RTOR Reduction (vph)	0	67	0	0	0	0	0	2	0	0	11	0
Lane Group Flow (vph)	108	17	0	2	2	0	75	331	0	1	1301	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	17.5	17.5		0.8	0.8		5.8	50.0		0.8	45.0	
Effective Green, g (s)	17.5	17.5		0.8	0.8		5.8	50.0		0.8	45.0	
Actuated g/C Ratio	0.20	0.20		0.01	0.01		0.07	0.57		0.01	0.51	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	351	314		16	16		116	2000		16	1768	
v/s Ratio Prot	c0.06	0.01		c0.00	0.00		c0.04	0.09		0.00	c0.38	
v/s Ratio Perm												
v/c Ratio	0.31	0.05		0.12	0.12		0.65	0.17		0.06	0.74	
Uniform Delay, d1	30.1	28.5		43.3	43.3		40.1	9.1		43.2	16.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.1		3.5	3.5		11.7	0.0		1.6	1.6	
Delay (s)	30.6	28.6		46.8	46.8		51.8	9.1		44.9	18.5	
Level of Service	C	C		D	D		D	A		D	B	
Approach Delay (s)		29.7			46.8			17.0			18.5	
Approach LOS		C			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		19.4										
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		88.0										
Intersection Capacity Utilization		60.6%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Existing (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	53	959	54	0	327	32	12	37	4	22	24	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Frt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5045			5017		1770	1834			1760	
Flt Permitted	0.95	1.00			1.00		0.71	1.00			0.18	
Satd. Flow (perm)	1770	5045			5017		1318	1834			315	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	60	1090	61	0	348	34	17	53	6	26	28	22
RTOR Reduction (vph)	0	3	0	0	7	0	0	2	0	0	8	0
Lane Group Flow (vph)	60	1148	0	0	375	0	17	57	0	0	68	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1908			2037		256	356			52	
v/s Ratio Prot	c0.03	c0.23			c0.07			c0.03				
v/s Ratio Perm							0.01				c0.21	
v/c Ratio	0.31	0.60			0.18		0.07	0.16			1.30	
Uniform Delay, d1	73.6	45.0			34.3		59.2	60.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.9	1.4			0.2		0.1	0.2			225.5	
Delay (s)	74.5	46.4			34.5		59.3	60.5			300.5	
Level of Service	E	D			C		E	E			F	
Approach Delay (s)		47.8			34.5			60.2			300.5	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		56.5										
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

Existing (1 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	987	0	467	362	35	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3493							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3493							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1109	0	497	385	37	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1109	0	497	422	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3174							609
v/s Ratio Prot		c0.22		c0.14	c0.12							
v/s Ratio Perm												0.00
v/c Ratio		0.58		0.26	0.13							0.00
Uniform Delay, d1		44.5		20.4	0.8							34.8
Progression Factor		0.19		1.00	1.00							1.00
Incremental Delay, d2		1.0		0.1	0.0							0.0
Delay (s)		9.7		20.4	0.9							34.9
Level of Service		A		C	A							C
Approach Delay (s)		9.7			11.5		0.0				34.9	
Approach LOS		A			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		10.6										B
HCM 2000 Volume to Capacity ratio		0.41										
Actuated Cycle Length (s)		180.0						Sum of lost time (s)		22.3		
Intersection Capacity Utilization		41.6%						ICU Level of Service		A		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave



















Existing (1 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	3	211	0	0	303	40	0	0	0	103	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	245	0	0	344	45	0	0	0	156	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	390			245			631	642	245	619	619	367
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	390			245			631	642	245	619	619	367
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	61	100	98
cM capacity (veh/h)	1169			1321			385	391	793	400	403	678
Direction, Lane #												
Volume Total	249	390	0	168								
Volume Left	3	0	0	156								
Volume Right	0	45	0	12								
cSH	1169	1321	1700	412								
Volume to Capacity	0.00	0.00	0.00	0.41								
Queue Length 95th (ft)	0	0	0	49								
Control Delay (s)	0.1	0.0	0.0	19.6								
Lane LOS	A			A								
Approach Delay (s)	0.1	0.0	0.0	19.6								
Approach LOS				A								
Intersection Summary												
Average Delay		4.1										
Intersection Capacity Utilization		31.2%								ICU Level of Service		A
Analysis Period (min)		15										













NBC Coastal Campus
22: 3rd St & Palm Ave

Existing (1 CVN)
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	292	12	84	317	24	14	38	67	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	374	15	94	356	27	25	67	118	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	390	94	383	209	161						
Volume Left (vph)	9	0	94	0	25	61						
Volume Right (vph)	0	15	0	27	118	28						
Hadj (s)	0.53	0.01	0.53	-0.02	-0.28	0.00						
Departure Headway (s)	7.2	6.7	7.1	6.5	6.6	7.0						
Degree Utilization, x	0.02	0.72	0.19	0.70	0.38	0.31						
Capacity (veh/h)	472	520	485	529	480	438						
Control Delay (s)	9.1	23.7	10.5	21.9	13.6	13.2						
Approach Delay (s)	23.4		19.6		13.6	13.2						
Approach LOS	C		C		B	B						
Intersection Summary												
Delay			19.0									
Level of Service			C									
Intersection Capacity Utilization			41.2%		ICU Level of Service		A					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Existing (1 CVN)
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	72	419	452	39	52	139
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	74	432	526	45	61	164
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	571				1129	285
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	571				1129	285
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	93				67	77
cM capacity (veh/h)	998				183	711
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	74	432	350	221	225	
Volume Left	74	0	0	0	61	
Volume Right	0	0	0	45	164	
cSH	998	1700	1700	1700	398	
Volume to Capacity	0.07	0.25	0.21	0.13	0.56	
Queue Length 95th (ft)	6	0	0	0	84	
Control Delay (s)	8.9	0.0	0.0	0.0	25.1	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		25.1	
Approach LOS					D	
Intersection Summary						
Average Delay			4.8			
Intersection Capacity Utilization			40.2%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Existing (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	428	29	31	454	3	54	19	22	12	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3536			1754			1841	1583
Flt Permitted	0.47	1.00		0.45	1.00			0.79			0.90	1.00
Satd. Flow (perm)	871	3505		836	3536			1417			1669	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	510	35	34	499	3	66	23	27	16	53	39
RTOR Reduction (vph)	0	7	0	0	1	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	538	0	34	501	0	0	95	0	0	69	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Effective Green, g (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	415	1671		398	1686			309			364	345
v/s Ratio Prot		c0.15			0.14							
v/s Ratio Perm	0.04			0.04				c0.07			0.04	0.01
v/c Ratio	0.08	0.32		0.09	0.30			0.31			0.19	0.02
Uniform Delay, d1	4.3	4.9		4.3	4.8			9.9			9.6	9.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.6			0.3	0.0
Delay (s)	4.4	5.0		4.4	4.9			10.5			9.9	9.3
Level of Service	A	A		A	A			B			A	A
Approach Delay (s)		5.0			4.9			10.5			9.7	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		30.2			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		44.6%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												







NBC Coastal Campus
25: Delaware St & Palm Ave

Existing (1 CVN)
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	475	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	579	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			589		579	579
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			589		579	579
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			986		477	515
Direction, Lane #						
Volume Total	579	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	486			
Volume to Capacity	0.34	0.01	0.02			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.6			
Lane LOS			B			
Approach Delay (s)	0.0		12.6			
Approach LOS			B			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			35.0%		ICU Level of Service	A
Analysis Period (min)			15			







NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Existing (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	1278	117	55	730	124	92	85	59	164	75	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5022		1770	4975			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5022		1770	4975			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	41	1360	124	56	737	125	101	93	65	184	84	27
RTOR Reduction (vph)	0	6	0	0	13	0	0	19	0	0	4	0
Lane Group Flow (vph)	41	1478	0	56	849	0	0	240	0	0	291	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2112		157	1981			649			658	
v/s Ratio Prot	0.02	c0.29		c0.03	0.17			c0.07			c0.09	
v/s Ratio Perm												
v/c Ratio	0.21	0.70		0.36	0.43			0.37			0.44	
Uniform Delay, d1	72.8	42.8		77.2	39.3			62.9			63.9	
Progression Factor	1.00	1.00		1.28	0.66			1.00			1.00	
Incremental Delay, d2	0.5	1.0		1.3	0.7			0.4			0.5	
Delay (s)	73.3	43.9		99.8	26.6			63.3			64.4	
Level of Service	E	D		F	C			E			E	
Approach Delay (s)		44.6			31.1			63.3			64.4	
Approach LOS		D			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		44.1			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.54										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		115.8%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Existing (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	19	1546	54	46	1115	52	20	10	33	60	12	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5060		1770	5051			1703		1770	1718	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.63	1.00	
Satd. Flow (perm)	1770	5060		1770	5051			1555		1178	1718	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	19	1578	55	47	1149	54	24	12	40	71	14	15
RTOR Reduction (vph)	0	2	0	0	2	0	0	24	0	0	13	0
Lane Group Flow (vph)	19	1631	0	47	1201	0	0	52	0	71	16	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.8		16.0	130.8			22.0		22.0	22.0	
Effective Green, g (s)	12.0	126.8		16.0	130.8			22.0		22.0	22.0	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3564		157	3670			190		143	209	
v/s Ratio Prot	0.01	c0.32		c0.03	c0.24						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.16	0.46		0.30	0.33			0.28		0.50	0.08	
Uniform Delay, d1	79.3	11.6		76.8	8.8			71.8		73.8	70.0	
Progression Factor	1.49	0.14		1.60	0.31			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.3		0.9	0.2			0.8		2.7	0.2	
Delay (s)	118.8	1.9		123.6	3.0			72.5		76.5	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.3			7.5			72.5			74.7	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		9.0			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.45										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		57.7%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Existing (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	1437	187	149	1186	77	122	38	121	146	42	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	4997		1770	5085	1583		1794	1583		3371	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	4997		1770	5085	1583		1794	1583		3371	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	27	1529	199	154	1223	79	133	41	132	197	57	26
RTOR Reduction (vph)	0	9	0	0	0	36	0	0	109	0	4	0
Lane Group Flow (vph)	27	1719	0	154	1223	43	0	174	23	0	276	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2			4				
Actuated Green, G (s)	12.0	79.7		19.6	87.7	87.7		30.7	30.7		30.7	
Effective Green, g (s)	12.0	79.7		19.6	87.7	87.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.07	0.44		0.11	0.49	0.49		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	118	2212		192	2477	771		305	269		574	
v/s Ratio Prot	0.02	c0.34		c0.09	0.24			c0.10			c0.08	
v/s Ratio Perm					0.03			0.01				
v/c Ratio	0.23	0.78		0.80	0.49	0.06		0.57	0.08		0.48	
Uniform Delay, d1	79.6	42.6		78.3	31.2	24.3		68.6	62.8		67.4	
Progression Factor	1.07	0.78		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.9	2.5		20.9	0.7	0.1		7.5	0.6		2.9	
Delay (s)	86.3	35.6		99.2	31.9	24.5		76.1	63.4		70.3	
Level of Service	F	D		F	C	C		E	E		E	
Approach Delay (s)		36.4			38.6			70.7			70.3	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		42.5			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		95.8%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Existing (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	1558	47	162	1470	15	37	8	77	22	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5063		1770	5077			1678			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.84	
Satd. Flow (perm)	1770	5063		1770	5077			1516			1509	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85		0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	10	1731	52	171	1547	16	44	9	91	27	12	12
RTOR Reduction (vph)	0	3	0	0	1	0	0	72	0	0	10	0
Lane Group Flow (vph)	10	1780	0	171	1562	0	0	72	0	0	41	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.8	40.4		11.1	50.7			17.2			17.2	
Effective Green, g (s)	0.8	40.4		11.1	50.7			17.2			17.2	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2423		232	3049			308			307	
v/s Ratio Prot	0.01	c0.35		c0.10	0.31							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.62	0.73		0.74	0.51			0.23			0.14	
Uniform Delay, d1	41.7	17.7		35.2	9.7			28.1			27.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	57.6	1.2		11.5	0.1			0.4			0.2	
Delay (s)	99.2	18.9		46.8	9.9			28.5			27.7	
Level of Service	F	B		D	A			C			C	
Approach Delay (s)		19.3			13.5			28.5			27.7	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		17.1			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		84.4			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		61.0%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Existing (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	180	1503	23	313	1478	530	62	169	509	561	228	217
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	189	1582	24	337	1589	570	66	180	541	610	248	236
RTOR Reduction (vph)	0	1	0	0	0	88	0	26	263	0	2	134
Lane Group Flow (vph)	189	1605	0	337	1589	482	66	349	83	610	270	78
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2			4				8
Actuated Green, G (s)	11.2	36.3		45.1	70.2	70.2	8.6	36.3	36.3	11.8	39.5	39.5
Effective Green, g (s)	11.2	36.3		45.1	70.2	70.2	8.6	36.3	36.3	11.8	39.5	39.5
Actuated g/C Ratio	0.07	0.24		0.30	0.46	0.46	0.06	0.24	0.24	0.08	0.26	0.26
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	253	1216		527	2357	733	100	391	360	267	455	392
v/s Ratio Prot	0.06	c0.32		c0.19	c0.31		0.04	c0.21		c0.18	c0.15	
v/s Ratio Perm						0.30		0.06				0.05
v/c Ratio	0.75	1.32		0.64	0.67	0.66	0.89	0.23	2.28	0.59	0.20	
Uniform Delay, d1	68.7	57.6		46.1	31.7	31.3	70.0	55.7	46.3	69.8	48.9	43.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.4	149.9		2.6	0.8	2.1	15.1	21.8	0.3	589.8	2.1	0.3
Delay (s)	80.1	207.5		48.7	32.5	33.4	85.1	77.5	46.6	659.6	51.0	43.9
Level of Service	F	F		D	C	C	F	E	D	F	D	D
Approach Delay (s)		194.0			34.9			64.6			389.0	
Approach LOS		F			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		147.7			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.05										
Actuated Cycle Length (s)		151.4			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		112.2%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Existing (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	↔
Volume (vph)	0	479	800	0	420	1527
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	538	851	0	462	1678
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	538	851	0	462	1673
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.15	c0.24		0.26	c0.60
v/s Ratio Perm						
v/c Ratio		0.30	0.99		0.70	0.94
Uniform Delay, d1		11.6	30.2		21.2	13.2
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	28.6		3.2	10.6
Delay (s)		11.7	58.8		24.3	23.7
Level of Service		B	E		C	C
Approach Delay (s)		11.7	58.8		23.8	
Approach LOS		B	E		C	
Intersection Summary						
HCM 2000 Control Delay		30.4			HCM 2000 Level of Service	
HCM 2000 Volume to Capacity ratio		1.02				C
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	
Intersection Capacity Utilization		81.3%			ICU Level of Service	
Analysis Period (min)		15				D
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Existing (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	893	0	0	502	239	401	2	102	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1612				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1612				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	930	0	0	564	269	431	2	110	0	0	0
RTOR Reduction (vph)	0	0	0	0	99	0	0	42	0	0	0	0
Lane Group Flow (vph)	0	930	0	0	734	0	280	221	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases							2					
Actuated Green, G (s)		18.3			18.3		13.2	13.2				
Effective Green, g (s)		18.3			18.3		13.2	13.2				
Actuated g/C Ratio		0.46			0.46		0.33	0.33				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1639			1560		561	538				
v/s Ratio Prot		0.26			0.22							
v/s Ratio Perm							0.17	0.14				
v/c Ratio		0.57			0.47		0.50	0.41				
Uniform Delay, d1		7.7			7.3		10.5	10.1				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.5			0.2		0.7	0.5				
Delay (s)		8.2			7.5		11.2	10.7				
Level of Service		A			A		B	B				
Approach Delay (s)		8.2			7.5		10.9			0.0		
Approach LOS		A			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		8.6			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.54										
Actuated Cycle Length (s)		39.5			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		45.6%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Existing (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	3	36	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	3	52	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	73	52	52			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	73	52	52			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	926	1015	1554			
Direction, Lane #						
Volume Total	16	12	52			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	1015	1554	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.3	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.3	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.5				
Intersection Capacity Utilization		17.2%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St









Existing (2 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1396	34	0	3789	551	0	0	475	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1682	41	0	4118	599	0	0	594	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4737			1743			3127	6460	621	5019	6181	1712
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4737			1743			3127	6460	621	5019	6181	1712
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	84
cM capacity (veh/h)	21			351			4	0	1354	0	0	77
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	673	673	377	1647	1647	1423	594	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	599	594	12				
cSH	1700	1700	1700	1700	1700	1700	1354	77				
Volume to Capacity	0.40	0.40	0.22	0.97	0.97	0.84	0.44	0.16				
Queue Length 95th (ft)	0	0	0	0	0	0	57	13				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	60.3				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	60.3				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				100.6%			ICU Level of Service		G			
Analysis Period (min)				15								

* User Entered Value




















NBC Coastal Campus
2: Pomona Ave & Fourth St

Existing (2 CVN)
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1257	201	0	3689	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1428	228	0	4099	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1677	2949		630	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1677	2949		630	
tC, single (s)			4.1	6.8		6.9	
tC, 2 stage (s)							
tF (s)			2.2	3.5		3.3	
p0 queue free %			100	100		39	
cM capacity (veh/h)			372	11		410	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	571	571	514	1366	1366	1366	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	228	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	410
Volume to Capacity	0.34	0.34	0.30	0.80	0.80	0.80	0.61
Queue Length 95th (ft)	0	0	0	0	0	0	99
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	26.7
Lane LOS	D						
Approach Delay (s)	0.0			0.0			26.7
Approach LOS	D						
Intersection Summary							
Average Delay	1.1						
Intersection Capacity Utilization	86.1%			ICU Level of Service		E	
Analysis Period (min)	15						













NBC Coastal Campus
3: Orange Ave & Third St

Existing (2 CVN)
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1556	1941	342	105	102	0	0	277	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4640		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4640		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1673	2087	368	142	138	0	0	318	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1021	3099	0	142	138	0	0	330	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.6			21.4	
Effective Green, g (s)				131.2	131.2		20.0	46.6			21.4	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1054	3214		186	870			396	
v/s Ratio Prot				c0.67	0.67		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.97	0.96		0.76	0.16			0.83	
Uniform Delay, d1				27.2	26.9		82.4	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				20.3	9.0		16.8	0.1			14.0	
Delay (s)				47.5	36.0		99.2	56.1			96.3	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			38.8			78.0			96.3	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay			45.1	HCM 2000 Level of Service					D			
HCM 2000 Volume to Capacity ratio			0.93									
Actuated Cycle Length (s)			189.4	Sum of lost time (s)					16.8			
Intersection Capacity Utilization			201.0%	ICU Level of Service					H			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Existing (2 CVN)
Timing Plan: AM PEAK







												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	1	582	64	0	0	0	0	197	198	450	1439	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3262	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3262	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	633	70	0	0	0	0	229	215	489	1499	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	18	49	0	0	0
Lane Group Flow (vph)	0	634	41	0	0	0	0	288	89	489	1499	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1178	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.42	
v/s Ratio Perm		0.12	0.03						0.06			
v/c Ratio		0.36	0.07					0.24	0.17	0.69	0.73	
Uniform Delay, d1		41.5	37.2					38.4	37.3	63.2	25.9	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.3	
Delay (s)		41.6	37.3					38.5	37.5	66.2	27.2	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.2			36.8	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.0		HCM 2000 Level of Service					D			
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)					14.4			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Existing (2 CVN)

Timing Plan: AM PEAK













Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	204	6	1079	567	0	1044
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3315			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3315			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	237	7	1160	610	0	1099
RTOR Reduction (vph)	2	0	53	0	0	0
Lane Group Flow (vph)	242	0	1717	0	0	1099
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	16.4		42.3			42.3
Effective Green, g (s)	16.4		42.3			42.3
Actuated g/C Ratio	0.24		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	384		2068			2097
v/s Ratio Prot	c0.15		c0.52			0.33
v/s Ratio Perm						
v/c Ratio	0.63		0.83			0.52
Uniform Delay, d1	23.0		9.9			7.1
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	3.4		3.0			0.2
Delay (s)	26.4		12.9			7.4
Level of Service	C		B			A
Approach Delay (s)	26.4		12.9			7.4
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			12.0		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.82			
Actuated Cycle Length (s)			67.8		Sum of lost time (s)	12.1
Intersection Capacity Utilization			74.0%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Existing (2 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	2	9	7	0	5	18	1281	24	37	1177	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1692	1583		1708		1770	3529		1770	3524	
Frt Permitted	0.74	0.79	1.00		0.87		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1312	1389	1583		1526		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	51	2	10	14	0	10	21	1525	29	40	1279	37
RTOR Reduction (vph)	0	0	8	0	20	0	0	1	0	0	1	0
Lane Group Flow (vph)	27	26	2	0	4	0	21	1553	0	40	1315	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	14.3	14.3	14.3		14.3		2.4	57.1		2.7	57.4	
Effective Green, g (s)	14.3	14.3	14.3		14.3		2.4	57.1		2.7	57.4	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.65		0.03	0.65	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	212	225	256		247		48	2284		54	2293	
v/s Ratio Prot							0.01	c0.44		c0.02	0.37	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.13	0.12	0.01		0.02		0.44	0.68		0.74	0.57	
Uniform Delay, d1	31.6	31.6	31.0		31.0		42.2	9.8		42.4	8.6	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.2	0.0		0.0		6.3	0.8		41.8	0.3	
Delay (s)	31.9	31.8	31.0		31.1		48.5	10.6		84.2	8.9	
Level of Service	C	C	C		C		D	B		F	A	
Approach Delay (s)		31.7			31.1			11.1			11.1	
Approach LOS		C			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			11.7		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.58									
Actuated Cycle Length (s)			88.2		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			54.0%		ICU Level of Service			A				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Existing (2 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	21	0	1229	7	402	767	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Frt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	32	0	1351	8	410	783	0
RTOR Reduction (vph)	0	0	0	0	29	0	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1351	4	410	783	0
Turn Type	Split			Split	NA		NA	Perm	Prot	NA		
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.38		c0.23	0.22	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.81	0.01	0.67	0.26	
Uniform Delay, d1					60.6			33.0	20.4	40.5	2.3	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			3.1	0.0	2.9	0.2	
Delay (s)					60.6			15.2	20.4	43.4	2.5	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			15.2			16.6	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		16.4			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		75.1%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Existing (2 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	47	13	1	61	121	129	1076	5	274	237	293
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frbp, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.98	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3192	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3192	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	45	72	20	1	69	138	143	1196	6	315	272	337
RTOR Reduction (vph)	0	0	19	0	0	116	0	0	3	0	155	0
Lane Group Flow (vph)	45	72	1	0	70	22	143	1196	3	315	454	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1047	
v/s Ratio Prot	0.03	c0.04			c0.04		0.08	c0.34		c0.18	0.14	
v/s Ratio Perm			0.00			0.01			0.00			
v/c Ratio	0.37	0.56	0.01		0.24	0.09	0.26	0.76	0.00	0.92	0.43	
Uniform Delay, d1	64.5	65.4	62.9		53.3	52.1	37.5	33.7	22.3	57.5	38.1	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.92	
Incremental Delay, d2	1.9	5.6	0.1		0.4	0.2	0.3	3.5	0.0	29.6	1.3	
Delay (s)	66.4	70.9	63.0		53.7	52.2	37.8	37.2	22.3	84.8	36.4	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		68.3			52.8			37.2			52.9	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay		45.6			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		80.6%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Existing (2 CVN)
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖		↖	↗
Volume (veh/h)	21	187	4	82	307	8
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	25	220	5	102	334	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	732	56			108	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	732	56			108	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	78			78	
cM capacity (veh/h)	301	1010			1483	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	245	108	342			
Volume Left	25	0	334			
Volume Right	220	102	0			
cSH	1124	1700	1483			
Volume to Capacity	0.22	0.06	0.22			
Queue Length 95th (ft)	21	0	22			
Control Delay (s)	10.4	0.0	8.0			
Lane LOS	B		A			
Approach Delay (s)	10.4	0.0	8.0			
Approach LOS	B					
Intersection Summary						
Average Delay		7.6				
Intersection Capacity Utilization		34.1%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Existing (2 CVN)
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖	↖		↖
Volume (vph)	24	3	1221	385	0	214
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.98		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.98		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1728		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1728		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	32	4	1285	405	0	334
RTOR Reduction (vph)	4	0	0	110	0	0
Lane Group Flow (vph)	32	0	1285	295	0	334
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	1.9		31.5	31.5		31.5
Effective Green, g (s)	1.9		31.5	31.5		31.5
Actuated g/C Ratio	0.04		0.73	0.73		0.73
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	75		2574	1105		2574
v/s Ratio Prot	c0.02		c0.36			0.09
v/s Ratio Perm				0.19		
v/c Ratio	0.43		0.50	0.27		0.13
Uniform Delay, d1	20.2		2.5	2.0		1.8
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	3.9		0.2	0.1		0.0
Delay (s)	24.1		2.7	2.1		1.8
Level of Service	C		A	A		A
Approach Delay (s)	24.1		2.5			1.8
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		2.8		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.49				
Actuated Cycle Length (s)		43.3		Sum of lost time (s)		9.9
Intersection Capacity Utilization		46.2%		ICU Level of Service		A
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Existing (2 CVN)

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖↗		↖	↖↗
Volume (veh/h)	0	14	1995	5	5	240
Sign Control	Stop		Free		Free	
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	24	2145	5	7	353
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2339	1075			2151	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2339	1075			2151	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	89			97	
cM capacity (veh/h)	30	215			247	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	24	1430	720	7	176	176
Volume Left	0	0	0	7	0	0
Volume Right	24	0	5	0	0	0
cSH	215	1700	1700	247	1700	1700
Volume to Capacity	0.11	0.84	0.42	0.03	0.10	0.10
Queue Length 95th (ft)	9	0	0	2	0	0
Control Delay (s)	23.8	0.0	0.0	20.0	0.0	0.0
Lane LOS	C			C		
Approach Delay (s)	23.8	0.0		0.4		
Approach LOS	C					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			65.3%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

Existing (2 CVN)

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖↗	↖	↖	↖↗
Volume (vph)	16	81	1914	11	35	204
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	20	100	2058	12	51	296
RTOR Reduction (vph)	0	6	0	1	0	0
Lane Group Flow (vph)	20	94	2058	11	51	296
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.5	25.6	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.5	20.5	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	256	303	2259	1010	82	2717
v/s Ratio Prot	0.01	c0.06	c0.58		c0.03	0.08
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.31	0.91	0.01	0.62	0.11
Uniform Delay, d1	39.5	37.1	16.7	7.0	50.0	3.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	6.1	0.0	13.8	0.0
Delay (s)	39.6	37.7	22.7	7.0	63.7	3.2
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.0		22.7			12.1
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay			21.9		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.79			
Actuated Cycle Length (s)			106.8		Sum of lost time (s)	18.1
Intersection Capacity Utilization			68.8%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Existing (2 CVN)
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↖		↖	↖
Volume (veh/h)	0	30	1893	24	0	219
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	48	1993	25	0	296
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2153	1009			2018	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2153	1009			2018	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	80			100	
cM capacity (veh/h)	41	238			278	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	48	1328	689	148	148	
Volume Left	0	0	0	0	0	
Volume Right	48	0	25	0	0	
cSH	238	1700	1700	1700	1700	
Volume to Capacity	0.20	0.78	0.41	0.09	0.09	
Queue Length 95th (ft)	19	0	0	0	0	
Control Delay (s)	23.9	0.0	0.0	0.0	0.0	
Lane LOS	C					
Approach Delay (s)	23.9	0.0		0.0		
Approach LOS	C					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		63.1%		ICU Level of Service	B	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Existing (2 CVN)
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖	↖	↖	↖
Volume (vph)	9	6	1917	30	14	197
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	15	10	1997	31	17	243
RTOR Reduction (vph)	0	7	0	7	0	0
Lane Group Flow (vph)	15	3	1997	24	17	243
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.9	59.9	2.0	69.4
Effective Green, g (s)	1.4	3.4	59.9	59.9	2.0	69.4
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2738	1225	45	3173
v/s Ratio Prot	c0.01	0.00	c0.56		c0.01	0.07
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.47	0.05	0.73	0.02	0.38	0.08
Uniform Delay, d1	37.6	35.4	4.5	2.0	37.1	0.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.5	0.3	1.0	0.0	5.2	0.0
Delay (s)	48.1	35.7	5.5	2.0	42.3	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	43.2		5.5			3.2
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		5.6		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.71				
Actuated Cycle Length (s)		77.4		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		65.8%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Existing (2 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	42	1	0	41	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	78	2	0	65	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	80	65	3					
Volume Left (vph)	0	0	78	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.09	0.07	0.00					
Capacity (veh/h)	837	1121	818	844	1121					
Control Delay (s)	7.2	6.2	7.7	7.5	6.2					
Approach Delay (s)	7.2		7.7	7.4						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.0%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Existing (2 CVN)

Timing Plan: AM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑			↑	↑	↑	↑	↑			
Volume (vph)	2	34	0	0	30	211	3	1734	47	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1359	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	45	0	0	42	293	3	1845	50	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	20	0	0	0	0
Lane Group Flow (vph)	3	45	0	0	42	237	3	1845	30	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	15.4	15.4			15.4	15.4	46.2	42.1	42.1			
Effective Green, g (s)	15.4	15.4			15.4	15.4	46.2	42.1	42.1			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	295	404			404	343	1153	2101	939			
v/s Ratio Prot		0.02			0.02		0.00	c0.52				
v/s Ratio Perm	0.00					c0.15			0.02			
v/c Ratio	0.01	0.11			0.10	0.69	0.00	0.88	0.03			
Uniform Delay, d1	21.8	22.3			22.2	25.6	4.3	12.2	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	5.7	0.0	4.5	0.0			
Delay (s)	21.8	22.4			22.3	31.2	4.3	16.7	6.0			
Level of Service	C	C			C	C	A	B	A			
Approach Delay (s)		22.3				30.1		16.4			0.0	
Approach LOS		C				C		B			A	
Intersection Summary												
HCM 2000 Control Delay		18.6				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		70.9				Sum of lost time (s)		13.4				
Intersection Capacity Utilization		80.6%				ICU Level of Service		D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Existing (2 CVN)

Timing Plan: AM PEAK





















							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	0	1547	0	168	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	0	1611	0	213	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None			None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1018	106	213		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1018	106	213		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	233	927	1355		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	806	806	142	71	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.47	0.47	0.08	0.04	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			46.1%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Existing (2 CVN)

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	367	0	36	2	1	2	24	1435	0	0	125	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3409	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3409	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	417	0	41	6	3	6	25	1511	0	0	181	59
RTOR Reduction (vph)	0	29	0	0	6	0	0	0	0	0	27	0
Lane Group Flow (vph)	417	12	0	6	3	0	25	1511	0	0	213	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	24.6	24.6		1.7	1.7		1.9	43.7			37.6	
Effective Green, g (s)	24.6	24.6		1.7	1.7		1.9	43.7			37.6	
Actuated g/C Ratio	0.29	0.29		0.02	0.02		0.02	0.52			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	514	459		35	33		39	1825			1513	
v/s Ratio Prot	c0.24	0.01		c0.00	0.00		0.01	c0.43			0.06	
v/s Ratio Perm												
v/c Ratio	0.81	0.03		0.17	0.09		0.64	0.83			0.14	
Uniform Delay, d1	27.9	21.5		40.8	40.7		41.1	17.3			14.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	9.4	0.0		2.3	1.2		30.7	3.2			0.0	
Delay (s)	37.3	21.5		43.1	42.0		71.8	20.6			14.0	
Level of Service	D	C		D	D		E	C			B	
Approach Delay (s)		35.9			42.4			21.4			14.0	
Approach LOS		D			D			C			B	
Intersection Summary												
HCM 2000 Control Delay			23.7				HCM 2000 Level of Service				C	
HCM 2000 Volume to Capacity ratio			0.86									
Actuated Cycle Length (s)			84.7				Sum of lost time (s)				18.9	
Intersection Capacity Utilization			75.1%				ICU Level of Service				D	
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Existing (2 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	7	171	13	0	1302	16	35	21	1	18	38	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5030			5076		1770	1852			1732	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.20	
Satd. Flow (perm)	1770	5030			5076		1250	1852			357	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	8	192	15	0	1431	18	42	25	1	23	49	62
RTOR Reduction (vph)	0	5	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	8	202	0	0	1448	0	42	25	0	0	117	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2061		243	360			59	
v/s Ratio Prot	c0.00	0.04			c0.29			0.01				
v/s Ratio Perm							c0.03				c0.33	
v/c Ratio	0.04	0.11			0.70		0.17	0.07			1.97	
Uniform Delay, d1	71.4	36.2			44.4		60.4	59.2			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			1.9		0.3	0.1			493.5	
Delay (s)	71.5	36.4			46.3		60.8	59.3			568.5	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		37.7			46.3			60.2			568.5	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		83.3			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		63.9%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Existing (2 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	188	0	368	1310	8	0	0	0	0	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	229	0	391	1394	9	0	0	0	0	0	16
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	10
Lane Group Flow (vph)	0	229	0	391	1403	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.05		0.11	c0.40							
v/s Ratio Perm												0.00
v/c Ratio		0.12		0.23	0.44							0.01
Uniform Delay, d1		36.4		25.4	1.2							34.9
Progression Factor		0.43		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.1	0.1							0.0
Delay (s)		15.8		25.5	1.3							34.9
Level of Service		B		C	A							C
Approach Delay (s)		15.8			6.6			0.0				34.9
Approach LOS		B			A			A				C
Intersection Summary												
HCM 2000 Control Delay		7.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.45										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		58.1%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

Existing (2 CVN)
Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	9	231	0	0	127	103	0	0	0	47	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	11	275	0	0	137	111	0	0	0	52	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	247			275			493	544	275	488	488	192
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	247			275			493	544	275	488	488	192
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1319			1288			481	443	764	487	476	850
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	286	247	0	56								
Volume Left	11	0	0	52								
Volume Right	0	111	0	4								
cSH	1319	1288	1700	504								
Volume to Capacity	0.01	0.00	0.00	0.11								
Queue Length 95th (ft)	1	0	0	9								
Control Delay (s)	0.4	0.0	0.0	13.0								
Lane LOS	A			A	B							
Approach Delay (s)	0.4	0.0	0.0	13.0								
Approach LOS				A	B							
Intersection Summary												
Average Delay				1.4								
Intersection Capacity Utilization				29.4%								A
Analysis Period (min)				15								













NBC Coastal Campus
22: 3rd St & Palm Ave

Existing (2 CVN)
Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations	↕	↕		↕	↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	269	4	26	207	24	11	14	125	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	313	5	28	223	26	14	17	154	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	317	28	248	185	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	154	18						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.0	5.5	5.1	5.6						
Degree Utilization, x	0.01	0.48	0.05	0.38	0.26	0.07						
Capacity (veh/h)	579	636	567	632	638	551						
Control Delay (s)	7.9	12.3	8.1	10.5	9.8	9.0						
Approach Delay (s)	12.2		10.3		9.8	9.0						
Approach LOS	B		B		A	A						
Intersection Summary												
Delay				10.9								
Level of Service				B								
Intersection Capacity Utilization				37.2%								A
Analysis Period (min)				15								

























NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Existing (2 CVN)
Timing Plan: AM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	223	422	330	151	17	68
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	282	534	402	184	24	96
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	587				1593	293
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	587				1593	293
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	71				66	86
cM capacity (veh/h)	984				70	703
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	282	534	268	318	120	
Volume Left	282	0	0	0	24	
Volume Right	0	0	0	184	96	
cSH	984	1700	1700	1700	250	
Volume to Capacity	0.29	0.31	0.16	0.19	0.48	
Queue Length 95th (ft)	30	0	0	0	60	
Control Delay (s)	10.1	0.0	0.0	0.0	32.0	
Lane LOS	B				D	
Approach Delay (s)	3.5		0.0		32.0	
Approach LOS					D	
Intersection Summary						
Average Delay			4.4			
Intersection Capacity Utilization			41.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Existing (2 CVN)
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	415	15	26	331	1900	65	35	1900	1	21	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1720			1858	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.88			0.98	1.00
Satd. Flow (perm)	934	3521		825	3539			1534			1830	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	539	19	34	430	0	98	53	121	2	36	47
RTOR Reduction (vph)	0	4	0	0	0	0	0	33	0	0	0	30
Lane Group Flow (vph)	21	554	0	34	430	0	0	239	0	0	38	17
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.1	13.1		13.1	13.1			13.1			13.1	13.1
Effective Green, g (s)	13.1	13.1		13.1	13.1			13.1			13.1	13.1
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	345	1302		305	1309			567			677	585
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.16			0.02	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.42			0.06	0.03
Uniform Delay, d1	7.2	8.3		7.3	8.0			8.3			7.2	7.1
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.1			0.5			0.0	0.0
Delay (s)	7.3	8.6		7.5	8.1			8.8			7.2	7.1
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.5			8.1			8.8			7.2	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.4							A		
HCM 2000 Volume to Capacity ratio			0.42									
Actuated Cycle Length (s)			35.4						9.2			
Intersection Capacity Utilization			46.3%							A		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Existing (2 CVN)
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗			↙	↘
Volume (veh/h)	499	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	542	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)			767			
pX, platoon unblocked						
vC, conflicting volume			547		542	542
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			547		542	542
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1023		501	540
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	542	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	528			
Volume to Capacity	0.32	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	11.9			
Lane LOS			B			
Approach Delay (s)	0.0		11.9			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.3%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Existing (2 CVN)
Timing Plan: AM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑↑	↘	↙	↑↑↑			↙			↙	↘
Volume (vph)	20	617	33	22	1461	41	154	35	48	85	43	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5047		1770	5064			3323			3363	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5047		1770	5064			3323			3363	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	24	735	39	24	1605	45	186	42	58	104	52	28
RTOR Reduction (vph)	0	3	0	0	2	0	0	12	0	0	8	0
Lane Group Flow (vph)	24	771	0	24	1648	0	0	274	0	0	176	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2234		118	2157			646			653	
v/s Ratio Prot	0.01	c0.15		c0.01	c0.33			c0.08			c0.05	
v/s Ratio Perm												
v/c Ratio	0.16	0.35		0.20	0.76			0.42			0.27	
Uniform Delay, d1	76.7	33.0		79.5	44.0			63.7			61.6	
Progression Factor	1.00	1.00		1.33	0.69			1.00			1.00	
Incremental Delay, d2	0.5	0.4		0.8	2.4			0.5			0.2	
Delay (s)	77.2	33.4		106.7	32.8			64.1			61.9	
Level of Service	E	C		F	C			E			E	
Approach Delay (s)		34.7			33.8			64.1			61.9	
Approach LOS		C			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		38.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.53										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		66.2%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Existing (2 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	2	836	33	19	1626	11	17	4	29	52	10	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5056		1770	5080			1686		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.67	1.00	
Satd. Flow (perm)	1770	5056		1770	5080			1550		1247	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.70	0.70	0.70	0.70
Adj. Flow (vph)	2	939	37	22	1848	12	23	5	40	74	14	20
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	17	0
Lane Group Flow (vph)	2	974	0	22	1860	0	0	40	0	74	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases						4				8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3474		118	3716			258		207	283	
v/s Ratio Prot	0.00	0.19		c0.01	c0.37						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.28		0.19	0.50			0.15		0.36	0.06	
Uniform Delay, d1	86.1	10.9		79.4	10.2			64.1		66.5	63.1	
Progression Factor	1.71	0.28		1.40	0.31			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.6	0.4			0.3		1.1	0.1	
Delay (s)	147.7	3.3		111.4	3.5			64.4		67.5	63.2	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.6			4.8			64.4			66.2	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		7.9			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.47										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		65.1%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Existing (2 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	3	903	60	91	1489	49	137	18	86	160	34	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	0.85	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5038		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5038		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1015	67	110	1794	59	154	20	97	213	45	19
RTOR Reduction (vph)	0	4	0	0	0	28	0	0	80	0	3	0
Lane Group Flow (vph)	3	1078	0	110	1794	31	0	174	17	0	274	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.21		c0.06	c0.35			c0.10			c0.08	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.48		0.56	0.66	0.04		0.57	0.06		0.47	
Uniform Delay, d1	86.2	35.6		75.8	30.5	20.1		68.3	62.3		67.1	
Progression Factor	1.21	0.64		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.7		3.6	1.3	0.1		2.4	0.1		0.6	
Delay (s)	105.3	23.4		79.5	31.8	20.2		70.7	62.4		67.7	
Level of Service	F	C		E	C	C		E	E		E	
Approach Delay (s)		23.6			34.1			67.8			67.7	
Approach LOS		C			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		36.1			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		82.7%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Existing (2 CVN)
Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔↔↔	↔	↔	↔↔↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	13	1156	24	41	1612	11	15	6	46	36	2	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5080			1671			1723	
Flt Permitted	0.95	1.00		0.95	1.00			0.93			0.78	
Satd. Flow (perm)	1770	5070		1770	5080			1566			1387	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	14	1257	26	48	1874	13	18	7	55	47	3	26
RTOR Reduction (vph)	0	2	0	0	0	0	0	43	0	0	20	0
Lane Group Flow (vph)	14	1281	0	48	1887	0	0	37	0	0	56	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.3		2.9	39.5			15.0			15.0	
Effective Green, g (s)	0.7	37.3		2.9	39.5			15.0			15.0	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2667		72	2830			331			293	
v/s Ratio Prot	0.01	0.25		c0.03	c0.37							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.82	0.48		0.67	0.67			0.11			0.19	
Uniform Delay, d1	35.0	10.7		33.5	11.1			22.6			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	132.1	0.1		20.9	0.6			0.1			0.3	
Delay (s)	167.1	10.8		54.4	11.7			22.7			23.3	
Level of Service	F	B		D	B			C			C	
Approach Delay (s)		12.5			12.7			22.7			23.3	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		13.1			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		70.9			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		50.6%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Existing (2 CVN)
Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔↔↔	↔	↔	↔↔↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	87	1169	28	233	1556	205	70	69	736	224	88	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	101	1359	33	248	1655	218	78	77	818	267	105	87
RTOR Reduction (vph)	0	2	0	0	0	67	0	154	183	0	3	55
Lane Group Flow (vph)	101	1390	0	248	1655	151	78	299	259	267	111	23
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.3		17.9	47.2	47.2	6.7	29.7	29.7	10.4	33.4	33.4
Effective Green, g (s)	6.0	35.3		17.9	47.2	47.2	6.7	29.7	29.7	10.4	33.4	33.4
Actuated g/C Ratio	0.05	0.31		0.16	0.41	0.41	0.06	0.26	0.26	0.09	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	178	1552		275	2083	648	102	399	387	309	507	436
v/s Ratio Prot	0.03	c0.27		c0.14	0.33		0.04	c0.19		c0.08	c0.06	
v/s Ratio Perm						0.10			0.17			0.02
v/c Ratio	0.57	0.90		0.90	0.79	0.23	0.76	0.75	0.67	0.86	0.22	0.05
Uniform Delay, d1	53.3	38.2		47.8	29.8	22.2	53.5	39.3	38.3	51.7	31.0	29.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.1	7.1		30.1	2.2	0.2	28.3	7.7	4.3	21.3	0.2	0.0
Delay (s)	57.4	45.3		77.8	31.9	22.4	81.7	47.1	42.7	73.0	31.2	29.5
Level of Service	E	D		E	C	C	F	D	D	E	C	C
Approach Delay (s)		46.1			36.3			47.9			55.2	
Approach LOS		D			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		43.2			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.84										
Actuated Cycle Length (s)		115.2			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		79.5%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Existing (2 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	271	1032	0	148	964
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	304	1110	0	164	1071
RTOR Reduction (vph)	0	0	0	0	0	9
Lane Group Flow (vph)	0	304	1110	0	164	1062
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.31		0.09	c0.38
v/s Ratio Perm						
v/c Ratio		0.11	0.95		0.79	0.69
Uniform Delay, d1		2.5	26.2		34.3	13.1
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	16.0		18.4	1.4
Delay (s)		2.5	42.2		52.8	14.5
Level of Service		A	D		D	B
Approach Delay (s)		2.5	42.2		19.6	
Approach LOS		A	D		B	
Intersection Summary						
HCM 2000 Control Delay			27.1		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.84			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			55.9%		ICU Level of Service	B
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Existing (2 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	420	0	0	402	500	727	1	137	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3245		1681	1628				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3245		1681	1628				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	483	0	0	437	543	790	1	149	0	0	0
RTOR Reduction (vph)	0	0	0	0	340	0	0	32	0	0	0	0
Lane Group Flow (vph)	0	483	0	0	640	0	482	426	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.2			16.2		19.1	19.1				
Effective Green, g (s)		16.2			16.2		19.1	19.1				
Actuated g/C Ratio		0.37			0.37		0.44	0.44				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1324			1214		741	718				
v/s Ratio Prot		0.14			c0.20							
v/s Ratio Perm							c0.29	0.26				
v/c Ratio		0.36			0.53		0.65	0.59				
Uniform Delay, d1		9.8			10.6		9.5	9.2				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.4		2.1	1.3				
Delay (s)		10.0			11.0		11.5	10.5				
Level of Service		A			B		B	B				
Approach Delay (s)		10.0			11.0		11.0				0.0	
Approach LOS		A			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					10.8					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.59							
Actuated Cycle Length (s)					43.3					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					64.9%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												





















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Existing (2 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔			↔	↔	
Volume (veh/h)	0	3	4	65	13	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	90	32	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	133	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	133	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	858	1042	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	96	32			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	1042	1581	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		1.0				
Intersection Capacity Utilization		16.7%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Existing (2 CVN)
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Volume (veh/h)	0	4040	17	0	1796	243	0	0	906	0	0	55
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4208	18	0	1852	251	0	0	1007	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2122			4246			4958	6359	1452	3420	6243	782
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2122			4246			4958	6359	1452	3420	6243	782
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	249			34			0	0	1827	1	0	326
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1683	1683	859	741	741	621	1007	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	251	1007	83				
cSH	1700	1700	1700	1700	1700	1700	1827	326				
Volume to Capacity	0.99	0.99	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	89	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.4	19.8				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.4	19.8				
Approach LOS							A	C				
Intersection Summary												
Average Delay			1.5									
Intersection Capacity Utilization			143.1%		ICU Level of Service				H			
Analysis Period (min)			15									

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Existing (2 CVN)
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3806	130	0	1833	0	200	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3924	134	0	1909	0	244	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4078		4667	1415	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4078		4667	1415	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			40		1	123	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1569	1569	919	636	636	636	244
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	244
cSH	1700	1700	1700	1700	1700	1700	123
Volume to Capacity	0.92	0.92	0.54	0.37	0.37	0.37	1.99
Queue Length 95th (ft)	0	0	0	0	0	0	494
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	531.4
Lane LOS							F
Approach Delay (s)	0.0			0.0			531.4
Approach LOS							F
Intersection Summary							
Average Delay			20.9				
Intersection Capacity Utilization			97.5%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Existing (2 CVN)
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	
Volume (vph)	0	0	0	962	633	109	86	251			859	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3528	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3528	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1013	666	115	89	259	0	0	886	16
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	506	1276	0	89	259	0	0	900	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1432		98	1989			1568	
v/s Ratio Prot				c0.33	0.28		c0.05	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.08	0.96dl		0.91	0.13			0.57	
Uniform Delay, d1				31.1	29.7		42.3	9.3			18.6	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				63.6	7.4		61.4	0.0			0.5	
Delay (s)				94.7	37.0		103.7	9.3			19.2	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			53.3			33.5			19.2	
Approach LOS		A			D			C			B	
Intersection Summary												
HCM 2000 Control Delay			40.9			HCM 2000 Level of Service		D				
HCM 2000 Volume to Capacity ratio			0.79									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)		17.2				
Intersection Capacity Utilization		135.4%				ICU Level of Service		H				
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Existing (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	7	2106	106	0	0	0	0	337	433	759	1085	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.95	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3130	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3130	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2314	116	0	0	0	0	392	503	791	1130	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2322	87	0	0	0	0	612	248	791	1130	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.2	53.2	44.0	100.0	
Effective Green, g (s)		63.4	63.4					53.2	53.2	44.0	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					951	410	863	2022	
v/s Ratio Prot		c0.46						c0.20		c0.23	0.32	
v/s Ratio Perm			0.06						0.18			
v/c Ratio		1.26	0.15					0.64	0.60	0.92	0.56	
Uniform Delay, d1		55.8	37.7					52.7	51.9	63.7	23.6	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		122.1	0.1					1.5	2.5	14.2	0.3	
Delay (s)		177.9	37.8					54.2	54.4	77.9	23.9	
Level of Service		F	D					D	D	E	C	
Approach Delay (s)		171.2			0.0			54.3			46.2	
Approach LOS		F			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		105.6		HCM 2000 Level of Service					F			
HCM 2000 Volume to Capacity ratio		0.96										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)					14.4			
Intersection Capacity Utilization		135.4%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Existing (2 CVN)
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑↑
Volume (vph)	163	11	821	648	0	1146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3257			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3257			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	209	14	922	728	0	1232
RTOR Reduction (vph)	2	0	68	0	0	0
Lane Group Flow (vph)	221	0	1582	0	0	1232
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	296		2461			2540
v/s Ratio Prot	c0.14		c0.49			0.37
v/s Ratio Perm						
v/c Ratio	0.75		0.64			0.49
Uniform Delay, d1	61.4		9.3			7.5
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	9.9		1.3			0.7
Delay (s)	71.3		10.6			8.2
Level of Service	E		B			A
Approach Delay (s)	71.3		10.6			8.2
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay		14.0		HCM 2000 Level of Service		
HCM 2000 Volume to Capacity ratio		0.68			B	
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		
Intersection Capacity Utilization		76.9%		ICU Level of Service		
Analysis Period (min)		15			D	
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Existing (2 CVN)

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Volume (vph)	135	9	27	24	9	23	21	1392	46	63	1357	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1723		1770	3522		1770	3489	
Flt Permitted	0.70	0.70	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1243	1240	1583		1468		1770	3522		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	173	12	35	38	14	36	23	1497	49	68	1475	155
RTOR Reduction (vph)	0	0	29	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	92	93	6	0	66	0	23	1545	0	68	1627	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	18.6	18.6	18.6		18.6		2.9	68.1		8.0	73.2	
Effective Green, g (s)	18.6	18.6	18.6		18.6		2.9	68.1		8.0	73.2	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.62		0.07	0.67	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	211	210	268		249		46	2190		129	2332	
v/s Ratio Prot							0.01	0.44		c0.04	c0.47	
v/s Ratio Perm	0.07	c0.07	0.00		0.04							
v/c Ratio	0.44	0.44	0.02		0.26		0.50	0.71		0.53	0.70	
Uniform Delay, d1	40.7	40.8	37.9		39.5		52.6	13.9		48.9	11.3	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.4	1.5	0.0		0.6		8.3	1.1		3.9	0.9	
Delay (s)	42.2	42.3	37.9		40.1		60.9	15.0		52.8	12.2	
Level of Service	D	D	D		D		E	B		D	B	
Approach Delay (s)		41.6			40.1			15.7			13.8	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.0			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		109.5			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		72.0%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Existing (2 CVN)

Timing Plan: PM PEAK























	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖			↗			↗	↘	↖	↗	↘
Volume (vph)	0	0	0	7	0	136	0	1209	0	30	1488	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	10	0	197	0	1286	0	32	1600	0
RTOR Reduction (vph)	0	0	0	0	160	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	47	0	0	1286	0	32	1600	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					14.1			45.8		1.7	51.7	
Effective Green, g (s)					14.1			45.8		1.7	51.7	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					300			2135		39	2410	
v/s Ratio Prot					c0.03			0.36		0.02	c0.45	
v/s Ratio Perm												
v/c Ratio					0.16			0.60		0.82	0.66	
Uniform Delay, d1					25.9			9.4		36.9	7.0	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.2			0.5		76.9	0.7	
Delay (s)					26.1			9.9		113.9	7.7	
Level of Service					C			A		F	A	
Approach Delay (s)		0.0			26.1			9.9			9.8	
Approach LOS		A			C			A			A	
Intersection Summary												
HCM 2000 Control Delay		10.9			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		75.9			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		58.3%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Existing (2 CVN)

Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	275	47	112	6	65	397	26	547	2	131	1321	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1517		1854	1512	1770	3539	1352	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1517		1854	1512	1770	3539	1352	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	362	62	147	7	71	432	29	601	2	139	1405	66
RTOR Reduction (vph)	0	0	118	0	0	234	0	0	1	0	2	0
Lane Group Flow (vph)	362	62	29	0	78	198	29	601	1	139	1469	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.8	27.8	27.8		21.3	21.3	2.9	56.7	56.7	16.2	70.0	
Effective Green, g (s)	27.8	27.8	27.8		21.3	21.3	2.9	56.7	56.7	16.2	70.0	
Actuated g/C Ratio	0.20	0.20	0.20		0.15	0.15	0.02	0.40	0.40	0.11	0.50	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	347	366	298		279	227	36	1419	542	202	1738	
v/s Ratio Prot	c0.20	0.03			0.04		0.02	0.17		c0.08	c0.42	
v/s Ratio Perm			0.02			c0.13			0.00			
v/c Ratio	1.04	0.17	0.10		0.28	0.87	0.81	0.42	0.00	0.69	0.85	
Uniform Delay, d1	56.8	47.2	46.5		53.2	58.7	69.0	30.6	25.4	60.2	31.0	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	60.0	0.2	0.1		0.5	28.9	75.6	0.9	0.0	9.4	5.3	
Delay (s)	116.8	47.4	46.7		53.8	87.6	144.5	31.5	25.4	69.5	36.3	
Level of Service	F	D	D		D	F	F	C	C	E	D	
Approach Delay (s)		91.2			82.4			36.7			39.1	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay			54.3		HCM 2000 Level of Service					D		
HCM 2000 Volume to Capacity ratio			0.90									
Actuated Cycle Length (s)			141.4		Sum of lost time (s)					19.4		
Intersection Capacity Utilization			77.0%		ICU Level of Service					D		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

Existing (2 CVN)

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	296	466	3	34	169	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	329	518	4	48	192	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915				600
pX, platoon unblocked						
vC, conflicting volume	416	28			52	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	416	28			52	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	37	51			88	
cM capacity (veh/h)	520	1047			1554	
Direction, Lane #						
Volume Total	847	52	195			
Volume Left	329	0	192			
Volume Right	518	48	0			
cSH	1143	1700	1554			
Volume to Capacity	0.74	0.03	0.12			
Queue Length 95th (ft)	180	0	11			
Control Delay (s)	16.6	0.0	7.5			
Lane LOS	C		A			
Approach Delay (s)	16.6	0.0	7.5			
Approach LOS	C					
Intersection Summary						
Average Delay		14.2				
Intersection Capacity Utilization		39.3%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Existing (2 CVN)
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	299	6	581	37	0	1441
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	378	8	646	41	0	1619
RTOR Reduction (vph)	1	0	0	23	0	0
Lane Group Flow (vph)	385	0	646	18	0	1619
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.22		0.18			c0.46
v/s Ratio Perm				0.01		
v/c Ratio	0.46		0.42	0.03		1.07
Uniform Delay, d1	18.4		20.9	17.3		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.2	0.0		42.6
Delay (s)	18.8		21.1	17.3		72.6
Level of Service	B		C	B		E
Approach Delay (s)	18.8		20.9			72.6
Approach LOS	B		C			E
Intersection Summary						
HCM 2000 Control Delay			51.7		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.75			
Actuated Cycle Length (s)			105.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			89.7%		ICU Level of Service	E
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Existing (2 CVN)
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗	↖	↗
Volume (veh/h)	4	6	441	3	14	1380
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	513	3	15	1516
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1304	258			516	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1304	258			516	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	95	98			99	
cM capacity (veh/h)	150	741			1046	
Direction, Lane #						
Volume Total	20	342	174	15	758	758
Volume Left	8	0	0	15	0	0
Volume Right	12	0	3	0	0	0
cSH	287	1700	1700	1046	1700	1700
Volume to Capacity	0.07	0.20	0.10	0.01	0.45	0.45
Queue Length 95th (ft)	6	0	0	1	0	0
Control Delay (s)	18.5	0.0	0.0	8.5	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	18.5	0.0		0.1		
Approach LOS	C					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			48.1%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Existing (2 CVN)
Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↕	↖	↗	↕
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	28	53	390	11	96	1288
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	30	58	443	12	105	1415
RTOR Reduction (vph)	0	45	0	6	0	0
Lane Group Flow (vph)	30	13	443	6	105	1415
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	6.3	18.3	27.3	27.3	6.9	43.0
Effective Green, g (s)	6.3	13.2	27.3	27.3	6.9	43.0
Actuated g/C Ratio	0.11	0.23	0.47	0.47	0.12	0.73
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	190	356	1648	737	208	2596
v/s Ratio Prot	c0.02	0.01	0.13		0.06	c0.40
v/s Ratio Perm				0.00		
v/c Ratio	0.16	0.04	0.27	0.01	0.50	0.55
Uniform Delay, d1	23.7	17.7	9.6	8.4	24.2	3.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	0.0	0.1	0.0	1.9	0.2
Delay (s)	24.1	17.8	9.6	8.4	26.2	3.7
Level of Service	C	B	A	A	C	A
Approach Delay (s)	19.9		9.6			5.2
Approach LOS	B		A			A
Intersection Summary						
HCM 2000 Control Delay		6.8		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.60				
Actuated Cycle Length (s)		58.6		Sum of lost time (s)		18.1
Intersection Capacity Utilization		47.5%		ICU Level of Service		A
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Existing (2 CVN)
Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↕	↖	↗	↕
Lane Configurations		↗	↕			↕
Volume (veh/h)	0	21	381	17	0	1316
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	28	438	20	0	1430
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1163	229			457	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1163	229			457	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	188	774			1100	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	28	292	166	715	715	
Volume Left	0	0	0	0	0	
Volume Right	28	0	20	0	0	
cSH	774	1700	1700	1700	1700	
Volume to Capacity	0.04	0.17	0.10	0.42	0.42	
Queue Length 95th (ft)	3	0	0	0	0	
Control Delay (s)	9.8	0.0	0.0	0.0	0.0	
Lane LOS	A					
Approach Delay (s)	9.8	0.0		0.0		
Approach LOS	A					
Intersection Summary						
Average Delay		0.1				
Intersection Capacity Utilization		39.7%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Existing (2 CVN)

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	28	24	375	17	21	1293
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	39	33	399	18	23	1421
RTOR Reduction (vph)	0	30	0	7	0	0
Lane Group Flow (vph)	39	3	399	11	23	1421
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.4	27.2	27.2	1.8	36.5
Effective Green, g (s)	2.6	4.4	27.2	27.2	1.8	36.5
Actuated g/C Ratio	0.06	0.10	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	152	2106	942	69	2826
v/s Ratio Prot	c0.02	0.00	0.11		0.01	c0.40
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.39	0.02	0.19	0.01	0.33	0.50
Uniform Delay, d1	20.8	18.7	4.2	3.8	21.4	1.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.5	0.1	0.0	0.0	2.8	0.1
Delay (s)	23.3	18.8	4.3	3.8	24.2	1.7
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.2		4.2			2.0
Approach LOS	C		A			A

Intersection Summary

HCM 2000 Control Delay	3.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	45.7	Sum of lost time (s)	14.1
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Existing (2 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	10	13	79	7	0	167	12	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	10	14	103	9	0	188	13	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	10	14	112	201						
Volume Left (vph)	0	0	103	0						
Volume Right (vph)	0	14	0	13						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.13	0.18						
Capacity (veh/h)	874	1121	860	1121						
Control Delay (s)	7.1	6.2	7.7	6.9						
Approach Delay (s)	6.6		7.7	6.9						
Approach LOS	A		A	A						

Intersection Summary

Delay	7.2		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

NBC Coastal Campus

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Existing (2 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱	↰	↱	↰			
Volume (vph)	9	173	0	0	76	129	11	301	64	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1305	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	10	197	0	0	87	148	12	331	70	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	117	0	0	38	0	0	0
Lane Group Flow (vph)	10	197	0	0	87	31	12	331	32	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.5	8.5			8.5	8.5	18.9	18.9	18.9			
Effective Green, g (s)	8.5	8.5			8.5	8.5	18.9	18.9	18.9			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	271	388			388	329	819	1639	733			
v/s Ratio Prot		c0.11			0.05		0.01	c0.09				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.51			0.22	0.09	0.01	0.20	0.04			
Uniform Delay, d1	12.9	14.3			13.4	13.0	5.9	6.5	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.0			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.9	15.3			13.7	13.2	5.9	6.5	6.0			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.2			13.4		6.4			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.5			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.30										
Actuated Cycle Length (s)		40.8			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		40.1%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd









Existing (2 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱	↰
Volume (veh/h)	0	0	0	436	0	1450	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	0	0	495	0	1611	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1859	806	1611		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1859	806	1611		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	65	325	401		0		
Direction, Lane #							
Volume Total	0	0	248	248	1074	537	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.15	0.15	0.63	0.32	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			43.4%		ICU Level of Service		
Analysis Period (min)			15				A









NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Existing (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	81	0	63	1	1	0	68	301	11	1	1035	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3521		1770	3461	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3521		1770	3461	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	108	0	84	2	2	0	75	331	12	1	1150	200
RTOR Reduction (vph)	0	68	0	0	0	0	0	2	0	0	11	0
Lane Group Flow (vph)	108	16	0	2	2	0	75	341	0	1	1339	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	17.8	17.8		0.8	0.8		5.8	52.4		0.8	47.4	
Effective Green, g (s)	17.8	17.8		0.8	0.8		5.8	52.4		0.8	47.4	
Actuated g/C Ratio	0.20	0.20		0.01	0.01		0.06	0.58		0.01	0.52	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	347	310		15	16		113	2034		15	1808	
v/s Ratio Prot	c0.06	0.01		c0.00	0.00		c0.04	0.10		0.00	c0.39	
v/s Ratio Perm												
v/c Ratio	0.31	0.05		0.13	0.12		0.66	0.17		0.07	0.74	
Uniform Delay, d1	31.2	29.6		44.6	44.6		41.5	9.0		44.6	16.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.1		4.0	3.5		13.7	0.0		1.9	1.7	
Delay (s)	31.7	29.7		48.6	48.1		55.2	9.0		46.5	18.5	
Level of Service	C	C		D	D		E	A		D	B	
Approach Delay (s)		30.8			48.4			17.3			18.6	
Approach LOS		C			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		19.5										
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		90.7										
Intersection Capacity Utilization		61.6%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Existing (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	53	993	54	0	336	32	12	37	4	22	24	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5046			5019		1770	1834			1760	
Flt Permitted	0.95	1.00			1.00		0.71	1.00			0.18	
Satd. Flow (perm)	1770	5046			5019		1318	1834			315	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	60	1128	61	0	357	34	17	53	6	26	28	22
RTOR Reduction (vph)	0	3	0	0	7	0	0	2	0	0	8	0
Lane Group Flow (vph)	60	1186	0	0	384	0	17	57	0	0	68	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1909			2038		256	356			52	
v/s Ratio Prot	c0.03	c0.24			c0.08			c0.03				
v/s Ratio Perm							0.01				c0.21	
v/c Ratio	0.31	0.62			0.19		0.07	0.16			1.30	
Uniform Delay, d1	73.6	45.5			34.4		59.2	60.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.9	1.5			0.2		0.1	0.2			225.5	
Delay (s)	74.5	47.0			34.6		59.3	60.5			300.5	
Level of Service	E	D			C		E	E			F	
Approach Delay (s)		48.3			34.6			60.2			300.5	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		56.5										
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

Existing (2 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	1021	0	467	371	35	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3494							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3494							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1147	0	497	395	37	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1147	0	497	432	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3175							609
v/s Ratio Prot		c0.23		c0.14	c0.12							
v/s Ratio Perm												0.00
v/c Ratio		0.60		0.26	0.14							0.00
Uniform Delay, d1		44.9		20.4	0.9							34.8
Progression Factor		0.19		1.00	1.00							1.00
Incremental Delay, d2		1.1		0.1	0.0							0.0
Delay (s)		9.7		20.4	0.9							34.9
Level of Service		A		C	A							C
Approach Delay (s)		9.7			11.3		0.0				34.9	
Approach LOS		A			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		10.5					HCM 2000 Level of Service		B			
HCM 2000 Volume to Capacity ratio		0.42										
Actuated Cycle Length (s)		180.0					Sum of lost time (s)		22.3			
Intersection Capacity Utilization		42.2%					ICU Level of Service		A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave



















Existing (2 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	3	211	0	0	303	40	0	0	0	103	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	245	0	0	344	45	0	0	0	156	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	390			245			631	642	245	619	619	367
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	390			245			631	642	245	619	619	367
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	61	100	98
cM capacity (veh/h)	1169			1321			385	391	793	400	403	678
Direction, Lane #												
Volume Total	249	390	0	168								
Volume Left	3	0	0	156								
Volume Right	0	45	0	12								
cSH	1169	1321	1700	412								
Volume to Capacity	0.00	0.00	0.00	0.41								
Queue Length 95th (ft)	0	0	0	49								
Control Delay (s)	0.1	0.0	0.0	19.6								
Lane LOS	A			A								
Approach Delay (s)	0.1	0.0	0.0	19.6								
Approach LOS				A								
Intersection Summary												
Average Delay		4.1										
Intersection Capacity Utilization		31.2%					ICU Level of Service		A			
Analysis Period (min)		15										











NBC Coastal Campus
22: 3rd St & Palm Ave

Existing (2 CVN)
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	292	12	84	317	24	14	38	67	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	374	15	94	356	27	25	67	118	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	390	94	383	209	161						
Volume Left (vph)	9	0	94	0	25	61						
Volume Right (vph)	0	15	0	27	118	28						
Hadj (s)	0.53	0.01	0.53	-0.02	-0.28	0.00						
Departure Headway (s)	7.2	6.7	7.1	6.5	6.6	7.0						
Degree Utilization, x	0.02	0.72	0.19	0.70	0.38	0.31						
Capacity (veh/h)	472	520	485	529	480	438						
Control Delay (s)	9.1	23.7	10.5	21.9	13.6	13.2						
Approach Delay (s)	23.4		19.6		13.6	13.2						
Approach LOS	C		C		B	B						
Intersection Summary												
Delay			19.0									
Level of Service			C									
Intersection Capacity Utilization			41.2%	ICU Level of Service		A						
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Existing (2 CVN)
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	72	419	452	39	52	139
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	74	432	526	45	61	164
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	571				1129	285
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	571				1129	285
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	93				67	77
cM capacity (veh/h)	998				183	711
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	74	432	350	221	225	
Volume Left	74	0	0	0	61	
Volume Right	0	0	0	45	164	
cSH	998	1700	1700	1700	398	
Volume to Capacity	0.07	0.25	0.21	0.13	0.56	
Queue Length 95th (ft)	6	0	0	0	84	
Control Delay (s)	8.9	0.0	0.0	0.0	25.1	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		25.1	
Approach LOS					D	
Intersection Summary						
Average Delay			4.8			
Intersection Capacity Utilization			40.2%	ICU Level of Service		A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Existing (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	428	29	31	454	3	54	19	22	12	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3536			1754			1841	1583
Flt Permitted	0.47	1.00		0.45	1.00			0.79			0.90	1.00
Satd. Flow (perm)	871	3505		836	3536			1417			1669	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	510	35	34	499	3	66	23	27	16	53	39
RTOR Reduction (vph)	0	7	0	0	1	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	538	0	34	501	0	0	95	0	0	69	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Effective Green, g (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	415	1671		398	1686			309			364	345
v/s Ratio Prot		c0.15			0.14							
v/s Ratio Perm	0.04			0.04				c0.07			0.04	0.01
v/c Ratio	0.08	0.32		0.09	0.30			0.31			0.19	0.02
Uniform Delay, d1	4.3	4.9		4.3	4.8			9.9			9.6	9.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.6			0.3	0.0
Delay (s)	4.4	5.0		4.4	4.9			10.5			9.9	9.3
Level of Service	A	A		A	A			B			A	A
Approach Delay (s)		5.0			4.9			10.5			9.7	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		30.2			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		44.6%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Existing (2 CVN)
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	475	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	579	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			589		579	579
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			589		579	579
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			986		477	515
Direction, Lane #						
Volume Total	579	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	486			
Volume to Capacity	0.34	0.01	0.02			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.6			
Lane LOS			B			
Approach Delay (s)	0.0		12.6			
Approach LOS			B			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			35.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Existing (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	39	1312	117	55	739	124	92	85	59	164	75	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5023		1770	4976			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5023		1770	4976			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	41	1396	124	56	746	125	101	93	65	184	84	27
RTOR Reduction (vph)	0	6	0	0	12	0	0	19	0	0	4	0
Lane Group Flow (vph)	41	1514	0	56	859	0	0	240	0	0	291	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2112		157	1982			649			658	
v/s Ratio Prot	0.02	c0.30		c0.03	0.17			c0.07			c0.09	
v/s Ratio Perm												
v/c Ratio	0.21	0.72		0.36	0.43			0.37			0.44	
Uniform Delay, d1	72.8	43.3		77.2	39.4			62.9			63.9	
Progression Factor	1.00	1.00		1.28	0.67			1.00			1.00	
Incremental Delay, d2	0.5	1.2		1.3	0.7			0.4			0.5	
Delay (s)	73.3	44.4		99.8	27.0			63.3			64.4	
Level of Service	E	D		F	C			E			E	
Approach Delay (s)		45.2			31.4			63.3			64.4	
Approach LOS		D			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		44.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		115.8%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Existing (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	19	1580	54	46	1124	52	20	10	33	60	12	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5060		1770	5051			1703		1770	1718	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.63	1.00	
Satd. Flow (perm)	1770	5060		1770	5051			1555		1178	1718	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	19	1612	55	47	1159	54	24	12	40	71	14	15
RTOR Reduction (vph)	0	2	0	0	2	0	0	24	0	0	13	0
Lane Group Flow (vph)	19	1665	0	47	1211	0	0	52	0	71	16	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.8		16.0	130.8			22.0		22.0	22.0	
Effective Green, g (s)	12.0	126.8		16.0	130.8			22.0		22.0	22.0	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3564		157	3670			190		143	209	
v/s Ratio Prot	0.01	c0.33		c0.03	c0.24						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.16	0.47		0.30	0.33			0.28		0.50	0.08	
Uniform Delay, d1	79.3	11.7		76.8	8.8			71.8		73.8	70.0	
Progression Factor	1.47	0.13		1.60	0.31			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.3		0.9	0.2			0.8		2.7	0.2	
Delay (s)	117.3	1.9		123.7	3.0			72.5		76.5	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.2			7.5			72.5			74.7	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.9			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.45										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		57.7%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Existing (2 CVN)
Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Volume (vph)	25	1471	187	149	1195	77	122	38	121	146	42	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	4999		1770	5085	1583		1794	1583		3371	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	4999		1770	5085	1583		1794	1583		3371	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.92	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	27	1565	199	154	1232	79	133	41	132	197	57	26
RTOR Reduction (vph)	0	9	0	0	0	35	0	0	109	0	4	0
Lane Group Flow (vph)	27	1755	0	154	1232	44	0	174	23	0	276	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2			4				
Actuated Green, G (s)	12.0	79.7		19.6	87.7	87.7		30.7	30.7		30.7	
Effective Green, g (s)	12.0	79.7		19.6	87.7	87.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.07	0.44		0.11	0.49	0.49		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	118	2213		192	2477	771		305	269		574	
v/s Ratio Prot	0.02	c0.35		c0.09	0.24			c0.10			c0.08	
v/s Ratio Perm					0.03			0.01				
v/c Ratio	0.23	0.79		0.80	0.50	0.06		0.57	0.08		0.48	
Uniform Delay, d1	79.6	43.1		78.3	31.2	24.3		68.6	62.8		67.4	
Progression Factor	1.07	0.79		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.9	2.8		20.9	0.7	0.1		7.5	0.6		2.9	
Delay (s)	86.0	37.0		99.2	32.0	24.5		76.1	63.4		70.3	
Level of Service	F	D		F	C	C		E	E		E	
Approach Delay (s)		37.7			38.6			70.7			70.3	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		43.1			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		96.5%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Existing (2 CVN)
Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Volume (vph)	9	1592	47	162	1479	15	37	8	77	22	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5064		1770	5078			1678			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.84	
Satd. Flow (perm)	1770	5064		1770	5078			1516			1509	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	10	1769	52	171	1557	16	44	9	91	27	12	12
RTOR Reduction (vph)	0	3	0	0	1	0	0	72	0	0	10	0
Lane Group Flow (vph)	10	1818	0	171	1572	0	0	72	0	0	41	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.8	40.4		11.1	50.7			17.2			17.2	
Effective Green, g (s)	0.8	40.4		11.1	50.7			17.2			17.2	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2424		232	3050			308			307	
v/s Ratio Prot	0.01	c0.36		c0.10	0.31							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.62	0.75		0.74	0.52			0.23			0.14	
Uniform Delay, d1	41.7	17.9		35.2	9.7			28.1			27.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	57.6	1.3		11.5	0.1			0.4			0.2	
Delay (s)	99.2	19.2		46.8	9.9			28.5			27.7	
Level of Service	F	B		D	A			C			C	
Approach Delay (s)		19.7			13.5			28.5			27.7	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		17.3			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		84.4			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		61.6%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Existing (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	180	1537	23	313	1487	530	62	169	509	561	228	217
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	189	1618	24	337	1599	570	66	180	541	610	248	236
RTOR Reduction (vph)	0	1	0	0	0	88	0	26	263	0	2	134
Lane Group Flow (vph)	189	1641	0	337	1599	482	66	349	83	610	270	78
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2			4				8
Actuated Green, G (s)	11.2	36.3		45.1	70.2	70.2	8.6	36.3	36.3	11.8	39.5	39.5
Effective Green, g (s)	11.2	36.3		45.1	70.2	70.2	8.6	36.3	36.3	11.8	39.5	39.5
Actuated g/C Ratio	0.07	0.24		0.30	0.46	0.46	0.06	0.24	0.24	0.08	0.26	0.26
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	253	1216		527	2357	733	100	391	360	267	455	392
v/s Ratio Prot	0.06	c0.32		c0.19	c0.31		0.04	c0.21		c0.18	c0.15	
v/s Ratio Perm					0.30			0.06				0.05
v/c Ratio	0.75	1.35		0.64	0.68	0.66	0.89	0.23	2.28	0.59	0.20	
Uniform Delay, d1	68.7	57.6		46.1	31.8	31.3	70.0	55.7	46.3	69.8	48.9	43.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.4	162.9		2.6	0.8	2.1	15.1	21.8	0.3	589.8	2.1	0.3
Delay (s)	80.1	220.4		48.7	32.6	33.5	85.1	77.5	46.6	659.6	51.0	43.9
Level of Service	F	F		D	C	C	F	E	D	F	D	D
Approach Delay (s)		205.9			34.9			64.6			389.0	
Approach LOS		F			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		151.3			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.06										
Actuated Cycle Length (s)		151.4			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		113.0%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Existing (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	↔
Volume (vph)	0	479	809	0	420	1527
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	538	861	0	462	1678
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	538	861	0	462	1673
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.15	c0.24		0.26	c0.60
v/s Ratio Perm						
v/c Ratio		0.30	1.00		0.70	0.94
Uniform Delay, d1		11.6	30.3		21.2	13.2
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	31.6		3.2	10.6
Delay (s)		11.7	61.9		24.3	23.7
Level of Service		B	E		C	C
Approach Delay (s)		11.7	61.9		23.9	
Approach LOS		B	E		C	
Intersection Summary						
HCM 2000 Control Delay		31.3			HCM 2000 Level of Service	
HCM 2000 Volume to Capacity ratio		1.03				C
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	
Intersection Capacity Utilization		81.3%			ICU Level of Service	
Analysis Period (min)		15				D
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Existing (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	893	0	0	502	239	410	2	102	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	930	0	0	564	269	441	2	110	0	0	0
RTOR Reduction (vph)	0	0	0	0	100	0	0	42	0	0	0	0
Lane Group Flow (vph)	0	930	0	0	733	0	282	229	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases							2					
Actuated Green, G (s)		18.3			18.3		13.3	13.3				
Effective Green, g (s)		18.3			18.3		13.3	13.3				
Actuated g/C Ratio		0.46			0.46		0.34	0.34				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1635			1556		564	542				
v/s Ratio Prot		0.26			0.22							
v/s Ratio Perm							0.17	0.14				
v/c Ratio		0.57			0.47		0.50	0.42				
Uniform Delay, d1		7.8			7.3		10.5	10.2				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.5			0.2		0.7	0.5				
Delay (s)		8.2			7.6		11.2	10.7				
Level of Service		A			A		B	B				
Approach Delay (s)		8.2			7.6		11.0			0.0		
Approach LOS		A			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		8.6			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.54										
Actuated Cycle Length (s)		39.6			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		45.9%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												













NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Existing (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	3	36	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	3	52	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	73	52	52			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	73	52	52			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	926	1015	1554			
Direction, Lane #						
Volume Total	16	12	52			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	1015	1554	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.3	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.3	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.5				
Intersection Capacity Utilization		17.2%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St










Near-Term (1 CVN)
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1313	35	0	3269	532	0	0	477	0	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1582	42	0	3553	578	0	0	596	0	0	13
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4152			1644			2841	5775	588	4410	5506	1514
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4152			1644			2841	5775	588	4410	5506	1514
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	55	100	100	87
cM capacity (veh/h)	37			383			6	0	1337	0	0	105
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	633	633	359	1421	1421	1289	596	13				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	42	0	0	578	596	13				
cSH	1700	1700	1700	1700	1700	1700	1337	105				
Volume to Capacity	0.37	0.37	0.21	0.84	0.84	0.76	0.45	0.13				
Queue Length 95th (ft)	0	0	0	0	0	0	59	11				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.8	44.1				
Lane LOS							A	E				
Approach Delay (s)	0.0			0.0			9.8	44.1				
Approach LOS							A	E				
Intersection Summary												
Average Delay				1.0								
Intersection Capacity Utilization				90.2%	ICU Level of Service			E				
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Near-Term (1 CVN)
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1174	203	0	3168	0	233	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1334	231	0	3520	0	253	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1585	2663		600	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1585	2663		600	
tC, single (s)			4.1	6.8		6.9	
tC, 2 stage (s)							
tF (s)			2.2	3.5		3.3	
p0 queue free %			100	100		41	
cM capacity (veh/h)			404	18		429	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	534	534	498	1173	1173	1173	253
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	231	0	0	0	253
cSH	1700	1700	1700	1700	1700	1700	429
Volume to Capacity	0.31	0.31	0.29	0.69	0.69	0.69	0.59
Queue Length 95th (ft)	0	0	0	0	0	0	92
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	24.7
Lane LOS							C
Approach Delay (s)	0.0			0.0			24.7
Approach LOS							C
Intersection Summary							
Average Delay				1.2			
Intersection Capacity Utilization				76.1%	ICU Level of Service		D
Analysis Period (min)				15			

NBC Coastal Campus
3: Orange Ave & Third St

Near-Term (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↔↔↔	↔↔↔		↔	↔↔			↔↔	
Volume (vph)	0	0	0	1562	1536	250	41	94	0	0	259	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4641		1770	3539			3522	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4641		1770	3539			3522	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1680	1652	269	55	127	0	0	298	7
RTOR Reduction (vph)	0	0	0	0	6	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	890	2705	0	55	127	0	0	304	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.5	131.5		15.5	41.9			21.2	
Effective Green, g (s)				131.5	131.5		15.5	41.9			21.2	
Actuated g/C Ratio				0.71	0.71		0.08	0.23			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1081	3298		148	801			403	
v/s Ratio Prot				c0.58	0.58		c0.03	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.82	0.82		0.37	0.16			0.75	
Uniform Delay, d1				18.7	18.6		80.1	57.4			79.4	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				5.2	1.7		1.6	0.1			7.8	
Delay (s)				23.8	20.3		81.7	57.5			87.2	
Level of Service				C	C		F	E			F	
Approach Delay (s)		0.0			21.2			64.8			87.2	
Approach LOS		A			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		28.0		HCM 2000 Level of Service					C			
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		185.0		Sum of lost time (s)					16.8			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Near-Term (1 CVN)
Timing Plan: AM PEAK







Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔↔	↔					↔↔	↔	↔↔	↔↔	
Volume (vph)	0	501	52	0	0	0	0	126	217	435	1444	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.93	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3166	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3166	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	0	545	57	0	0	0	0	147	236	473	1504	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	66	66	0	0	0
Lane Group Flow (vph)	0	545	28	0	0	0	0	197	54	473	1504	0
Turn Type		NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		60.0	60.0					62.2	62.2	35.0	100.0	
Effective Green, g (s)		60.0	60.0					62.2	62.2	35.0	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.20	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1147	522	700	2062	
v/s Ratio Prot		c0.11						0.06		0.14	c0.42	
v/s Ratio Perm			0.02						0.04			
v/c Ratio		0.31	0.05					0.17	0.10	0.68	0.73	
Uniform Delay, d1		40.6	36.9					37.2	36.2	63.1	26.0	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.0					0.1	0.1	2.6	1.3	
Delay (s)		40.7	37.0					37.3	36.3	65.7	27.3	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		40.4			0.0			37.0			36.5	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		37.3		HCM 2000 Level of Service					D			
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)					14.4			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Near-Term (1 CVN)

Timing Plan: AM PEAK













Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	225	7	1151	626	0	1144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3310			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3310			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	262	8	1238	673	0	1204
RTOR Reduction (vph)	1	0	58	0	0	0
Lane Group Flow (vph)	269	0	1853	0	0	1204
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	17.3		42.7			42.7
Effective Green, g (s)	17.3		42.7			42.7
Actuated g/C Ratio	0.25		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	398		2045			2077
v/s Ratio Prot	c0.17		c0.56			0.36
v/s Ratio Perm						
v/c Ratio	0.67		0.91			0.58
Uniform Delay, d1	23.4		11.5			7.9
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	4.5		6.2			0.4
Delay (s)	27.8		17.7			8.3
Level of Service	C		B			A
Approach Delay (s)	27.8		17.7			8.3
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			15.1		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.88			
Actuated Cycle Length (s)			69.1		Sum of lost time (s)	12.1
Intersection Capacity Utilization			78.5%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Near-Term (1 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	49	3	11	8	0	6	21	1374	27	41	1291	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1693	1583		1706		1770	3529		1770	3524	
Frt Permitted	0.74	0.78	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1308	1380	1583		1517		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	57	3	13	16	0	12	25	1636	32	45	1403	41
RTOR Reduction (vph)	0	0	11	0	24	0	0	1	0	0	1	0
Lane Group Flow (vph)	30	30	2	0	4	0	25	1667	0	45	1443	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.3	15.3	15.3		15.3		2.7	63.5		4.0	64.8	
Effective Green, g (s)	15.3	15.3	15.3		15.3		2.7	63.5		4.0	64.8	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	206	217	249		239		49	2312		73	2356	
v/s Ratio Prot							0.01	c0.47		c0.03	0.41	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.15	0.14	0.01		0.02		0.51	0.72		0.62	0.61	
Uniform Delay, d1	35.2	35.1	34.4		34.5		46.4	10.9		45.7	9.0	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		8.7	1.1		14.5	0.5	
Delay (s)	35.5	35.4	34.4		34.5		55.1	12.0		60.2	9.5	
Level of Service	D	D	C		C		E	B		E	A	
Approach Delay (s)		35.3			34.5			12.7			11.0	
Approach LOS		D			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.6							HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio			0.61									
Actuated Cycle Length (s)			96.9							Sum of lost time (s)	14.1	
Intersection Capacity Utilization			57.3%							ICU Level of Service	B	
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Near-Term (1 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	24	0	1316	8	444	839	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	36	0	1446	9	453	856	0
RTOR Reduction (vph)	0	0	0	0	33	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1446	4	453	856	0
Turn Type					NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.41		c0.26	0.24	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.87	0.01	0.74	0.29	
Uniform Delay, d1					60.6			34.5	20.4	41.8	2.3	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			4.3	0.0	4.9	0.2	
Delay (s)					60.6			17.0	20.5	46.7	2.6	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			17.0			17.9	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		18.0			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		79.8%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Near-Term (1 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	53	15	2	68	134	143	1148	6	303	254	324
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.98	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1860	1510	1770	3539	1347	1770	3187	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1860	1510	1770	3539	1347	1770	3187	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	49	82	23	2	77	152	159	1276	7	348	292	372
RTOR Reduction (vph)	0	0	21	0	0	128	0	0	4	0	159	0
Lane Group Flow (vph)	49	82	2	0	79	24	159	1276	3	348	505	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1046	
v/s Ratio Prot	0.03	c0.04			c0.04		0.09	c0.36		c0.20	0.16	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.40	0.64	0.02		0.27	0.10	0.29	0.81	0.01	1.02	0.48	
Uniform Delay, d1	64.6	65.7	62.9		53.6	52.2	37.9	34.9	22.3	58.5	38.9	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.90	
Incremental Delay, d2	2.2	10.5	0.1		0.5	0.2	0.3	4.6	0.0	53.7	1.6	
Delay (s)	66.8	76.2	63.0		54.1	52.3	38.2	39.5	22.4	109.9	36.7	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		71.2			52.9			39.3			61.9	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		50.2			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		84.1%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Near-Term (1 CVN)
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖			↖
Volume (veh/h)	24	207	5	91	339	9
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	28	244	6	114	368	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked	0.99					
vC, conflicting volume	810	63			120	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	801	63			120	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	76			75	
cM capacity (veh/h)	262	1001			1468	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	272	120	378			
Volume Left	28	0	368			
Volume Right	244	114	0			
cSH	1118	1700	1468			
Volume to Capacity	0.24	0.07	0.25			
Queue Length 95th (ft)	24	0	25			
Control Delay (s)	10.9	0.0	8.1			
Lane LOS	B		A			
Approach Delay (s)	10.9	0.0	8.1			
Approach LOS	B					
Intersection Summary						
Average Delay		7.8				
Intersection Capacity Utilization		35.9%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near-Term (1 CVN)
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖	↖		↖
Volume (vph)	27	4	1308	425	0	229
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.98		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.98		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1724		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1724		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	36	5	1377	447	0	358
RTOR Reduction (vph)	5	0	0	122	0	0
Lane Group Flow (vph)	36	0	1377	325	0	358
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	1.9		31.6	31.6		31.6
Effective Green, g (s)	1.9		31.6	31.6		31.6
Actuated g/C Ratio	0.04		0.73	0.73		0.73
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	75		2576	1106		2576
v/s Ratio Prot	c0.02		c0.39			0.10
v/s Ratio Perm				0.21		
v/c Ratio	0.48		0.53	0.29		0.14
Uniform Delay, d1	20.3		2.6	2.0		1.8
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.8		0.2	0.1		0.0
Delay (s)	25.1		2.8	2.2		1.8
Level of Service	C		A	A		A
Approach Delay (s)	25.1		2.7			1.8
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.0		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.53				
Actuated Cycle Length (s)		43.4		Sum of lost time (s)	9.9	
Intersection Capacity Utilization		48.6%		ICU Level of Service	A	
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Near-Term (1 CVN)

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (veh/h)	0	16	2161	6	6	257
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	28	2324	6	9	378
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2533	1165			2330	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2533	1165			2330	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	85			96	
cM capacity (veh/h)	22	187			210	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	28	1549	781	9	189	189
Volume Left	0	0	0	9	0	0
Volume Right	28	0	6	0	0	0
cSH	187	1700	1700	210	1700	1700
Volume to Capacity	0.15	0.91	0.46	0.04	0.11	0.11
Queue Length 95th (ft)	13	0	0	3	0	0
Control Delay (s)	27.5	0.0	0.0	22.9	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	27.5	0.0		0.5		
Approach LOS	D					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		69.9%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

Near-Term (1 CVN)

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (vph)	18	90	2072	13	39	218
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	22	111	2228	14	57	316
RTOR Reduction (vph)	0	4	0	1	0	0
Lane Group Flow (vph)	22	107	2228	13	57	316
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.9	26.0	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.9	20.9	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	262	308	2251	1007	82	2707
v/s Ratio Prot	0.01	c0.07	c0.63		c0.03	0.09
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.35	0.99	0.01	0.70	0.12
Uniform Delay, d1	39.4	37.3	19.2	7.2	50.3	3.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	16.4	0.0	22.5	0.0
Delay (s)	39.5	37.9	35.6	7.2	72.9	3.3
Level of Service	D	D	D	A	E	A
Approach Delay (s)	38.2		35.4			13.9
Approach LOS	D		D			B
Intersection Summary						
HCM 2000 Control Delay		32.6		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio		0.86				
Actuated Cycle Length (s)		107.2		Sum of lost time (s)		18.1
Intersection Capacity Utilization		73.7%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Near-Term (1 CVN)
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↖↗			↖↗
Volume (veh/h)	0	34	2049	27	0	234
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	55	2157	28	0	316
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2329	1093			2185	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2329	1093			2185	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	74			100	
cM capacity (veh/h)	31	209			239	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	55	1438	747	158	158	
Volume Left	0	0	0	0	0	
Volume Right	55	0	28	0	0	
cSH	209	1700	1700	1700	1700	
Volume to Capacity	0.26	0.85	0.44	0.09	0.09	
Queue Length 95th (ft)	25	0	0	0	0	
Control Delay (s)	28.2	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	28.2	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.6				
Intersection Capacity Utilization		67.5%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Near-Term (1 CVN)
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖↗	↖	↖	↖↗
Volume (vph)	11	7	2075	34	16	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	18	11	2161	35	20	259
RTOR Reduction (vph)	0	4	0	8	0	0
Lane Group Flow (vph)	18	7	2161	27	20	259
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.5	59.2	59.2	2.1	68.8
Effective Green, g (s)	1.4	3.5	59.2	59.2	2.1	68.8
Actuated g/C Ratio	0.02	0.05	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	72	2727	1220	48	3170
v/s Ratio Prot	c0.01	0.00	c0.61		c0.01	0.07
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.56	0.10	0.79	0.02	0.42	0.08
Uniform Delay, d1	37.4	35.1	5.2	2.1	36.7	0.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	20.7	0.6	1.6	0.0	5.8	0.0
Delay (s)	58.1	35.7	6.8	2.1	42.5	0.5
Level of Service	E	D	A	A	D	A
Approach Delay (s)	49.6		6.8			3.5
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		6.9		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.77				
Actuated Cycle Length (s)		76.8		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		70.2%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (1 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control	Stop			Yield			Stop		Stop	
Volume (vph)	0	3	0	47	2	0	46	3	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	12	0	87	4	0	73	5	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	12	0	91	73	5					
Volume Left (vph)	0	0	87	0	0					
Volume Right (vph)	0	0	0	0	5					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.2	3.2					
Degree Utilization, x	0.01	0.00	0.11	0.08	0.00					
Capacity (veh/h)	829	1121	814	835	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.4%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (1 CVN)

Timing Plan: AM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑			↑	↑	↑	↑	↑			
Volume (vph)	3	38	0	0	34	233	4	1873	53	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1353	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	4	51	0	0	47	324	4	1993	56	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	23	0	0	0	0
Lane Group Flow (vph)	4	51	0	0	47	268	4	1993	33	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.9	16.9			16.9	16.9	47.7	43.6	43.6			
Effective Green, g (s)	16.9	16.9			16.9	16.9	47.7	43.6	43.6			
Actuated g/C Ratio	0.23	0.23			0.23	0.23	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	309	426			426	362	1142	2087	933			
v/s Ratio Prot		0.03			0.03		0.00	c0.56				
v/s Ratio Perm	0.00					c0.17			0.02			
v/c Ratio	0.01	0.12			0.11	0.74	0.00	0.95	0.04			
Uniform Delay, d1	22.0	22.6			22.6	26.5	4.7	14.2	6.3			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	8.0	0.0	10.9	0.0			
Delay (s)	22.1	22.7			22.7	34.4	4.7	25.2	6.4			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.7				32.9		24.6			0.0	
Approach LOS		C				C		C			A	
Intersection Summary												
HCM 2000 Control Delay		25.8				HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio		0.90										
Actuated Cycle Length (s)		73.9				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		85.8%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near-Term (1 CVN)

Timing Plan: AM PEAK





















							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	0	1667	0	178	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	0	1736	0	225	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1094	113	225		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1094	113	225		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	208	919	1340		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	868	868	150	75	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.51	0.51	0.09	0.04	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			49.4%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near-Term (1 CVN)

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	406	2	40	50	8	21	27	1543	11	4	131	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	1.00		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1595		1770	1661		1770	3535		1770	3401	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1595		1770	1661		1770	3535		1770	3401	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	461	2	45	161	26	68	28	1624	12	6	190	67
RTOR Reduction (vph)	0	31	0	0	64	0	0	1	0	0	31	0
Lane Group Flow (vph)	461	16	0	161	30	0	28	1635	0	6	226	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	28.1	28.1		5.1	5.1		2.0	40.1		0.9	39.0	
Effective Green, g (s)	28.1	28.1		5.1	5.1		2.0	40.1		0.9	39.0	
Actuated g/C Ratio	0.30	0.30		0.05	0.05		0.02	0.43		0.01	0.42	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	534	481		96	90		38	1522		17	1424	
v/s Ratio Prot	c0.26	0.01		c0.09	0.02		c0.02	c0.46		0.00	0.07	
v/s Ratio Perm												
v/c Ratio	0.86	0.03		1.68	0.33		0.74	1.07		0.35	0.16	
Uniform Delay, d1	30.7	22.9		44.0	42.4		45.3	26.5		45.8	16.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	13.5	0.0		345.6	2.2		53.2	46.0		12.2	0.1	
Delay (s)	44.2	22.9		389.6	44.5		98.5	72.5		58.0	16.9	
Level of Service	D	C		F	D		F	E		E	B	
Approach Delay (s)		42.3			262.4			72.9			17.8	
Approach LOS		D			F			E			B	
Intersection Summary												
HCM 2000 Control Delay			79.7				HCM 2000 Level of Service			E		
HCM 2000 Volume to Capacity ratio			1.04									
Actuated Cycle Length (s)			93.1			Sum of lost time (s)		18.9				
Intersection Capacity Utilization			80.6%			ICU Level of Service		D				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Near-Term (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	8	215	20	0	1397	18	39	24	2	21	43	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5022			5075		1770	1845			1732	
Flt Permitted	0.95	1.00			1.00		0.66	1.00			0.17	
Satd. Flow (perm)	1770	5022			5075		1229	1845			292	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	0.77
Adj. Flow (vph)	9	242	22	0	1535	20	46	29	2	27	56	70
RTOR Reduction (vph)	0	6	0	0	1	0	0	2	0	0	17	0
Lane Group Flow (vph)	9	258	0	0	1554	0	46	29	0	0	136	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1899			2061		238	358			48	
v/s Ratio Prot	c0.01	0.05			c0.31			0.02				
v/s Ratio Perm							c0.04				c0.47	
v/c Ratio	0.05	0.14			0.75		0.19	0.08			2.84	
Uniform Delay, d1	71.5	36.7			45.8		60.7	59.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			2.4		0.4	0.1			882.4	
Delay (s)	71.6	36.8			48.2		61.1	59.4			957.4	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		38.0			48.2			60.4			957.4	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		114.9			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		65.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Near-Term (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	232	0	407	1406	9	0	0	0	0	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	283	0	433	1496	10	0	0	0	0	0	19
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	283	0	433	1506	0	0	0	0	0	0	7
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.06		0.13	c0.43							
v/s Ratio Perm												0.00
v/c Ratio		0.15		0.25	0.47							0.01
Uniform Delay, d1		36.8		25.7	1.3							34.9
Progression Factor		0.40		1.00	1.00							1.00
Incremental Delay, d2		0.2		0.1	0.1							0.0
Delay (s)		15.0		25.8	1.4							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.0			6.9		0.0				35.0	
Approach LOS		B			A		A				C	
Intersection Summary												
HCM 2000 Control Delay		8.1			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.48										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		60.8%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

Near-Term (1 CVN)

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	10	234	0	0	129	105	0	0	0	48	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	12	279	0	0	139	113	0	0	0	53	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	252			279			503	554	279	498	498	195
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	252			279			503	554	279	498	498	195
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1314			1284			473	436	760	480	470	846
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	290	252	0	58								
Volume Left	12	0	0	53								
Volume Right	0	113	0	5								
cSH	1314	1284	1700	500								
Volume to Capacity	0.01	0.00	0.00	0.12								
Queue Length 95th (ft)	1	0	0	10								
Control Delay (s)	0.4	0.0	0.0	13.1								
Lane LOS	A			A	B							
Approach Delay (s)	0.4	0.0	0.0	13.1								
Approach LOS				A	B							
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				30.4%								A
Analysis Period (min)				15								

NBC Coastal Campus

22: 3rd St & Palm Ave













Near-Term (1 CVN)

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations	↔	↔		↔	↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	273	5	27	210	25	12	15	127	12	11	15
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	9	317	6	29	226	27	15	19	157	15	14	19
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	323	29	253	190	48						
Volume Left (vph)	9	0	29	0	15	15						
Volume Right (vph)	0	6	0	27	157	19						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.1	5.5	5.1	5.7						
Degree Utilization, x	0.02	0.50	0.05	0.39	0.27	0.08						
Capacity (veh/h)	575	631	562	625	632	544						
Control Delay (s)	7.9	12.6	8.2	10.7	10.0	9.2						
Approach Delay (s)	12.5		10.5		10.0	9.2						
Approach LOS	B		B		A	A						
Intersection Summary												
Delay				11.1								
Level of Service				B								
Intersection Capacity Utilization				37.7%								A
Analysis Period (min)				15								

























NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Near-Term (1 CVN)
Timing Plan: AM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	226	428	335	154	18	70
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	286	542	409	188	25	99
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	596				1616	298
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	596				1616	298
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	71				62	86
cM capacity (veh/h)	976				67	698
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	286	542	272	324	124	
Volume Left	286	0	0	0	25	
Volume Right	0	0	0	188	99	
cSH	976	1700	1700	1700	238	
Volume to Capacity	0.29	0.32	0.16	0.19	0.52	
Queue Length 95th (ft)	31	0	0	0	68	
Control Delay (s)	10.2	0.0	0.0	0.0	35.5	
Lane LOS	B				E	
Approach Delay (s)	3.5		0.0		35.5	
Approach LOS					E	
Intersection Summary						
Average Delay			4.7			
Intersection Capacity Utilization			42.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Near-Term (1 CVN)
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	421	16	27	336		66	37		82	2	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3520		1770	3539			1721			1857	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.87			0.98	1.00
Satd. Flow (perm)	929	3520		817	3539			1527			1824	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	22	547	21	35	436	0	100	56	124	3	48	48
RTOR Reduction (vph)	0	4	0	0	0	0	0	33	0	0	0	30
Lane Group Flow (vph)	22	564	0	35	436	0	0	247	0	0	51	18
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.5	13.5		13.5	13.5			13.3			13.3	13.3
Effective Green, g (s)	13.5	13.5		13.5	13.5			13.3			13.3	13.3
Actuated g/C Ratio	0.38	0.38		0.38	0.38			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	348	1320		306	1327			564			673	584
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.16			0.03	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.44			0.08	0.03
Uniform Delay, d1	7.2	8.4		7.3	8.0			8.5			7.4	7.2
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.1			0.5			0.0	0.0
Delay (s)	7.3	8.6		7.5	8.2			9.1			7.4	7.3
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.5			8.1			9.1			7.3	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.4							A		
HCM 2000 Volume to Capacity ratio			0.43									
Actuated Cycle Length (s)			36.0						9.2			
Intersection Capacity Utilization			47.4%							A		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Near-Term (1 CVN)
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗			↙	
Volume (veh/h)	506	5	0	0	3	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	550	5	0	0	3	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			555		550	550
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			555		550	550
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1015		496	535
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	550	5	10			
Volume Left	0	0	3			
Volume Right	0	5	7			
cSH	1700	1700	521			
Volume to Capacity	0.32	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.0			
Lane LOS			B			
Approach Delay (s)	0.0		12.0			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near-Term (1 CVN)
Timing Plan: AM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↙
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑↑	↘	↙	↑↑↑			↙			↙	
Volume (vph)	22	663	40	25	1548	45	168	38	53	93	47	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5042		1770	5064			3323			3361	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5042		1770	5064			3323			3361	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	26	789	48	27	1701	49	202	46	64	113	57	32
RTOR Reduction (vph)	0	3	0	0	2	0	0	13	0	0	9	0
Lane Group Flow (vph)	26	834	0	27	1748	0	0	299	0	0	193	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2232		118	2157			646			653	
v/s Ratio Prot	0.01	c0.17		c0.02	c0.35			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.18	0.37		0.23	0.81			0.46			0.30	
Uniform Delay, d1	76.8	33.5		79.6	45.3			64.2			62.0	
Progression Factor	1.00	1.00		1.30	0.69			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.9	3.0			0.5			0.3	
Delay (s)	77.3	34.0		104.2	34.5			64.7			62.2	
Level of Service	E	C		F	C			E			E	
Approach Delay (s)		35.3			35.5			64.7			62.2	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		40.1			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		68.0%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Near-Term (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	3	901	36	21	1727	13	19	5	32	57	11	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5056		1770	5080			1691		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.65	1.00	
Satd. Flow (perm)	1770	5056		1770	5080			1545		1208	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	3	1012	40	24	1962	15	26	7	44	81	16	23
RTOR Reduction (vph)	0	2	0	0	0	0	0	27	0	0	19	0
Lane Group Flow (vph)	3	1050	0	24	1977	0	0	50	0	81	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases						4				8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3474		118	3716			257		201	283	
v/s Ratio Prot	0.00	0.21		c0.01	c0.39						0.01	
v/s Ratio Perm								0.03		c0.07		
v/c Ratio	0.08	0.30		0.20	0.53			0.20		0.40	0.07	
Uniform Delay, d1	86.2	11.1		79.5	10.6			64.6		67.0	63.2	
Progression Factor	1.62	0.28		1.37	0.30			1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.2		0.6	0.4			0.4		1.3	0.1	
Delay (s)	140.4	3.3		109.7	3.6			65.0		68.3	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.7			4.8			65.0			66.7	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.50										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		67.1%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near-Term (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	4	974	66	100	1578	54	149	20	94	174	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5037		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5037		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1094	74	120	1901	65	167	22	106	232	49	21
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	88	0	3	0
Lane Group Flow (vph)	4	1164	0	120	1901	35	0	189	18	0	299	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.23		c0.07	c0.37			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.10	0.52		0.61	0.70	0.04		0.62	0.07		0.51	
Uniform Delay, d1	86.2	36.3		76.3	31.5	20.2		69.0	62.4		67.7	
Progression Factor	1.19	0.63		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.9		5.6	1.6	0.1		3.6	0.1		0.8	
Delay (s)	104.2	23.6		81.9	33.1	20.3		72.6	62.5		68.4	
Level of Service	F	C		F	C	C		E	E		E	
Approach Delay (s)		23.9			35.5			69.0			68.4	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		37.1			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		84.4%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Near-Term (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	15	1248	27	45	1712	13	17	7	51	40	3	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5069		1770	5080			1672			1725	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.77	
Satd. Flow (perm)	1770	5069		1770	5080			1561			1371	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	16	1357	29	52	1991	15	20	8	61	53	4	29
RTOR Reduction (vph)	0	2	0	0	0	0	0	48	0	0	23	0
Lane Group Flow (vph)	16	1384	0	52	2006	0	0	41	0	0	63	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.1		2.9	39.3			15.2			15.2	
Effective Green, g (s)	0.7	37.1		2.9	39.3			15.2			15.2	
Actuated g/C Ratio	0.01	0.52		0.04	0.55			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2652		72	2815			334			293	
v/s Ratio Prot	0.01	0.27		c0.03	c0.39							
v/s Ratio Perm								0.03			c0.05	
v/c Ratio	0.94	0.52		0.72	0.71			0.12			0.22	
Uniform Delay, d1	35.1	11.1		33.6	11.6			22.5			22.9	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	188.5	0.2		29.8	0.9			0.2			0.4	
Delay (s)	223.6	11.3		63.4	12.5			22.6			23.3	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		13.7			13.8			22.6			23.3	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		14.2			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		70.9			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		54.7%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near-Term (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰		↰	↰	↰	↰	↰	↰
Volume (vph)	95	1262	31	254	1651	223	76	75	800	244	96	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	110	1467	36	270	1756	237	84	83	889	290	114	95
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	180	0	3	61
Lane Group Flow (vph)	110	1501	0	270	1756	170	84	339	300	290	121	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.3	31.1	31.1	10.4	33.2	33.2
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.3	31.1	31.1	10.4	33.2	33.2
Actuated g/C Ratio	0.05	0.30		0.15	0.40	0.40	0.07	0.27	0.27	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	176	1530		271	2055	639	126	413	401	306	498	428
v/s Ratio Prot	0.03	c0.30		c0.15	0.35		0.05	c0.22		c0.08	0.07	
v/s Ratio Perm						0.11			0.20			0.02
v/c Ratio	0.62	0.98		1.00	0.85	0.27	0.67	0.82	0.75	0.95	0.24	0.06
Uniform Delay, d1	54.1	40.3		49.3	31.6	23.2	52.8	40.1	39.1	52.8	32.0	30.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.8	18.5		53.3	3.7	0.2	12.5	12.3	7.4	37.3	0.3	0.1
Delay (s)	60.9	58.9		102.6	35.3	23.4	65.3	52.4	46.5	90.1	32.3	30.3
Level of Service	E	E		F	D	C	E	D	D	F	C	C
Approach Delay (s)		59.0			42.1			50.7			65.5	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		50.9			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		116.5			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		84.7%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Near-Term (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	295	1082	0	161	1047
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	331	1163	0	179	1163
RTOR Reduction (vph)	0	0	0	0	0	7
Lane Group Flow (vph)	0	331	1163	0	179	1156
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	18
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.33		0.10	c0.41
v/s Ratio Perm						
v/c Ratio		0.12	1.00		0.86	0.75
Uniform Delay, d1		2.5	26.8		34.7	13.8
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	25.3		29.2	2.2
Delay (s)		2.5	52.1		63.8	16.0
Level of Service		A	D		E	B
Approach Delay (s)		2.5	52.1		22.4	
Approach LOS		A	D		C	
Intersection Summary						
HCM 2000 Control Delay			32.2		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.90			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			59.4%		ICU Level of Service	B
Analysis Period (min)			15			
c Critical Lane Group						







NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Near-Term (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↖↗		↖	↗				
Volume (vph)	0	456	0	0	437	543	751	2	149	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3245		1681	1627				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3245		1681	1627				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	524	0	0	475	590	816	2	162	0	0	0
RTOR Reduction (vph)	0	0	0	0	363	0	0	34	0	0	0	0
Lane Group Flow (vph)	0	524	0	0	702	0	498	448	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		17.3			17.3		19.7	19.7				
Effective Green, g (s)		17.3			17.3		19.7	19.7				
Actuated g/C Ratio		0.38			0.38		0.44	0.44				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1360			1247		735	712				
v/s Ratio Prot		0.15			c0.22							
v/s Ratio Perm							c0.30	0.28				
v/c Ratio		0.39			0.56		0.68	0.63				
Uniform Delay, d1		10.0			10.9		10.1	9.8				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.6		2.5	1.7				
Delay (s)		10.2			11.5		12.6	11.6				
Level of Service		B			B		B	B				
Approach Delay (s)		10.2			11.5		12.1				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					11.4					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.62							
Actuated Cycle Length (s)					45.0					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					68.3%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												













NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Near-Term (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	4	5	66	14	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	16	7	92	34	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	140	34	34			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	140	34	34			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	850	1039	1577			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	16	99	34			
Volume Left	0	7	0			
Volume Right	16	0	0			
cSH	1039	1577	1700			
Volume to Capacity	0.02	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.5	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		1.3				
Intersection Capacity Utilization		17.6%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Near-Term (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	3544	18	0	1675	240	0	0	903	0	0	56
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%			0%	0%		0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	3692	19	0	1727	247	0	0	1003	0	0	85
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1994			3730			4401	5715	1280	3121	5601	739
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1994			3730			4401	5715	1280	3121	5601	739
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	42	100	100	76
cM capacity (veh/h)	280			56			0	0	1724	2	0	348
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1477	1477	757	691	691	593	1003	85				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	19	0	0	247	1003	85				
cSH	1700	1700	1700	1700	1700	1700	1724	348				
Volume to Capacity	0.87	0.87	0.45	0.41	0.41	0.35	0.58	0.24				
Queue Length 95th (ft)	0	0	0	0	0	0	100	24				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	10.0	18.7				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			10.0	18.7				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.7								
Intersection Capacity Utilization				133.4%			ICU Level of Service	H				
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Near-Term (1 CVN)
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3310	131	0	1712	0	201	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3412	135	0	1783	0	245	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			3567		4114	1245	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			3567		4114	1245	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			65		2	160	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1365	1365	818	594	594	594	245
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	135	0	0	0	245
cSH	1700	1700	1700	1700	1700	1700	160
Volume to Capacity	0.80	0.80	0.48	0.35	0.35	0.35	1.53
Queue Length 95th (ft)	0	0	0	0	0	0	407
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	320.2
Lane LOS							F
Approach Delay (s)	0.0			0.0			320.2
Approach LOS							F
Intersection Summary							
Average Delay			14.1				
Intersection Capacity Utilization			88.0%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Near-Term (1 CVN)
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↗	
Volume (vph)	0	0	0	987	537		71	244		0	0	767
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4635		1770	3539				3527
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4635		1770	3539				3527
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1039	565	92	73	252	0	0	0	791
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	0	0	0	2
Lane Group Flow (vph)	0	0	0	519	1167	0	73	252	0	0	0	804
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA				NA
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.9	27.9		3.9	49.6				40.1
Effective Green, g (s)				27.9	27.9		3.9	49.6				40.1
Actuated g/C Ratio				0.31	0.31		0.04	0.56				0.45
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				476	1451		77	1970				1587
v/s Ratio Prot				c0.34	0.25		c0.04	0.07				c0.23
v/s Ratio Perm												
v/c Ratio				1.09	0.96dl		0.95	0.13				0.51
Uniform Delay, d1				30.6	28.1		42.5	9.4				17.5
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				68.0	3.3		84.0	0.0				0.3
Delay (s)				98.6	31.4		126.5	9.5				17.7
Level of Service				F	C		F	A				B
Approach Delay (s)		0.0			52.0			35.7				17.7
Approach LOS		A			D			D				B
Intersection Summary												
HCM 2000 Control Delay			40.3				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.76									
Actuated Cycle Length (s)			89.1			Sum of lost time (s)				17.2		
Intersection Capacity Utilization		134.1%				ICU Level of Service				H		
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Near-Term (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	0	1701	45	0	0	0	0	322	440	672	1103	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3115	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3115	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	0	1869	49	0	0	0	0	374	512	700	1149	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	9	28	0	0	0
Lane Group Flow (vph)	0	1869	20	0	0	0	0	601	248	700	1149	0
Confl. Peds. (#/hr)				20					20			
Turn Type	NA	Perm					NA	Perm	Prot	NA		
Protected Phases	4	4					2		1	6		
Permitted Phases			4					2				
Actuated Green, G (s)		63.4	63.4					56.3	56.3	40.9	100.0	
Effective Green, g (s)		63.4	63.4					56.3	56.3	40.9	100.0	
Actuated g/C Ratio		0.36	0.36					0.32	0.32	0.23	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1842	573					1002	433	802	2022	
v/s Ratio Prot		c0.37						c0.19		c0.20	0.32	
v/s Ratio Perm			0.01						0.18			
v/c Ratio		1.01	0.04					0.60	0.57	0.87	0.57	
Uniform Delay, d1		55.8	36.0					49.9	49.3	64.5	23.8	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		24.7	0.0					1.0	1.8	10.3	0.4	
Delay (s)		80.5	36.1					50.9	51.2	74.9	24.2	
Level of Service		F	D					D	D	E	C	
Approach Delay (s)		79.3			0.0			51.0			43.4	
Approach LOS		E			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		59.6										
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		175.0							14.4			
Intersection Capacity Utilization		134.1%							H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Near-Term (1 CVN)
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑↑
Volume (vph)	181	13	896	715	0	1227
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1582		3255			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1582		3255			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	232	17	1007	803	0	1319
RTOR Reduction (vph)	2	0	69	0	0	0
Lane Group Flow (vph)	247	0	1741	0	0	1319
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	296		2459			2540
v/s Ratio Prot	c0.16		c0.53			0.39
v/s Ratio Perm						
v/c Ratio	0.84		0.71			0.52
Uniform Delay, d1	62.6		10.3			7.9
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	18.1		1.8			0.8
Delay (s)	80.7		12.0			8.6
Level of Service	F		B			A
Approach Delay (s)	80.7		12.0			8.6
Approach LOS	F		B			A
Intersection Summary						
HCM 2000 Control Delay		15.8				B
HCM 2000 Volume to Capacity ratio		0.75				
Actuated Cycle Length (s)		160.0				12.1
Intersection Capacity Utilization		81.1%				D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Near-Term (1 CVN)

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↩	↩	↩	↩	↩	↩	↩	↩	↩	↩	↩	↩
Volume (vph)	150	11	30	27	11	26	24	1526	52	70	1460	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1723		1770	3522		1770	3487	
Flt Permitted	0.67	0.67	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1188	1193	1583		1459		1770	3522		1770	3487	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	192	14	38	42	17	41	26	1641	56	76	1587	172
RTOR Reduction (vph)	0	0	32	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	102	104	6	0	78	0	26	1696	0	76	1756	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	19.3	19.3	19.3		19.3		4.6	71.0		8.1	74.5	
Effective Green, g (s)	19.3	19.3	19.3		19.3		4.6	71.0		8.1	74.5	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.04	0.63		0.07	0.66	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	203	269		248		71	2209		126	2294	
v/s Ratio Prot							0.01	0.48		c0.04	c0.50	
v/s Ratio Perm	0.09	c0.09	0.00		0.05							
v/c Ratio	0.50	0.51	0.02		0.31		0.37	0.77		0.60	0.77	
Uniform Delay, d1	42.6	42.7	39.1		41.1		52.9	15.2		51.0	13.3	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.0	2.2	0.0		0.7		3.2	1.7		7.9	1.6	
Delay (s)	44.6	44.8	39.1		41.9		56.1	16.8		58.9	14.9	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.9			41.9			17.4			16.7	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		19.4			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		113.2			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		75.3%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Near-Term (1 CVN)

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↩			↩			↩	↩	↩	↩	↩
Volume (vph)	0	0	0	8	0	151	0	1324	0	34	1604	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	12	0	219	0	1409	0	37	1725	0
RTOR Reduction (vph)	0	0	0	0	178	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	53	0	0	1409	0	37	1725	0
Turn Type				Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			44.9		1.7	50.8	
Effective Green, g (s)					14.1			44.9		1.7	50.8	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					304			2118		40	2397	
v/s Ratio Prot					c0.03			0.40		0.02	c0.49	
v/s Ratio Perm												
v/c Ratio					0.17			0.67		0.93	0.72	
Uniform Delay, d1					25.6			10.0		36.6	7.6	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			0.8		112.0	1.1	
Delay (s)					25.8			10.8		148.6	8.7	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			25.8			10.8			11.6	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay		12.3			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		75.0			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		62.5%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Near-Term (1 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	304	53	124	7	72	439	29	594	3	145	1420	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1515		1854	1509	1770	3539	1344	1770	3511	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1515		1854	1509	1770	3539	1344	1770	3511	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	400	70	163	8	78	477	32	653	3	154	1511	73
RTOR Reduction (vph)	0	0	132	0	0	214	0	0	2	0	2	0
Lane Group Flow (vph)	400	70	31	0	86	263	32	653	1	154	1582	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.6	27.6	27.6		26.8	26.8	4.0	55.9	55.9	17.7	69.6	
Effective Green, g (s)	27.6	27.6	27.6		26.8	26.8	4.0	55.9	55.9	17.7	69.6	
Actuated g/C Ratio	0.19	0.19	0.19		0.18	0.18	0.03	0.38	0.38	0.12	0.47	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	331	348	283		337	274	48	1342	509	212	1657	
v/s Ratio Prot	c0.23	0.04			0.05		0.02	0.18		c0.09	c0.45	
v/s Ratio Perm			0.02			c0.17			0.00			
v/c Ratio	1.21	0.20	0.11		0.26	0.96	0.67	0.49	0.00	0.73	0.95	
Uniform Delay, d1	59.9	50.6	49.7		51.7	59.8	71.0	34.8	28.4	62.5	37.4	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	118.7	0.3	0.2		0.4	43.6	29.8	1.3	0.0	11.7	13.7	
Delay (s)	178.6	50.9	49.9		52.1	103.4	100.8	36.1	28.4	74.2	51.1	
Level of Service	F	D	D		D	F	F	D	C	E	D	
Approach Delay (s)		131.3			95.6			39.1			53.1	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay		70.7			HCM 2000 Level of Service					E		
HCM 2000 Volume to Capacity ratio		1.01										
Actuated Cycle Length (s)		147.4			Sum of lost time (s)					19.4		
Intersection Capacity Utilization		81.5%			ICU Level of Service					D		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

Near-Term (1 CVN)

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	327	514	4	38	187	4
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	363	571	6	54	212	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked	0.99					
vC, conflicting volume	462	32			59	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	457	32			59	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	25	45			86	
cM capacity (veh/h)	482	1041			1545	
Direction, Lane #						
Volume Total	934	59	217			
Volume Left	363	0	212			
Volume Right	571	54	0			
cSH	979	1700	1545			
Volume to Capacity	0.95	0.03	0.14			
Queue Length 95th (ft)	404	0	12			
Control Delay (s)	39.5	0.0	7.6			
Lane LOS	E		A			
Approach Delay (s)	39.5	0.0	7.6			
Approach LOS	E					
Intersection Summary						
Average Delay		31.9				
Intersection Capacity Utilization		42.0%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near-Term (1 CVN)

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	330	7	632	41	0	1552
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	418	9	702	46	0	1744
RTOR Reduction (vph)	1	0	0	26	0	0
Lane Group Flow (vph)	426	0	702	20	0	1744
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.24		0.20			c0.49
v/s Ratio Perm				0.01		
v/c Ratio	0.51		0.46	0.03		1.15
Uniform Delay, d1	19.0		21.3	17.3		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.5		0.2	0.0		74.5
Delay (s)	19.5		21.5	17.3		104.5
Level of Service	B		C	B		F
Approach Delay (s)	19.5		21.3			104.5
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay		70.7		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		0.81				
Actuated Cycle Length (s)		105.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		92.8%		ICU Level of Service		F
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Near-Term (1 CVN)

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (veh/h)	5	7	477	4	16	1485
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	10	14	555	5	18	1632
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1408	280			559	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1408	280			559	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	98			98	
cM capacity (veh/h)	127	718			1008	
Direction, Lane #						
Volume Total	24	370	190	18	816	816
Volume Left	10	0	0	18	0	0
Volume Right	14	0	5	0	0	0
cSH	245	1700	1700	1008	1700	1700
Volume to Capacity	0.10	0.22	0.11	0.02	0.48	0.48
Queue Length 95th (ft)	8	0	0	1	0	0
Control Delay (s)	21.3	0.0	0.0	8.6	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	21.3	0.0		0.1		
Approach LOS	C					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			51.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

Near-Term (1 CVN)

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement						
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	31	59	421	13	107	1383
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	34	64	478	15	118	1520
RTOR Reduction (vph)	0	47	0	8	0	0
Lane Group Flow (vph)	34	17	478	7	118	1520
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.4	21.7	27.9	27.9	7.2	43.9
Effective Green, g (s)	9.4	16.6	27.9	27.9	7.2	43.9
Actuated g/C Ratio	0.15	0.27	0.45	0.45	0.12	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	265	419	1577	705	203	2481
v/s Ratio Prot	c0.02	0.01	0.14		0.07	c0.43
v/s Ratio Perm				0.00		
v/c Ratio	0.13	0.04	0.30	0.01	0.58	0.61
Uniform Delay, d1	23.0	17.1	11.1	9.7	26.3	4.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.0	4.2	0.5
Delay (s)	23.3	17.1	11.2	9.7	30.5	5.4
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.3		11.2			7.2
Approach LOS	B		B			A

Intersection Summary

HCM 2000 Control Delay	8.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	62.6	Sum of lost time (s)	18.1
Intersection Capacity Utilization	50.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

Near-Term (1 CVN)

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement						
Lane Configurations		↖	↕			↕
Volume (veh/h)	0	24	411	20	0	1414
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	32	472	23	0	1537
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1252	248			495	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1252	248			495	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	164	752			1065	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	32	315	180	768	768
Volume Left	0	0	0	0	0
Volume Right	32	0	23	0	0
cSH	752	1700	1700	1700	1700
Volume to Capacity	0.04	0.19	0.11	0.45	0.45
Queue Length 95th (ft)	3	0	0	0	0
Control Delay (s)	10.0	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	10.0	0.0		0.0	
Approach LOS	A				

Intersection Summary







Average Delay	0.2				
Intersection Capacity Utilization	42.4%		ICU Level of Service	A	
Analysis Period (min)	15				

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Near-Term (1 CVN)

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	31	27	404	20	24	1389
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	43	38	430	21	26	1526
RTOR Reduction (vph)	0	34	0	8	0	0
Lane Group Flow (vph)	43	4	430	13	26	1526
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	27.3	27.3	1.7	36.5
Effective Green, g (s)	2.6	4.3	27.3	27.3	1.7	36.5
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	148	2114	945	65	2826
v/s Ratio Prot	c0.02	0.00	0.12		0.01	c0.43
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.43	0.02	0.20	0.01	0.40	0.54
Uniform Delay, d1	20.8	18.8	4.2	3.7	21.5	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.1	0.0	0.0	4.0	0.2
Delay (s)	23.8	18.9	4.3	3.7	25.5	1.8
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.5		4.2			2.2
Approach LOS	C		A			A

Intersection Summary





HCM 2000 Control Delay	3.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	45.7	Sum of lost time (s)	14.1
Intersection Capacity Utilization	49.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (1 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	12	15	88	8	0	185	14	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	12	16	114	10	0	208	16	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	13	16	125	224						
Volume Left (vph)	0	0	114	0						
Volume Right (vph)	0	16	0	16						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.1	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.20						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						

Intersection Summary




















Delay	7.2		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

NBC Coastal Campus

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (1 CVN)

Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	191	0	0	85	143	13	323	71	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.69	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1292	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	12	217	0	0	98	164	14	355	78	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	129	0	0	43	0	0	0
Lane Group Flow (vph)	12	217	0	0	98	35	14	355	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.0	18.0	18.0			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.0	18.0	18.0			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.45	0.45	0.45			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	272	393			393	334	800	1600	715			
v/s Ratio Prot		c0.12			0.05		0.01	c0.10				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.55			0.25	0.10	0.02	0.22	0.05			
Uniform Delay, d1	12.5	14.0			13.1	12.7	6.0	6.6	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.7			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.6	15.7			13.4	12.8	6.0	6.7	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.5			13.0		6.6				0.0	
Approach LOS		B			B		A				A	
Intersection Summary												
HCM 2000 Control Delay			10.6		HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio			0.33									
Actuated Cycle Length (s)			39.8		Sum of lost time (s)				13.4			
Intersection Capacity Utilization			40.9%		ICU Level of Service				A			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near-Term (1 CVN)

Timing Plan: PM PEAK









Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱	↰
Volume (veh/h)	0	0	0	472	0	1562	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	0	0	536	0	1736	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2004	868	1736		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2004	868	1736		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	52	296	359		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	268	268	1157	579	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.16	0.16	0.68	0.34	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			46.5%		ICU Level of Service		
Analysis Period (min)			15		A		

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near-Term (1 CVN)

Timing Plan: PM PEAK









Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	7	70	19	4	7	76	323	58	19	1105	199
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.86		1.00	0.90		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1608		1770	1685		1770	3458		1770	3458	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1608		1770	1685		1770	3458		1770	3458	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	120	9	93	38	8	14	84	355	64	21	1228	221
RTOR Reduction (vph)	0	75	0	0	14	0	0	10	0	0	11	0
Lane Group Flow (vph)	120	27	0	38	8	0	84	409	0	21	1438	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	18.1	18.1		2.7	2.7		5.8	49.7		1.6	45.5	
Effective Green, g (s)	18.1	18.1		2.7	2.7		5.8	49.7		1.6	45.5	
Actuated g/C Ratio	0.20	0.20		0.03	0.03		0.06	0.55		0.02	0.50	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	352	319		52	49		112	1888		31	1729	
v/s Ratio Prot	c0.07	0.02		c0.02	0.00		c0.05	c0.12		0.01	c0.42	
v/s Ratio Perm												
v/c Ratio	0.34	0.09		0.73	0.17		0.75	0.22		0.68	0.83	
Uniform Delay, d1	31.3	29.7		43.8	43.1		41.9	10.6		44.4	19.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.1		40.9	1.7		24.2	0.1		45.6	3.6	
Delay (s)	31.9	29.8		84.7	44.7		66.1	10.7		90.1	23.0	
Level of Service	C	C		F	D		E	B		F	C	
Approach Delay (s)		30.9			70.0			19.9			24.0	
Approach LOS		C			E			B			C	
Intersection Summary												
HCM 2000 Control Delay		25.0										
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		91.0										
Intersection Capacity Utilization		64.7%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

Near-Term (1 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	1058	60	0	381	36	19	41	5	25	27	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5044			5020		1770	1833			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.15	
Satd. Flow (perm)	1770	5044			5020		1305	1833			269	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	67	1202	68	0	405	38	27	59	7	29	32	26
RTOR Reduction (vph)	0	4	0	0	6	0	0	2	0	0	8	0
Lane Group Flow (vph)	67	1266	0	0	437	0	27	64	0	0	79	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1908			2038		253	356			44	
v/s Ratio Prot	c0.04	c0.25			c0.09			c0.03				
v/s Ratio Perm							0.02				c0.29	
v/c Ratio	0.34	0.66			0.21		0.11	0.18			1.79	
Uniform Delay, d1	73.9	46.4			34.8		59.6	60.5			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	1.8			0.2		0.2	0.2			430.9	
Delay (s)	75.0	48.3			35.0		59.8	60.7			505.9	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		49.6			35.0			60.5			505.9	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		67.1										
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

Near-Term (1 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	1089	0	516	416	39	0	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3494							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3494							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1224	0	549	443	41	0	0	0	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	1224	0	549	484	0	0	0	0	0	0	4
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3175							609
v/s Ratio Prot		c0.24		c0.16	c0.14							
v/s Ratio Perm												0.00
v/c Ratio		0.64		0.29	0.15							0.01
Uniform Delay, d1		45.8		20.7	0.9							34.9
Progression Factor		0.19		1.00	1.00							1.00
Incremental Delay, d2		1.2		0.1	0.0							0.0
Delay (s)		9.9		20.8	0.9							34.9
Level of Service		A		C	A							C
Approach Delay (s)		9.9			11.5		0.0				34.9	
Approach LOS		A			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		10.7										B
HCM 2000 Volume to Capacity ratio		0.46										
Actuated Cycle Length (s)		180.0						22.3				
Intersection Capacity Utilization		44.9%							A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave



















Near-Term (1 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	4	214	0	0	308	41	0	0	0	105	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	5	249	0	0	350	47	0	0	0	159	0	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	397			249			645	655	249	631	631	373
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	397			249			645	655	249	631	631	373
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	59	100	98
cM capacity (veh/h)	1162			1317			376	384	790	392	396	673
Direction, Lane #												
Volume Total	253	397	0	173								
Volume Left	5	0	0	159								
Volume Right	0	47	0	14								
cSH	1162	1317	1700	405								
Volume to Capacity	0.00	0.00	0.00	0.43								
Queue Length 95th (ft)	0	0	0	52								
Control Delay (s)	0.2	0.0	0.0	20.3								
Lane LOS	A			A								
Approach Delay (s)	0.2	0.0	0.0	20.3								
Approach LOS				A								
Intersection Summary												
Average Delay		4.3										
Intersection Capacity Utilization		31.7%								A		
Analysis Period (min)		15										











NBC Coastal Campus
22: 3rd St & Palm Ave

Near-Term (1 CVN)
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	296	13	86	322	25	15	39	69	29	34	14
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	10	379	17	97	362	28	26	68	121	63	74	30
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	10	396	97	390	216	167						
Volume Left (vph)	10	0	97	0	26	63						
Volume Right (vph)	0	17	0	28	121	30						
Hadj (s)	0.53	0.00	0.53	-0.02	-0.28	0.00						
Departure Headway (s)	7.3	6.8	7.2	6.6	6.7	7.1						
Degree Utilization, x	0.02	0.74	0.19	0.72	0.40	0.33						
Capacity (veh/h)	465	513	478	521	472	429						
Control Delay (s)	9.3	25.7	10.7	23.6	14.2	13.6						
Approach Delay (s)	25.3		21.1		14.2	13.6						
Approach LOS	D		C		B	B						
Intersection Summary												
Delay			20.3									
Level of Service			C									
Intersection Capacity Utilization			41.7%		ICU Level of Service				A			
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Near-Term (1 CVN)
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	74	425	458	40	53	142
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	76	438	533	47	62	167
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)	908					
pX, platoon unblocked						
vC, conflicting volume	579				1147	290
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	579				1147	290
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	92				65	76
cM capacity (veh/h)	991				178	707
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	76	438	355	224	229	
Volume Left	76	0	0	0	62	
Volume Right	0	0	0	47	167	
cSH	991	1700	1700	1700	391	
Volume to Capacity	0.08	0.26	0.21	0.13	0.59	
Queue Length 95th (ft)	6	0	0	0	90	
Control Delay (s)	8.9	0.0	0.0	0.0	26.5	
Lane LOS	A				D	
Approach Delay (s)	1.3	0.0			26.5	
Approach LOS					D	
Intersection Summary						
Average Delay			5.1			
Intersection Capacity Utilization			40.7%	ICU Level of Service		A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Near-Term (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↱	↱	↰	↰↱	↱		↰↱			↰	↱
Volume (vph)	29	434	30	32	460	4	55	26	23	13	43	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3535			1761			1842	1583
Flt Permitted	0.46	1.00		0.45	1.00			0.80			0.89	1.00
Satd. Flow (perm)	865	3505		829	3535			1437			1661	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	35	517	36	35	505	4	67	32	28	17	57	41
RTOR Reduction (vph)	0	7	0	0	1	0	0	22	0	0	0	32
Lane Group Flow (vph)	35	546	0	35	508	0	0	105	0	0	74	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.7	14.7		14.7	14.7			6.5			6.5	6.5
Effective Green, g (s)	14.7	14.7		14.7	14.7			6.5			6.5	6.5
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.21			0.21	0.21
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	418	1694		400	1709			307			355	338
v/s Ratio Prot		c0.16			0.14							
v/s Ratio Perm	0.04			0.04				c0.07			0.04	0.01
v/c Ratio	0.08	0.32		0.09	0.30			0.34			0.21	0.03
Uniform Delay, d1	4.2	4.8		4.2	4.7			10.1			9.8	9.4
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.7			0.3	0.0
Delay (s)	4.3	4.9		4.3	4.8			10.8			10.1	9.5
Level of Service	A	A		A	A			B			B	A
Approach Delay (s)		4.9			4.8			10.8			9.9	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.33										
Actuated Cycle Length (s)		30.4			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		45.3%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Near-Term (1 CVN)
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↱			↰	↱
Volume (veh/h)	482	9	0	0	7	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	588	11	0	0	10	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			599		588	588
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			599		588	588
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			978		472	509
Direction, Lane #						
Volume Total	588	11	15			
Volume Left	0	0	10			
Volume Right	0	11	4			
cSH	1700	1700	482			
Volume to Capacity	0.35	0.01	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.7			
Lane LOS			B			
Approach Delay (s)	0.0		12.7			
Approach LOS			B			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			35.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near-Term (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	43	1388	128	60	793	135	101	93	65	179	82	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5021		1770	4975			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5021		1770	4975			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	46	1477	136	61	801	136	111	102	71	201	92	30
RTOR Reduction (vph)	0	6	0	0	13	0	0	19	0	0	4	0
Lane Group Flow (vph)	46	1607	0	61	924	0	0	265	0	0	319	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2000		196	1981			649			658	
v/s Ratio Prot	0.03	c0.32		c0.03	0.19			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.23	0.80		0.31	0.47			0.41			0.48	
Uniform Delay, d1	73.0	47.9		73.7	40.0			63.4			64.5	
Progression Factor	1.00	1.00		1.24	0.75			1.00			1.00	
Incremental Delay, d2	0.6	2.4		0.9	0.8			0.4			0.6	
Delay (s)	73.6	50.4		91.9	30.6			63.9			65.0	
Level of Service	E	D		F	C			E			E	
Approach Delay (s)		51.0			34.4			63.9			65.0	
Approach LOS		D			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		48.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		119.9%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Near-Term (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	21	1679	59	51	1211		22	11	36	66	14	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.93			1.00	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.95	
Satd. Flow (prot)	1770	5059		1770	5051			1705			1770	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.61	
Satd. Flow (perm)	1770	5059		1770	5051			1544			1144	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	21	1713	60	53	1248	59	27	13	43	78	16	18
RTOR Reduction (vph)	0	2	0	0	2	0	0	23	0	0	16	0
Lane Group Flow (vph)	21	1771	0	53	1305	0	0	60	0	78	18	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3558		157	3664			190		141	211	
v/s Ratio Prot	0.01	c0.35		c0.03	c0.26						0.01	
v/s Ratio Perm								0.04		c0.07		
v/c Ratio	0.18	0.50		0.34	0.36			0.32		0.55	0.09	
Uniform Delay, d1	79.3	12.2		77.0	9.1			72.0		74.2	69.9	
Progression Factor	1.44	0.13		1.55	0.30			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.3		1.1	0.2			1.0		4.6	0.2	
Delay (s)	115.0	1.9		120.3	3.0			72.9		78.9	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.3			7.6			72.9			76.2	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		9.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.49										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		62.2%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near-Term (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	1561	204	162	1288	84	133	42	132	159	46	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	4997		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	4997		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	30	1661	217	167	1328	87	145	46	143	215	62	28
RTOR Reduction (vph)	0	9	0	0	0	38	0	0	119	0	4	0
Lane Group Flow (vph)	30	1869	0	167	1328	49	0	191	24	0	301	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2212		192	2364	736		306	269		575	
v/s Ratio Prot	0.02	c0.37		c0.09	c0.26			c0.11			c0.09	
v/s Ratio Perm						0.03			0.02			
v/c Ratio	0.19	0.84		0.87	0.56	0.07		0.62	0.09		0.52	
Uniform Delay, d1	76.0	44.6		78.9	34.9	26.6		69.3	62.9		68.0	
Progression Factor	1.05	0.85		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	3.8		31.6	1.0	0.2		9.3	0.7		3.4	
Delay (s)	80.2	41.9		110.5	35.8	26.8		78.6	63.6		71.4	
Level of Service	F	D		F	D	C		E	E		E	
Approach Delay (s)		42.5			43.2			72.1			71.4	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		47.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		98.6%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Near-Term (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	1692	52	177	1596		41	9		25	11	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5062		1770	5077			1680			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.82	
Satd. Flow (perm)	1770	5062		1770	5077			1510			1487	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	11	1880	58	186	1680	18	48	11	99	31	14	14
RTOR Reduction (vph)	0	3	0	0	1	0	0	79	0	0	11	0
Lane Group Flow (vph)	11	1935	0	186	1697	0	0	79	0	0	48	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.4			17.4	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.4			17.4	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2411		234	3042			310			305	
v/s Ratio Prot	0.01	c0.38		c0.11	0.33							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.69	0.80		0.79	0.56			0.26			0.16	
Uniform Delay, d1	41.8	18.8		35.6	10.2			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	80.1	2.0		16.8	0.2			0.4			0.2	
Delay (s)	121.9	20.8		52.4	10.4			28.6			27.8	
Level of Service	F	C		D	B			C			C	
Approach Delay (s)		21.4			14.6			28.6			27.8	
Approach LOS		C			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		18.6			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		84.6			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		65.2%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near-Term (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	196	1632	26	340	1605	576	68	184	553	610	248	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5073		1770	5085	1583	1770	1632	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5073		1770	5085	1583	1770	1632	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	206	1718	27	366	1726	619	72	196	588	663	270	257
RTOR Reduction (vph)	0	1	0	0	0	90	0	26	282	0	2	128
Lane Group Flow (vph)	206	1744	0	366	1726	529	72	382	94	663	294	103
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.3	38.3	11.8	41.4	41.4
Effective Green, g (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.3	38.3	11.8	41.4	41.4
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1201		519	2318	721	100	407	375	264	471	406
v/s Ratio Prot	0.06	c0.34		c0.21	c0.34		0.04	c0.23		c0.19	c0.17	
v/s Ratio Perm					0.33			0.06				0.07
v/c Ratio	0.81	1.45		0.71	0.74	0.73	0.72	0.94	0.25	2.51	0.62	0.25
Uniform Delay, d1	69.9	58.5		48.2	34.3	34.1	71.1	56.4	46.0	70.8	49.1	43.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	16.9	208.2		4.3	1.3	3.9	21.9	29.4	0.4	691.3	2.6	0.3
Delay (s)	86.8	266.7		52.6	35.7	38.0	93.0	85.8	46.4	762.0	51.7	44.2
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		247.7			38.5			69.1			446.0	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		175.5			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.15										
Actuated Cycle Length (s)		153.3			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		120.3%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Near-Term (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	↔
Volume (vph)	0	521	869	0	456	1659
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	585	924	0	501	1823
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	0	585	924	0	501	1819
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.17	c0.26		0.28	c0.65
v/s Ratio Perm						
v/c Ratio		0.33	1.08		0.76	1.02
Uniform Delay, d1		11.7	30.3		21.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	53.6		4.9	27.8
Delay (s)		11.9	83.9		26.7	42.3
Level of Service		B	F		C	D
Approach Delay (s)		11.9	83.9		38.9	
Approach LOS		B	F		D	
Intersection Summary						
HCM 2000 Control Delay		45.6			HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio		1.11				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		87.1%			ICU Level of Service	E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Near-Term (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	970	0	0	546	260	436	3	111	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1613				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1613				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1010	0	0	613	292	469	3	119	0	0	0
RTOR Reduction (vph)	0	0	0	0	99	0	0	32	0	0	0	0
Lane Group Flow (vph)	0	1010	0	0	806	0	305	254	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.6			19.6		14.6	14.6				
Effective Green, g (s)		19.6			19.6		14.6	14.6				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1643			1564		581	558				
v/s Ratio Prot		0.29			0.24							
v/s Ratio Perm							0.18	0.16				
v/c Ratio		0.61			0.52		0.52	0.46				
Uniform Delay, d1		8.5			8.0		11.0	10.7				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.7			0.3		0.9	0.6				
Delay (s)		9.2			8.2		11.9	11.3				
Level of Service		A			A		B	B				
Approach Delay (s)		9.2			8.2		11.6				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		9.4			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		42.2			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		49.0%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												




















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Near-Term (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	11	9	4	37	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	18	10	4	54	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	78	54	54			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	78	54	54			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	920	1014	1552			
Direction, Lane #						
Volume Total	18	14	54			
Volume Left	0	10	0			
Volume Right	18	0	0			
cSH	1014	1552	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.6				
Intersection Capacity Utilization		17.4%		ICU Level of Service		
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St







Near-Term (1 CVN) with Alternative 1
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Volume (veh/h)	0	1311	35	0	3229	532	0	0	477	0	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1580	42	0	3510	578	0	0	596	0	0	13
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4108			1642			2824	5729	588	4365	5461	1499
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4108			1642			2824	5729	588	4365	5461	1499
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	55	100	100	88
cM capacity (veh/h)	39			384			7	0	1336	0	0	108
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	632	632	358	1404	1404	1280	596	13				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	42	0	0	578	596	13				
cSH	1700	1700	1700	1700	1700	1700	1336	108				
Volume to Capacity	0.37	0.37	0.21	0.83	0.83	0.75	0.45	0.12				
Queue Length 95th (ft)	0	0	0	0	0	0	59	10				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.8	43.1				
Lane LOS							A	E				
Approach Delay (s)	0.0				0.0			9.8	43.1			
Approach LOS							A	E				
Intersection Summary												
Average Delay				1.0								
Intersection Capacity Utilization				89.4%	ICU Level of Service			E				
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Near-Term (1 CVN) with Alternative 1
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	1172	203	0	3128	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1332	231	0	3476	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1582		2646	599	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1582		2646	599	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	42	
cM capacity (veh/h)			405		18	430	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	533	533	497	1159	1159	1159	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	231	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	430
Volume to Capacity	0.31	0.31	0.29	0.68	0.68	0.68	0.58
Queue Length 95th (ft)	0	0	0	0	0	0	91
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	24.5
Lane LOS							C
Approach Delay (s)	0.0			0.0			24.5
Approach LOS							C
Intersection Summary							
Average Delay			1.2				
Intersection Capacity Utilization			75.3%		ICU Level of Service		D
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Near-Term (1 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↔↔↔	↔↔↔		↔	↔↔			↔↔	
Volume (vph)	0	0	0	1522	1536	250	43	94	0	0	259	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			1.00	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4641		1770	3539			3522	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4641		1770	3539			3522	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1637	1652	269	58	127	0	0	298	7
RTOR Reduction (vph)	0	0	0	0	6	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	884	2668	0	58	127	0	0	304	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.3			21.1	
Effective Green, g (s)				131.2	131.2		20.0	46.3			21.1	
Actuated g/C Ratio				0.69	0.69		0.11	0.24			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1055	3219		187	866			392	
v/s Ratio Prot				c0.58	0.57		c0.03	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.84	0.83		0.31	0.15			0.78	
Uniform Delay, d1				21.2	20.9		78.2	55.9			81.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				5.9	1.9		0.9	0.1			9.3	
Delay (s)				27.1	22.7		79.1	56.0			91.0	
Level of Service				C	C		E	E			F	
Approach Delay (s)		0.0			23.8			63.3			91.0	
Approach LOS		A			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		30.7		HCM 2000 Level of Service					C			
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		189.1		Sum of lost time (s)					16.8			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Near-Term (1 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔↔	↔					↔↔	↔	↔↔	↔↔	
Volume (vph)	0	501	68	0	0	0	0	128	215	435	1404	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.93	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3169	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3169	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	0	545	74	0	0	0	0	149	234	473	1462	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	66	66	0	0	0
Lane Group Flow (vph)	0	545	45	0	0	0	0	198	53	473	1462	0
Turn Type	NA	Perm					NA	Perm		Prot	NA	
Protected Phases	4						2			1	6	
Permitted Phases		4						2				
Actuated Green, G (s)	60.0	60.0					62.2	62.2	35.0	100.0		
Effective Green, g (s)	60.0	60.0					62.2	62.2	35.0	100.0		
Actuated g/C Ratio	0.35	0.35					0.36	0.36	0.20	0.58		
Clearance Time (s)	5.6	5.6					4.6	4.6	4.2	6.0		
Vehicle Extension (s)	3.0	3.0					3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)	1777	553					1148	522	700	2062		
v/s Ratio Prot	c0.11						0.06		0.14	c0.41		
v/s Ratio Perm		0.03						0.04				
v/c Ratio	0.31	0.08					0.17	0.10	0.68	0.71		
Uniform Delay, d1	40.6	37.3					37.2	36.2	63.1	25.5		
Progression Factor	1.00	1.00					1.00	1.00	1.00	1.00		
Incremental Delay, d2	0.1	0.1					0.1	0.1	2.6	1.1		
Delay (s)	40.7	37.4					37.3	36.3	65.7	26.6		
Level of Service	D	D					D	D	E	C		
Approach Delay (s)	40.3			0.0			37.0			36.1		
Approach LOS	D			A			D			D		
Intersection Summary												
HCM 2000 Control Delay		37.1		HCM 2000 Level of Service					D			
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)					14.4			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Near-Term (1 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗		↖	↗
Volume (vph)	225	7	1151	624	0	1127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3310			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3310			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	262	8	1238	671	0	1186
RTOR Reduction (vph)	1	0	57	0	0	0
Lane Group Flow (vph)	269	0	1852	0	0	1186
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	17.3		42.5			42.5
Effective Green, g (s)	17.3		42.5			42.5
Actuated g/C Ratio	0.25		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	399		2041			2073
v/s Ratio Prot	c0.17		c0.56			0.35
v/s Ratio Perm						
v/c Ratio	0.67		0.91			0.57
Uniform Delay, d1	23.3		11.5			7.8
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	4.4		6.3			0.4
Delay (s)	27.7		17.8			8.2
Level of Service	C		B			A
Approach Delay (s)	27.7		17.8			8.2
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			15.2		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.88			
Actuated Cycle Length (s)			68.9		Sum of lost time (s)	12.1
Intersection Capacity Utilization			78.5%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Near-Term (1 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↗	↖	↗	↖	↖	↗	↖
Volume (vph)	49	3	11	8	0	6	21	1372	27	41	1274	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1693	1583		1706		1770	3529		1770	3524	
Frt Permitted	0.74	0.78	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1308	1381	1583		1517		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	57	3	13	16	0	12	25	1633	32	45	1385	41
RTOR Reduction (vph)	0	0	11	0	24	0	0	1	0	0	1	0
Lane Group Flow (vph)	30	30	2	0	4	0	25	1664	0	45	1425	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.3	15.3	15.3		15.3		2.7	63.4		4.0	64.7	
Effective Green, g (s)	15.3	15.3	15.3		15.3		2.7	63.4		4.0	64.7	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.65		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	206	218	250		239		49	2311		73	2355	
v/s Ratio Prot							0.01	c0.47		c0.03	0.40	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.15	0.14	0.01		0.02		0.51	0.72		0.62	0.61	
Uniform Delay, d1	35.1	35.1	34.4		34.4		46.4	10.9		45.6	8.9	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		8.7	1.1		14.5	0.4	
Delay (s)	35.4	35.4	34.4		34.4		55.1	12.0		60.1	9.4	
Level of Service	D	D	C		C		E	B		E	A	
Approach Delay (s)		35.2			34.4			12.7			10.9	
Approach LOS		D			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.6				HCM 2000 Level of Service			B		
HCM 2000 Volume to Capacity ratio			0.61									
Actuated Cycle Length (s)			96.8				Sum of lost time (s)			14.1		
Intersection Capacity Utilization			56.8%				ICU Level of Service			B		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Near-Term (1 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	24	0	1314	8	444	822	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	36	0	1444	9	453	839	0
RTOR Reduction (vph)	0	0	0	0	33	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1444	4	453	839	0
Turn Type					NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.41		c0.26	0.24	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.87	0.01	0.74	0.28	
Uniform Delay, d1					60.6			34.4	20.4	41.8	2.3	
Progression Factor					1.00			0.34	1.00	1.00	1.00	
Incremental Delay, d2					0.1			4.4	0.0	4.9	0.2	
Delay (s)					60.6			16.1	20.5	46.7	2.6	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			16.2			18.0	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.6			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		79.8%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Near-Term (1 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	38	12	2	53	118	120	1171	6	135	457	271
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.88		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3305	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3305	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	35	58	18	2	60	134	133	1301	7	155	525	311
RTOR Reduction (vph)	0	0	17	0	0	113	0	0	4	0	59	0
Lane Group Flow (vph)	35	58	1	0	62	21	133	1301	3	155	777	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Effective Green, g (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Actuated g/C Ratio	0.06	0.06	0.06		0.16	0.16	0.31	0.46	0.46	0.19	0.34	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	97	102	77		295	239	549	1625	618	341	1130	
v/s Ratio Prot	0.02	c0.03			c0.03		0.08	c0.37		c0.09	0.24	
v/s Ratio Perm			0.00			0.01			0.00			
v/c Ratio	0.36	0.57	0.01		0.21	0.09	0.24	0.80	0.01	0.45	0.69	
Uniform Delay, d1	66.0	66.8	64.8		53.1	52.1	37.3	33.5	21.2	51.7	41.0	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.95	0.94	
Incremental Delay, d2	2.3	7.1	0.1		0.4	0.2	0.2	4.2	0.0	0.9	3.4	
Delay (s)	68.3	73.9	64.8		53.5	52.2	37.5	37.8	21.3	50.2	41.8	
Level of Service	E	E	E		D	D	D	D	C	D	D	
Approach Delay (s)		70.7			52.6			37.7			43.1	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			42.1		HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio			0.60									
Actuated Cycle Length (s)			145.0		Sum of lost time (s)				19.4			
Intersection Capacity Utilization			88.2%		ICU Level of Service				E			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Near-Term (1 CVN) with Alternative 1
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖			↖
Volume (veh/h)	43	190	5	34	158	9
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	51	224	6	42	172	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	381	28			49	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	381	28			49	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	79			89	
cM capacity (veh/h)	553	1048			1558	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	274	49	182			
Volume Left	51	0	172			
Volume Right	224	42	0			
cSH	1285	1700	1558			
Volume to Capacity	0.21	0.03	0.11			
Queue Length 95th (ft)	20	0	9			
Control Delay (s)	9.9	0.0	7.2			
Lane LOS	A		A			
Approach Delay (s)	9.9	0.0	7.2			
Approach LOS	A					
Intersection Summary						
Average Delay		8.0				
Intersection Capacity Utilization		25.9%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near-Term (1 CVN) with Alternative 1
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖	↖		↖
Volume (vph)	46	3	1309	368	0	432
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1754		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1754		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	61	4	1378	387	0	675
RTOR Reduction (vph)	4	0	0	118	0	0
Lane Group Flow (vph)	61	0	1378	269	0	675
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		29.4	29.4		29.4
Effective Green, g (s)	3.0		29.4	29.4		29.4
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	124		2459	1056		2459
v/s Ratio Prot	c0.03		c0.39			0.19
v/s Ratio Perm				0.18		
v/c Ratio	0.49		0.56	0.25		0.27
Uniform Delay, d1	18.9		3.2	2.4		2.4
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	3.1		0.3	0.1		0.1
Delay (s)	22.0		3.5	2.5		2.5
Level of Service	C		A	A		A
Approach Delay (s)	22.0		3.3			2.5
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.6		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.55				
Actuated Cycle Length (s)		42.3		Sum of lost time (s)	9.9	
Intersection Capacity Utilization		48.6%		ICU Level of Service	A	
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Near-Term (1 CVN) with Alternative 1

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖↗		↖	↖↗
Volume (veh/h)	0	16	2105	6	6	477
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	28	2263	6	9	701
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2635	1135			2270	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2635	1135			2270	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			96	
cM capacity (veh/h)	18	196			221	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	28	1509	761	9	351	351
Volume Left	0	0	0	9	0	0
Volume Right	28	0	6	0	0	0
cSH	196	1700	1700	221	1700	1700
Volume to Capacity	0.14	0.89	0.45	0.04	0.21	0.21
Queue Length 95th (ft)	12	0	0	3	0	0
Control Delay (s)	26.3	0.0	0.0	21.9	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	26.3	0.0		0.3		
Approach LOS	D					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		68.4%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

Near-Term (1 CVN) with Alternative 1

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖↗	↖	↖	↖↗
Volume (vph)	18	90	2016	13	39	438
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	22	111	2168	14	57	635
RTOR Reduction (vph)	0	4	0	1	0	0
Lane Group Flow (vph)	22	107	2168	13	57	635
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.9	26.0	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.9	20.9	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	262	308	2251	1007	82	2707
v/s Ratio Prot	0.01	c0.07	c0.61		c0.03	0.18
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.35	0.96	0.01	0.70	0.23
Uniform Delay, d1	39.4	37.3	18.3	7.2	50.3	3.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	11.5	0.0	22.5	0.0
Delay (s)	39.5	37.9	29.9	7.2	72.9	3.7
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.2		29.7			9.4
Approach LOS	D		C			A
Intersection Summary						
HCM 2000 Control Delay		25.4		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio		0.84				
Actuated Cycle Length (s)		107.2		Sum of lost time (s)		18.1
Intersection Capacity Utilization		72.1%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

Near-Term (1 CVN) with Alternative 1

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↖		↖	↖
Volume (veh/h)	0	34	1993	27	0	454
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	55	2098	28	0	614
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2419	1063			2126	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2419	1063			2126	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	75			100	
cM capacity (veh/h)	27	219			252	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	55	1399	728	307	307	
Volume Left	0	0	0	0	0	
Volume Right	55	0	28	0	0	
cSH	219	1700	1700	1700	1700	
Volume to Capacity	0.25	0.82	0.43	0.18	0.18	
Queue Length 95th (ft)	24	0	0	0	0	
Control Delay (s)	26.8	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	26.8	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			66.0%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Near-Term (1 CVN) with Alternative 1

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖	↖	↖	↖
Volume (vph)	11	7	2019	34	16	430
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	18	11	2103	35	20	531
RTOR Reduction (vph)	0	5	0	8	0	0
Lane Group Flow (vph)	18	6	2103	27	20	531
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.5	59.2	59.2	2.1	68.8
Effective Green, g (s)	1.4	3.5	59.2	59.2	2.1	68.8
Actuated g/C Ratio	0.02	0.05	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	72	2727	1220	48	3170
v/s Ratio Prot	c0.01	0.00	c0.59		c0.01	0.15
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.56	0.09	0.77	0.02	0.42	0.17
Uniform Delay, d1	37.4	35.1	5.0	2.1	36.7	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	20.7	0.5	1.4	0.0	5.8	0.0
Delay (s)	58.1	35.6	6.4	2.1	42.5	0.5
Level of Service	E	D	A	A	D	A
Approach Delay (s)	49.6		6.3			2.0
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay			5.9		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.75			
Actuated Cycle Length (s)			76.8		Sum of lost time (s)	14.1
Intersection Capacity Utilization			68.6%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (1 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control	Stop			Yield			Stop		Stop	
Volume (vph)	0	3	0	47	2	0	46	3	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	12	0	87	4	0	73	5	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	12	0	91	73	5					
Volume Left (vph)	0	0	87	0	0					
Volume Right (vph)	0	0	0	0	5					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.2	3.2					
Degree Utilization, x	0.01	0.00	0.11	0.08	0.00					
Capacity (veh/h)	829	1121	814	835	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.4%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (1 CVN) with Alternative 1

Timing Plan: AM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↑		↑	↑	↑	↑	↑			
Volume (vph)	3	38	0	0	34	233	4	1817	53	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Flt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1353	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	4	51	0	0	47	324	4	1933	56	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	23	0	0	0	0
Lane Group Flow (vph)	4	51	0	0	47	268	4	1933	33	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.9	16.9			16.9	16.9	47.7	43.6	43.6			
Effective Green, g (s)	16.9	16.9			16.9	16.9	47.7	43.6	43.6			
Actuated g/C Ratio	0.23	0.23			0.23	0.23	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	309	426			426	362	1142	2087	933			
v/s Ratio Prot		0.03			0.03		0.00	c0.55				
v/s Ratio Perm	0.00					c0.17			0.02			
v/c Ratio	0.01	0.12			0.11	0.74	0.00	0.93	0.04			
Uniform Delay, d1	22.0	22.6			22.6	26.5	4.7	13.7	6.3			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	8.0	0.0	7.7	0.0			
Delay (s)	22.1	22.7			22.7	34.4	4.7	21.4	6.4			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.7				32.9		20.9			0.0	
Approach LOS		C				C		C			A	
Intersection Summary												
HCM 2000 Control Delay					22.8			HCM 2000 Level of Service			C	
HCM 2000 Volume to Capacity ratio					0.87							
Actuated Cycle Length (s)					73.9			Sum of lost time (s)			13.4	
Intersection Capacity Utilization					84.2%			ICU Level of Service			E	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near-Term (1 CVN) with Alternative 1

Timing Plan: AM PEAK





















							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	26	47	426	1585	0	169	229
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	104	188	444	1651	0	214	290
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None		None		
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2072	252	504		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2072	252	504		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	75	58		0		
cM capacity (veh/h)	27	748	1057		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	292	444	826	826	143	361	0
Volume Left	104	444	0	0	0	0	0
Volume Right	188	0	0	0	0	290	0
cSH	71	1057	1700	1700	1700	1700	1700
Volume to Capacity	4.10	0.42	0.49	0.49	0.08	0.21	0.00
Queue Length 95th (ft)	Err	53	0	0	0	0	0
Control Delay (s)	Err	10.8	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B					
Approach Delay (s)	Err	2.3			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay		1011.7					
Intersection Capacity Utilization		61.5%		ICU Level of Service		B	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near-Term (1 CVN) with Alternative 1

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	409	2	40	50	8	21	27	1883	11	4	169	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	1.00		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1595		1770	1661		1770	3536		1770	3425	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1595		1770	1661		1770	3536		1770	3425	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	465	2	45	161	26	68	28	1982	12	6	245	67
RTOR Reduction (vph)	0	31	0	0	64	0	0	1	0	0	22	0
Lane Group Flow (vph)	465	16	0	161	30	0	28	1993	0	6	290	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	28.3	28.3		5.1	5.1		2.1	40.1		0.9	38.9	
Effective Green, g (s)	28.3	28.3		5.1	5.1		2.1	40.1		0.9	38.9	
Actuated g/C Ratio	0.30	0.30		0.05	0.05		0.02	0.43		0.01	0.42	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	536	483		96	90		39	1519		17	1428	
v/s Ratio Prot	c0.26	0.01		c0.09	0.02		c0.02	c0.56		0.00	0.08	
v/s Ratio Perm												
v/c Ratio	0.87	0.03		1.68	0.33		0.72	1.31		0.35	0.20	
Uniform Delay, d1	30.7	22.9		44.1	42.5		45.3	26.6		45.9	17.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	13.8	0.0		345.6	2.2		47.4	145.4		12.2	0.1	
Delay (s)	44.6	22.9		389.7	44.6		92.7	172.0		58.1	17.4	
Level of Service	D	C		F	D		F	F		E	B	
Approach Delay (s)		42.6			262.5			170.9			18.2	
Approach LOS		D			F			F			B	
Intersection Summary												
HCM 2000 Control Delay		141.6						HCM 2000 Level of Service		F		
HCM 2000 Volume to Capacity ratio		1.17										
Actuated Cycle Length (s)		93.3						Sum of lost time (s)		18.9		
Intersection Capacity Utilization		90.1%						ICU Level of Service		E		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

Near-Term (1 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	8	252	20	0	1734	18	42	24	2	21	43	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5030			5077		1770	1845			1732	
Flt Permitted	0.95	1.00			1.00		0.66	1.00			0.17	
Satd. Flow (perm)	1770	5030			5077		1229	1845			292	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	0.77
Adj. Flow (vph)	9	283	22	0	1905	20	50	29	2	27	56	70
RTOR Reduction (vph)	0	5	0	0	1	0	0	2	0	0	17	0
Lane Group Flow (vph)	9	300	0	0	1924	0	50	29	0	0	136	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2061		238	358			48	
v/s Ratio Prot	c0.01	0.06			c0.38			0.02				
v/s Ratio Perm							c0.04				c0.47	
v/c Ratio	0.05	0.16			0.93		0.21	0.08			2.84	
Uniform Delay, d1	71.5	37.0			51.1		60.9	59.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.2			8.4		0.4	0.1			882.4	
Delay (s)	71.6	37.2			59.5		61.3	59.4			957.4	
Level of Service	E	D			E		E	E			F	
Approach Delay (s)		38.2			59.5			60.6			957.4	
Approach LOS		D			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		112.4			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.02										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		72.3%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

Near-Term (1 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	269	0	407	1743	9	0	0	0	0	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	328	0	433	1854	10	0	0	0	0	0	19
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	328	0	433	1864	0	0	0	0	0	0	7
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.06		0.13	c0.53							
v/s Ratio Perm												0.00
v/c Ratio		0.17		0.25	0.58							0.01
Uniform Delay, d1		37.2		25.7	1.6							34.9
Progression Factor		0.38		1.00	1.00							1.00
Incremental Delay, d2		0.2		0.1	0.3							0.0
Delay (s)		14.2		25.8	1.8							35.0
Level of Service		B		C	A							C
Approach Delay (s)		14.2			6.4		0.0				35.0	
Approach LOS		B			A		A				C	
Intersection Summary												
HCM 2000 Control Delay		7.5			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		70.1%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

Near-Term (1 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	10	241	0	0	130	105	0	0	0	48	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	12	287	0	0	140	113	0	0	0	53	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	253			287			512	563	287	507	507	196
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	253			287			512	563	287	507	507	196
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1313			1275			466	431	752	473	464	845
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	299	253	0	58								
Volume Left	12	0	0	53								
Volume Right	0	113	0	5								
cSH	1313	1275	1700	493								
Volume to Capacity	0.01	0.00	0.00	0.12								
Queue Length 95th (ft)	1	0	0	10								
Control Delay (s)	0.4	0.0	0.0	13.3								
Lane LOS	A			A	B							
Approach Delay (s)	0.4	0.0	0.0	13.3								
Approach LOS				A	B							
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				30.8%								A
Analysis Period (min)				15								

NBC Coastal Campus

22: 3rd St & Palm Ave













Near-Term (1 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	280	5	27	211	25	12	15	127	12	11	15
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	9	326	6	29	227	27	15	19	157	15	14	19
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	331	29	254	190	48						
Volume Left (vph)	9	0	29	0	15	15						
Volume Right (vph)	0	6	0	27	157	19						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.1	5.5	5.1	5.7						
Degree Utilization, x	0.02	0.51	0.05	0.39	0.27	0.08						
Capacity (veh/h)	574	631	561	623	628	540						
Control Delay (s)	7.9	12.9	8.2	10.8	10.0	9.2						
Approach Delay (s)	12.8		10.5		10.0	9.2						
Approach LOS	B		B		B	A						
Intersection Summary												
Delay				11.2								
Level of Service				B								
Intersection Capacity Utilization				38.1%								A
Analysis Period (min)				15								

























NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Near-Term (1 CVN) with Alternative 1
Timing Plan: AM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	229	428	335	154	18	70
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	290	542	409	188	25	99
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	596				1624	298
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	596				1624	298
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	70				61	86
cM capacity (veh/h)	976				66	698
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	290	542	272	324	124	
Volume Left	290	0	0	0	25	
Volume Right	0	0	0	188	99	
cSH	976	1700	1700	1700	235	
Volume to Capacity	0.30	0.32	0.16	0.19	0.53	
Queue Length 95th (ft)	31	0	0	0	70	
Control Delay (s)	10.2	0.0	0.0	0.0	36.3	
Lane LOS	B				E	
Approach Delay (s)	3.6		0.0		36.3	
Approach LOS					E	
Intersection Summary						
Average Delay			4.8			
Intersection Capacity Utilization			42.2%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Near-Term (1 CVN) with Alternative 1
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	421	16	27	336		0	66	40	82	2	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3520		1770	3539			1723			1857	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.87			0.98	1.00
Satd. Flow (perm)	929	3520		817	3539			1532			1824	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	22	547	21	35	436	0	100	61	124	3	48	48
RTOR Reduction (vph)	0	4	0	0	0	0	0	32	0	0	0	30
Lane Group Flow (vph)	22	564	0	35	436	0	0	253	0	0	51	18
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.5	13.5		13.5	13.5			13.4			13.4	13.4
Effective Green, g (s)	13.5	13.5		13.5	13.5			13.4			13.4	13.4
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	347	1316		305	1323			568			677	587
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.17			0.03	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.45			0.08	0.03
Uniform Delay, d1	7.2	8.4		7.4	8.1			8.6			7.3	7.2
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.1			0.6			0.0	0.0
Delay (s)	7.3	8.7		7.6	8.2			9.1			7.4	7.2
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.6			8.2			9.1			7.3	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.5							A		
HCM 2000 Volume to Capacity ratio			0.44									
Actuated Cycle Length (s)			36.1						9.2			
Intersection Capacity Utilization			47.5%							A		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Near-Term (1 CVN) with Alternative 1
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗			↖	
Volume (veh/h)	506	5	0	0	3	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	550	5	0	0	3	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			555		550	550
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			555		550	550
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1015		496	535
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	550	5	10			
Volume Left	0	0	3			
Volume Right	0	5	7			
cSH	1700	1700	521			
Volume to Capacity	0.32	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.0			
Lane LOS			B			
Approach Delay (s)	0.0		12.0			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 1
Timing Plan: AM PEAK

























	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑	↘	↖	↑↑↑			↗			↖	↘
Volume (vph)	22	700	40	25	1881	45	171	38	1900	1900	93	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6				4.6
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95				0.95
Frt	1.00	0.99		1.00	1.00			0.97				0.98
Flt Protected	0.95	1.00		0.95	1.00			0.97				0.97
Satd. Flow (prot)	1770	5044		1770	5068			3323				3361
Flt Permitted	0.95	1.00		0.95	1.00			0.97				0.97
Satd. Flow (perm)	1770	5044		1770	5068			3323				3361
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	26	833	48	27	2067	49	206	46	64	113	57	32
RTOR Reduction (vph)	0	3	0	0	1	0	0	13	0	0	9	0
Lane Group Flow (vph)	26	878	0	27	2115	0	0	303	0	0	193	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2233		118	2159			646			653	
v/s Ratio Prot	0.01	c0.17		c0.02	c0.42			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.18	0.39		0.23	0.98			0.47			0.30	
Uniform Delay, d1	76.8	33.8		79.6	50.9			64.3			62.0	
Progression Factor	1.00	1.00		1.24	0.76			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.8	13.1			0.5			0.3	
Delay (s)	77.3	34.4		99.7	51.8			64.8			62.2	
Level of Service	E	C		F	D			E			E	
Approach Delay (s)		35.6			52.5			64.8			62.2	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		49.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		74.4%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

27: Florida St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 1

Timing Plan: AM PEAK

























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	938	36	21	2060	13	19	5	32	57	11	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5080			1691		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.65	1.00	
Satd. Flow (perm)	1770	5057		1770	5080			1545		1208	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	3	1054	40	24	2341	15	26	7	44	81	16	23
RTOR Reduction (vph)	0	2	0	0	0	0	0	27	0	0	19	0
Lane Group Flow (vph)	3	1092	0	24	2356	0	0	50	0	81	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3716			257		201	283	
v/s Ratio Prot	0.00	0.22		c0.01	c0.46						0.01	
v/s Ratio Perm								0.03		c0.07		
v/c Ratio	0.08	0.31		0.20	0.63			0.20		0.40	0.07	
Uniform Delay, d1	86.2	11.2		79.5	12.1			64.6		67.0	63.2	
Progression Factor	1.61	0.27		1.41	0.34			1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.2		0.5	0.5			0.4		1.3	0.1	
Delay (s)	139.8	3.2		112.9	4.6			65.0		68.3	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.6			5.7			65.0			66.7	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		73.5%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

28: 13th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 1

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	1011	66	100	1909	54	152	20	94	174	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.85	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1136	74	120	2300	65	171	22	106	232	49	21
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	88	0	3	0
Lane Group Flow (vph)	4	1206	0	120	2300	35	0	193	18	0	299	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.24		c0.07	c0.45			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.10	0.54		0.61	0.85	0.04		0.63	0.07		0.51	
Uniform Delay, d1	86.2	36.7		76.3	36.0	20.2		69.2	62.4		67.7	
Progression Factor	1.19	0.62		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.9		5.6	3.6	0.1		4.0	0.1		0.8	
Delay (s)	103.9	23.6		81.9	39.7	20.3		73.2	62.5		68.4	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.8			41.2			69.4			68.4	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		40.2			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		90.8%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	15	1285	27	45	2043	13	17	7	51	40	3	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1672			1725	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.77	
Satd. Flow (perm)	1770	5070		1770	5081			1561			1370	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	16	1397	29	52	2376	15	20	8	61	53	4	29
RTOR Reduction (vph)	0	2	0	0	0	0	0	48	0	0	23	0
Lane Group Flow (vph)	16	1424	0	52	2391	0	0	41	0	0	63	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.6		2.8	39.7			15.2			15.2	
Effective Green, g (s)	0.7	37.6		2.8	39.7			15.2			15.2	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2673		69	2829			332			292	
v/s Ratio Prot	0.01	0.28		c0.03	c0.47							
v/s Ratio Perm								0.03			c0.05	
v/c Ratio	0.94	0.53		0.75	0.85			0.12			0.22	
Uniform Delay, d1	35.3	11.1		33.9	13.2			22.7			23.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	188.5	0.2		36.6	2.5			0.2			0.4	
Delay (s)	223.8	11.3		70.5	15.7			22.8			23.5	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		13.6			16.9			22.8			23.5	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		16.0			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		71.3			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		57.1%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	95	1298	31	254	1978	223	79	75	800	244	96	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	110	1509	36	270	2104	237	88	83	889	290	114	95
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	180	0	3	61
Lane Group Flow (vph)	110	1543	0	270	2104	170	88	339	300	290	121	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.4	31.1	31.1	10.4	33.1	33.1
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.4	31.1	31.1	10.4	33.1	33.1
Actuated g/C Ratio	0.05	0.30		0.15	0.40	0.40	0.07	0.27	0.27	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	176	1531		271	2055	639	127	413	401	306	496	427
v/s Ratio Prot	0.03	0.30		c0.15	c0.41		0.05	c0.22		c0.08	0.07	
v/s Ratio Perm						0.11			0.20			0.02
v/c Ratio	0.62	1.01		1.00	1.02	0.27	0.69	0.82	0.75	0.95	0.24	0.06
Uniform Delay, d1	54.1	40.6		49.3	34.7	23.2	52.8	40.1	39.1	52.8	32.1	30.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.8	24.9		53.3	26.2	0.2	15.1	12.3	7.4	37.3	0.3	0.1
Delay (s)	60.9	65.6		102.6	60.9	23.4	67.9	52.4	46.5	90.1	32.3	30.4
Level of Service	E	E		F	E	C	E	D	D	F	C	C
Approach Delay (s)		65.2			61.8			51.0			65.6	
Approach LOS		E			E			D			E	
Intersection Summary												
HCM 2000 Control Delay		61.1			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.97										
Actuated Cycle Length (s)		116.5			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		88.0%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Near-Term (1 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	295	1130	0	161	1325
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	331	1215	0	179	1472
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	331	1215	0	179	1467
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	18
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.34		0.10	c0.53
v/s Ratio Perm						
v/c Ratio		0.12	1.04		0.86	0.96
Uniform Delay, d1		2.5	26.8		34.7	17.1
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	37.7		29.2	14.0
Delay (s)		2.5	64.5		63.8	31.1
Level of Service		A	E		E	C
Approach Delay (s)		2.5	64.5		34.7	
Approach LOS		A	E		C	
Intersection Summary						
HCM 2000 Control Delay			42.7		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			1.06			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			69.2%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	456	0	0	443	543	793	2	149	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3247		1681	1629				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3247		1681	1629				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	524	0	0	482	590	862	2	162	0	0	0
RTOR Reduction (vph)	0	0	0	0	366	0	0	32	0	0	0	0
Lane Group Flow (vph)	0	524	0	0	706	0	526	468	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		17.4			17.4		20.5	20.5				
Effective Green, g (s)		17.4			17.4		20.5	20.5				
Actuated g/C Ratio		0.38			0.38		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1341			1230		750	727				
v/s Ratio Prot		0.15			c0.22							
v/s Ratio Perm							c0.31	0.29				
v/c Ratio		0.39			0.57		0.70	0.64				
Uniform Delay, d1		10.4			11.3		10.2	9.9				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		3.0	2.0				
Delay (s)		10.6			12.0		13.2	11.8				
Level of Service		B			B		B	B				
Approach Delay (s)		10.6			12.0		12.5				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					11.9					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.64							
Actuated Cycle Length (s)					45.9					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					69.6%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												





















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Near-Term (1 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔			↔	↔	
Volume (veh/h)	0	4	5	66	14	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	16	7	92	34	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	140	34	34			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	140	34	34			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	850	1039	1577			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	16	99	34			
Volume Left	0	7	0			
Volume Right	16	0	0			
cSH	1039	1577	1700			
Volume to Capacity	0.02	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.5	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		1.3				
Intersection Capacity Utilization		17.6%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St







Near-Term (1 CVN) with Alternative 1
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Volume (veh/h)	0	3520	18	0	1665	240	0	0	903	0	0	56
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	3667	19	0	1716	247	0	0	1003	0	0	85
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1984			3705			4373	5680	1272	3102	5566	736
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1984			3705			4373	5680	1272	3102	5566	736
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	42	100	100	76
cM capacity (veh/h)	282			57			0	0	1719	2	0	350
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1467	1467	752	687	687	591	1003	85				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	19	0	0	247	1003	85				
cSH	1700	1700	1700	1700	1700	1700	1719	350				
Volume to Capacity	0.86	0.86	0.44	0.40	0.40	0.35	0.58	0.24				
Queue Length 95th (ft)	0	0	0	0	0	0	101	23				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	10.0	18.6				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			10.0	18.6				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.7								
Intersection Capacity Utilization	132.9%			ICU Level of Service					H			
Analysis Period (min)	15											

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Near-Term (1 CVN) with Alternative 1
Timing Plan: PM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↑	
Volume (veh/h)	3286	131	0	1702	0	184	
Sign Control	Free			Free	Stop	Stop	
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3388	135	0	1773	0	224	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			3543		4086	1237	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			3543		4086	1237	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			67		2	162	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1355	1355	813	591	591	591	224
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	135	0	0	0	224
cSH	1700	1700	1700	1700	1700	1700	162
Volume to Capacity	0.80	0.80	0.48	0.35	0.35	0.35	1.39
Queue Length 95th (ft)	0	0	0	0	0	0	347
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	260.0
Lane LOS							F
Approach Delay (s)	0.0			0.0			260.0
Approach LOS							F
Intersection Summary							
Average Delay			10.6				
Intersection Capacity Utilization			86.5%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Near-Term (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↑	↑↑↑		↑	↑↑			↑↑	↑
Volume (vph)	0	0	0	977	537		86	244		0	0	767
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4635		1770	3539				3527
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4635		1770	3539				3527
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1028	565	92	89	252	0	0	0	791
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	0	0	0	2
Lane Group Flow (vph)	0	0	0	514	1161	0	89	252	0	0	0	804
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA				NA
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1431		98	1989				1567
v/s Ratio Prot				c0.34	0.25		c0.05	0.07				c0.23
v/s Ratio Perm												
v/c Ratio				1.09	0.97dl		0.91	0.13				0.51
Uniform Delay, d1				31.1	28.7		42.3	9.3				18.0
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				69.3	3.6		61.4	0.0				0.3
Delay (s)				100.4	32.3		103.7	9.3				18.3
Level of Service				F	C		F	A				B
Approach Delay (s)		0.0			53.1			33.9				18.3
Approach LOS		A			D			C				B
Intersection Summary												
HCM 2000 Control Delay			40.9				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.76									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)			17.2		
Intersection Capacity Utilization		133.9%					ICU Level of Service			H		
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Near-Term (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	0	1701	48	0	0	0	0	337	416	672	1093	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.95	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3139	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3139	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	0	1869	53	0	0	0	0	392	484	700	1139	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	9	28	0	0	0
Lane Group Flow (vph)	0	1869	24	0	0	0	0	596	243	700	1139	0
Confl. Peds. (#/hr)				20					20			
Turn Type	NA	Perm					NA	Perm	Prot	NA		
Protected Phases	4	4					2		1	6		
Permitted Phases			4					2				
Actuated Green, G (s)		63.4	63.4					56.3	56.3	40.9	100.0	
Effective Green, g (s)		63.4	63.4					56.3	56.3	40.9	100.0	
Actuated g/C Ratio		0.36	0.36					0.32	0.32	0.23	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1842	573					1009	433	802	2022	
v/s Ratio Prot		c0.37						c0.19		c0.20	0.32	
v/s Ratio Perm			0.02						0.18			
v/c Ratio		1.01	0.04					0.59	0.56	0.87	0.56	
Uniform Delay, d1		55.8	36.1					49.7	49.1	64.5	23.7	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		24.7	0.0					0.9	1.7	10.3	0.4	
Delay (s)		80.5	36.2					50.6	50.8	74.9	24.1	
Level of Service		F	D					D	D	E	C	
Approach Delay (s)		79.3			0.0			50.7			43.4	
Approach LOS		E			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		59.6		HCM 2000 Level of Service					E			
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)					14.4			
Intersection Capacity Utilization		133.9%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave









Near-Term (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑↑
Volume (vph)	181	13	896	698	0	1222
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1582		3259			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1582		3259			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	232	17	1007	784	0	1314
RTOR Reduction (vph)	2	0	67	0	0	0
Lane Group Flow (vph)	247	0	1724	0	0	1314
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA		NA	
Protected Phases	8		2		6	
Permitted Phases						
Actuated Green, G (s)	30.0		120.9		120.9	
Effective Green, g (s)	30.0		120.9		120.9	
Actuated g/C Ratio	0.19		0.76		0.76	
Clearance Time (s)	4.1		5.0		5.0	
Vehicle Extension (s)	3.0		3.0		3.0	
Lane Grp Cap (vph)	296		2462		2540	
v/s Ratio Prot	c0.16		c0.53		0.39	
v/s Ratio Perm						
v/c Ratio	0.84		0.70		0.52	
Uniform Delay, d1	62.6		10.1		7.8	
Progression Factor	1.00		1.00		1.00	
Incremental Delay, d2	18.1		1.7		0.8	
Delay (s)	80.7		11.8		8.6	
Level of Service	F		B		A	
Approach Delay (s)	80.7		11.8		8.6	
Approach LOS	F		B		A	
Intersection Summary						
HCM 2000 Control Delay		15.7		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.74				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		80.6%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Near-Term (1 CVN) with Alternative 1






Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	11	30	27	11	26	24	1509	52	70	1455	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	0.99		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1723		1770	3522		1770	3487	
Flt Permitted	0.67	0.67	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1188	1193	1583		1459		1770	3522		1770	3487	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.92	0.92	0.92	0.92
Adj. Flow (vph)	192	14	38	42	17	41	26	1623	56	76	1582	172
RTOR Reduction (vph)	0	0	32	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	102	104	6	0	78	0	26	1678	0	76	1751	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	19.3	19.3	19.3		19.3		4.6	71.0		8.1	74.5	
Effective Green, g (s)	19.3	19.3	19.3		19.3		4.6	71.0		8.1	74.5	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.04	0.63		0.07	0.66	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	203	269		248		71	2209		126	2294	
v/s Ratio Prot							0.01	0.48		c0.04	c0.50	
v/s Ratio Perm	0.09	c0.09	0.00		0.05							
v/c Ratio	0.50	0.51	0.02		0.31		0.37	0.76		0.60	0.76	
Uniform Delay, d1	42.6	42.7	39.1		41.1		52.9	15.0		51.0	13.3	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.0	2.2	0.0		0.7		3.2	1.5		7.9	1.6	
Delay (s)	44.6	44.8	39.1		41.9		56.1	16.6		58.9	14.9	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.9			41.9			17.2			16.7	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		19.3			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		113.2			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		75.2%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Near-Term (1 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	8	0	151	0	1307	0	34	1599	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	12	0	219	0	1390	0	37	1719	0
RTOR Reduction (vph)	0	0	0	0	178	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	53	0	0	1390	0	37	1719	0
Turn Type				Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			44.9		1.7	50.8	
Effective Green, g (s)					14.1			44.9		1.7	50.8	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					304			2118		40	2397	
v/s Ratio Prot					c0.03			0.39		0.02	c0.49	
v/s Ratio Perm												
v/c Ratio					0.17			0.66		0.93	0.72	
Uniform Delay, d1					25.6			9.9		36.6	7.6	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			0.7		112.0	1.0	
Delay (s)					25.8			10.7		148.6	8.6	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			25.8			10.7			11.6	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay				12.2				HCM 2000 Level of Service			B	
HCM 2000 Volume to Capacity ratio				0.69								
Actuated Cycle Length (s)				75.0				Sum of lost time (s)			18.9	
Intersection Capacity Utilization				62.4%				ICU Level of Service			B	
Analysis Period (min)				15								
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Near-Term (1 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	226	36	101	7	55	302	23	804	3	103	1470	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.96	1.00	1.00	0.86	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1514		1852	1514	1770	3539	1360	1770	3517	
Flt Permitted	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1514		1852	1514	1770	3539	1360	1770	3517	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	297	47	133	8	60	328	25	884	3	110	1564	60
RTOR Reduction (vph)	0	0	108	0	0	219	0	0	2	0	1	0
Lane Group Flow (vph)	297	47	25	0	68	109	25	884	1	110	1623	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	25.4	25.4	25.4		18.0	18.0	2.8	59.7	59.7	13.7	70.6	
Effective Green, g (s)	25.4	25.4	25.4		18.0	18.0	2.8	59.7	59.7	13.7	70.6	
Actuated g/C Ratio	0.19	0.19	0.19		0.13	0.13	0.02	0.44	0.44	0.10	0.52	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	330	347	282		244	200	36	1551	596	178	1823	
v/s Ratio Prot	c0.17	0.03			0.04		0.01	0.25		c0.06	c0.46	
v/s Ratio Perm			0.02			c0.07			0.00			
v/c Ratio	0.90	0.14	0.09		0.28	0.55	0.69	0.57	0.00	0.62	0.89	
Uniform Delay, d1	54.2	46.2	45.8		53.3	55.3	66.3	28.6	21.5	58.7	29.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	26.1	0.2	0.1		0.6	3.0	44.9	1.5	0.0	6.3	7.0	
Delay (s)	80.3	46.4	46.0		53.9	58.3	111.2	30.2	21.5	65.0	36.3	
Level of Service	F	D	D		D	E	F	C	C	E	D	
Approach Delay (s)		67.4			57.6			32.4			38.1	
Approach LOS		E			E			C			D	
Intersection Summary												
HCM 2000 Control Delay		42.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.84										
Actuated Cycle Length (s)		136.2			Sum of lost time (s)			19.4				
Intersection Capacity Utilization		78.2%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

Near-Term (1 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	271	364	4	49	142	4
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	301	404	6	69	161	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	367	40			75	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	367	40			75	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	47	61			89	
cM capacity (veh/h)	566	1031			1525	
Direction, Lane #						
Volume Total	706	75	166			
Volume Left	301	0	161			
Volume Right	404	69	0			
cSH	1138	1700	1525			
Volume to Capacity	0.62	0.04	0.11			
Queue Length 95th (ft)	113	0	9			
Control Delay (s)	13.2	0.0	7.5			
Lane LOS	B		A			
Approach Delay (s)	13.2	0.0	7.5			
Approach LOS	B					
Intersection Summary						
Average Delay		11.1				
Intersection Capacity Utilization		36.4%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near-Term (1 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	277	3	840	52	0	1602
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1772		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1772		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	351	4	933	58	0	1800
RTOR Reduction (vph)	1	0	0	33	0	0
Lane Group Flow (vph)	354	0	933	25	0	1800
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	843		1520	633		1520
v/s Ratio Prot	c0.20		0.26			c0.51
v/s Ratio Perm				0.02		
v/c Ratio	0.42		0.61	0.04		1.18
Uniform Delay, d1	18.0		23.2	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.3		0.7	0.0		89.9
Delay (s)	18.4		23.9	17.4		119.9
Level of Service	B		C	B		F
Approach Delay (s)	18.4		23.6			119.9
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay			78.1		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			0.78			
Actuated Cycle Length (s)			105.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			94.2%		ICU Level of Service	F
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Near-Term (1 CVN) with Alternative 1

Timing Plan: PM PEAK







Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗	↖	↗
Volume (veh/h)	5	7	682	4	16	1461
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	10	14	793	5	18	1605
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1633	399			798	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1633	399			798	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	98			98	
cM capacity (veh/h)	90	601			820	
Direction, Lane #						
Volume Total	24	529	269	18	803	803
Volume Left	10	0	0	18	0	0
Volume Right	14	0	5	0	0	0
cSH	179	1700	1700	820	1700	1700
Volume to Capacity	0.13	0.31	0.16	0.02	0.47	0.47
Queue Length 95th (ft)	11	0	0	2	0	0
Control Delay (s)	28.3	0.0	0.0	9.5	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	28.3	0.0		0.1		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			50.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

Near-Term (1 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	31	59	626	13	107	1359
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	34	64	711	15	118	1493
RTOR Reduction (vph)	0	47	0	8	0	0
Lane Group Flow (vph)	34	17	711	7	118	1493
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.4	21.7	27.8	27.8	7.2	43.8
Effective Green, g (s)	9.4	16.6	27.8	27.8	7.2	43.8
Actuated g/C Ratio	0.15	0.27	0.44	0.44	0.12	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	266	420	1574	704	203	2480
v/s Ratio Prot	c0.02	0.01	0.20		0.07	c0.42
v/s Ratio Perm				0.00		
v/c Ratio	0.13	0.04	0.45	0.01	0.58	0.60
Uniform Delay, d1	23.0	17.0	12.1	9.7	26.2	4.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.2	0.0	4.2	0.4
Delay (s)	23.2	17.1	12.3	9.7	30.4	5.3
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.2		12.2			7.1
Approach LOS	B		B			A

Intersection Summary




HCM 2000 Control Delay	9.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	62.5	Sum of lost time (s)	18.1
Intersection Capacity Utilization	49.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

Near-Term (1 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	24	616	20	0	1390
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	32	708	23	0	1511
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1475	366			731	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1475	366			731	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	117	631			869	







Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	32	472	259	755	755
Volume Left	0	0	0	0	0
Volume Right	32	0	23	0	0
cSH	631	1700	1700	1700	1700
Volume to Capacity	0.05	0.28	0.15	0.44	0.44
Queue Length 95th (ft)	4	0	0	0	0
Control Delay (s)	11.0	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	11.0	0.0		0.0	
Approach LOS	B				

Intersection Summary

Average Delay	0.2		
Intersection Capacity Utilization	41.8%	ICU Level of Service	A
Analysis Period (min)	15		





NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Near-Term (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	31	27	609	20	24	1365
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	43	38	648	21	26	1500
RTOR Reduction (vph)	0	34	0	8	0	0
Lane Group Flow (vph)	43	4	648	13	26	1500
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	27.2	27.2	1.7	36.4
Effective Green, g (s)	2.6	4.3	27.2	27.2	1.7	36.4
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	149	2110	944	65	2824
v/s Ratio Prot	c0.02	0.00	0.18		0.01	c0.42
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.43	0.02	0.31	0.01	0.40	0.53
Uniform Delay, d1	20.8	18.7	4.5	3.7	21.5	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.1	0.1	0.0	4.0	0.2
Delay (s)	23.7	18.8	4.6	3.7	25.5	1.8
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.4		4.6			2.2
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.6		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.65			
Actuated Cycle Length (s)			45.6		Sum of lost time (s)	14.1
Intersection Capacity Utilization			48.6%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	12	15	88	8	0	185	14	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	12	16	114	10	0	208	16	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	13	16	125	224						
Volume Left (vph)	0	0	114	0						
Volume Right (vph)	0	16	0	16						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.1	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.20						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (1 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱	↰	↱	↰			
Volume (vph)	11	191	0	0	85	143	13	528	71	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.69	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1292	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	12	217	0	0	98	164	14	580	78	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	121	0	43	0	0	0	0
Lane Group Flow (vph)	12	217	0	0	98	43	14	580	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.5	8.5			8.5	8.5	18.0	18.0	18.0			
Effective Green, g (s)	8.5	8.5			8.5	8.5	18.0	18.0	18.0			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.45	0.45	0.45			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	275	396			396	337	798	1596	714			
v/s Ratio Prot		c0.12			0.05		0.01	c0.16				
v/s Ratio Perm	0.01					0.03			0.02			
v/c Ratio	0.04	0.55			0.25	0.13	0.02	0.36	0.05			
Uniform Delay, d1	12.5	14.0			13.0	12.7	6.1	7.2	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.6			0.3	0.2	0.0	0.1	0.0			
Delay (s)	12.5	15.5			13.4	12.9	6.1	7.3	6.2			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.1		7.2			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.1			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.42										
Actuated Cycle Length (s)		39.9			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		43.0%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near-Term (1 CVN) with Alternative 1

Timing Plan: PM PEAK





















Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱	↰
Volume (veh/h)	226	421	105	451	0	1481	57
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	904	1684	119	512	0	1646	63
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2172	854	1709		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2172	854	1709		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	0	68		0		
cM capacity (veh/h)	27	302	368		0		
Direction, Lane #							
Volume Total	2588	119	256	256	1097	612	0
Volume Left	904	119	0	0	0	0	0
Volume Right	1684	0	0	0	0	63	0
cSH	66	368	1700	1700	1700	1700	1700
Volume to Capacity	39.21	0.32	0.15	0.15	0.65	0.36	0.00
Queue Length 95th (ft)	Err	35	0	0	0	0	0
Control Delay (s)	Err	19.4	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C					
Approach Delay (s)	Err	3.7			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			5250.8				
Intersection Capacity Utilization			97.0%		ICU Level of Service		
Analysis Period (min)			15				F

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near-Term (1 CVN) with Alternative 1

Timing Plan: PM PEAK






















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	91	7	70	19	4	7	76	407	58	19	1441	201
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.86		1.00	0.90		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1608		1770	1685		1770	3473		1770	3474	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1608		1770	1685		1770	3473		1770	3474	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	121	9	93	38	8	14	84	447	64	21	1601	223
RTOR Reduction (vph)	0	75	0	0	14	0	0	8	0	0	9	0
Lane Group Flow (vph)	121	27	0	38	8	0	84	503	0	21	1816	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	18.1	18.1		2.7	2.7		5.8	49.7		1.6	45.5	
Effective Green, g (s)	18.1	18.1		2.7	2.7		5.8	49.7		1.6	45.5	
Actuated g/C Ratio	0.20	0.20		0.03	0.03		0.06	0.55		0.02	0.50	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	352	319		52	49		112	1896		31	1737	
v/s Ratio Prot	c0.07	0.02		c0.02	0.00		c0.05	c0.14		0.01	c0.52	
v/s Ratio Perm												
v/c Ratio	0.34	0.09		0.73	0.17		0.75	0.27		0.68	1.05	
Uniform Delay, d1	31.3	29.7		43.8	43.1		41.9	11.0		44.4	22.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.1		40.9	1.7		24.2	0.1		45.6	34.5	
Delay (s)	31.9	29.8		84.7	44.7		66.1	11.0		90.1	57.2	
Level of Service	C	C		F	D		E	B		F	E	
Approach Delay (s)		31.0			70.0			18.8			57.6	
Approach LOS		C			E			B			E	
Intersection Summary												
HCM 2000 Control Delay		47.2										
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		91.0										
Intersection Capacity Utilization		74.1%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

Near-Term (1 CVN) with Alternative 1

Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	1391	62	0	464	36	20	41	5	25	27	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5053			5031		1770	1833			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.15	
Satd. Flow (perm)	1770	5053			5031		1305	1833			269	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	67	1581	70	0	494	38	29	59	7	29	32	26
RTOR Reduction (vph)	0	2	0	0	5	0	0	2	0	0	8	0
Lane Group Flow (vph)	67	1649	0	0	527	0	29	64	0	0	79	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1911			2043		253	356			44	
v/s Ratio Prot	c0.04	c0.33			c0.10			c0.03				
v/s Ratio Perm							0.02				c0.29	
v/c Ratio	0.34	0.86			0.26		0.11	0.18			1.79	
Uniform Delay, d1	73.9	51.6			35.5		59.7	60.5			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	5.4			0.3		0.2	0.2			430.9	
Delay (s)	75.0	57.1			35.8		59.9	60.7			505.9	
Level of Service	E	E			D		E	E			F	
Approach Delay (s)		57.8			35.8			60.5			505.9	
Approach LOS		E			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		69.1										
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		69.2%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

Near-Term (1 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	1422	0	516	499	39	0	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3501							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3501							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1598	0	549	531	41	0	0	0	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	1598	0	549	572	0	0	0	0	0	0	4
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3182							609
v/s Ratio Prot		c0.31		c0.16	c0.16							
v/s Ratio Perm												0.00
v/c Ratio		0.83		0.29	0.18							0.01
Uniform Delay, d1		50.7		20.7	0.9							34.9
Progression Factor		0.22		1.00	1.00							1.00
Incremental Delay, d2		2.1		0.1	0.0							0.0
Delay (s)		13.2		20.8	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		13.2			10.7		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		12.2				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.54										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		51.7%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave



















Near-Term (1 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	4	216	0	0	314	41	0	0	0	105	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	5	251	0	0	357	47	0	0	0	159	0	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	403			251			654	664	251	641	641	380
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	403			251			654	664	251	641	641	380
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	59	100	98
cM capacity (veh/h)	1155			1314			371	380	788	387	391	667
Direction, Lane #												
Volume Total	256	403	0	173								
Volume Left	5	0	0	159								
Volume Right	0	47	0	14								
cSH	1155	1314	1700	400								
Volume to Capacity	0.00	0.00	0.00	0.43								
Queue Length 95th (ft)	0	0	0	53								
Control Delay (s)	0.2	0.0	0.0	20.7								
Lane LOS	A			A			C					
Approach Delay (s)	0.2	0.0	0.0	20.7								
Approach LOS				A			C					
Intersection Summary												
Average Delay		4.3										
Intersection Capacity Utilization		32.0%				ICU Level of Service		A				
Analysis Period (min)		15										










NBC Coastal Campus
22: 3rd St & Palm Ave

Near-Term (1 CVN) with Alternative 1
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	298	13	86	328	25	15	39	69	29	34	14
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	10	382	17	97	369	28	26	68	121	63	74	30
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	10	399	97	397	216	167						
Volume Left (vph)	10	0	97	0	26	63						
Volume Right (vph)	0	17	0	28	121	30						
Hadj (s)	0.53	0.00	0.53	-0.02	-0.28	0.00						
Departure Headway (s)	7.3	6.8	7.2	6.7	6.8	7.2						
Degree Utilization, x	0.02	0.75	0.19	0.73	0.40	0.33						
Capacity (veh/h)	464	512	477	521	469	427						
Control Delay (s)	9.3	26.3	10.8	24.6	14.3	13.7						
Approach Delay (s)	25.9		21.9		14.3	13.7						
Approach LOS	D		C		B	B						
Intersection Summary												
Delay			20.8									
Level of Service			C									
Intersection Capacity Utilization			42.0%		ICU Level of Service		A					
Analysis Period (min)			15									




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Near-Term (1 CVN) with Alternative 1
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	75	425	458	40	53	144
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	77	438	533	47	62	169
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	579				1149	290
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	579				1149	290
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	92				65	76
cM capacity (veh/h)	991				177	707
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	77	438	355	224	232	
Volume Left	77	0	0	0	62	
Volume Right	0	0	0	47	169	
cSH	991	1700	1700	1700	392	
Volume to Capacity	0.08	0.26	0.21	0.13	0.59	
Queue Length 95th (ft)	6	0	0	0	92	
Control Delay (s)	8.9	0.0	0.0	0.0	26.7	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		26.7	
Approach LOS					D	
Intersection Summary						
Average Delay			5.2			
Intersection Capacity Utilization			40.8%	ICU Level of Service		A
Analysis Period (min)			15			











NBC Coastal Campus
24: 7th St & Palm Ave

Near-Term (1 CVN) with Alternative 1
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	434	30	32	460	4	55	27	23	13	45	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3535			1762			1842	1583
Flt Permitted	0.46	1.00		0.45	1.00			0.80			0.89	1.00
Satd. Flow (perm)	865	3505		829	3535			1438			1665	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	35	517	36	35	505	4	67	33	28	17	59	41
RTOR Reduction (vph)	0	7	0	0	1	0	0	22	0	0	0	32
Lane Group Flow (vph)	35	546	0	35	508	0	0	106	0	0	76	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases	2			6			8			4		
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	14.7	14.7		14.7	14.7			6.5			6.5	6.5
Effective Green, g (s)	14.7	14.7		14.7	14.7			6.5			6.5	6.5
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.21			0.21	0.21
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	418	1694		400	1709			307			356	338
v/s Ratio Prot	c0.16			0.14								
v/s Ratio Perm	0.04			0.04				c0.07			0.05	0.01
v/c Ratio	0.08		0.32	0.09		0.30		0.35			0.21	0.03
Uniform Delay, d1	4.2		4.8	4.2		4.7		10.1			9.8	9.4
Progression Factor	1.00		1.00	1.00		1.00		1.00			1.00	1.00
Incremental Delay, d2	0.1		0.1	0.1		0.1		0.7			0.3	0.0
Delay (s)	4.3		4.9	4.3		4.8		10.8			10.1	9.5
Level of Service	A		A	A		A		B			B	A
Approach Delay (s)	4.9			4.8				10.8			9.9	
Approach LOS	A			A				B			A	
Intersection Summary												
HCM 2000 Control Delay	5.8			HCM 2000 Level of Service				A				
HCM 2000 Volume to Capacity ratio	0.33											
Actuated Cycle Length (s)	30.4			Sum of lost time (s)				9.2				
Intersection Capacity Utilization	45.3%			ICU Level of Service				A				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Near-Term (1 CVN) with Alternative 1
Timing Plan: PM PEAK

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	482	9	0	0	7	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	588	11	0	0	10	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			599		588	588
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			599		588	588
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			978		472	509
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	588	11	15			
Volume Left	0	0	10			
Volume Right	0	11	4			
cSH	1700	1700	482			
Volume to Capacity	0.35	0.01	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.7			
Lane LOS			B			
Approach Delay (s)	0.0		12.7			
Approach LOS			B			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			35.4%	ICU Level of Service		A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	43	1717	130	60	875	135	102	93	65	179	82	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5032		1770	4984			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5032		1770	4984			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	46	1827	138	61	884	136	112	102	71	201	92	30
RTOR Reduction (vph)	0	5	0	0	11	0	0	18	0	0	4	0
Lane Group Flow (vph)	46	1960	0	61	1009	0	0	267	0	0	319	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2004		196	1985			649			658	
v/s Ratio Prot	0.03	c0.39		c0.03	0.20			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.23	0.98		0.31	0.51			0.41			0.48	
Uniform Delay, d1	73.0	53.4		73.7	40.9			63.5			64.5	
Progression Factor	1.00	1.00		1.23	0.82			1.00			1.00	
Incremental Delay, d2	0.6	15.1		0.9	0.9			0.4			0.6	
Delay (s)	73.6	68.5		91.1	34.2			63.9			65.0	
Level of Service	E	E		F	C			E			E	
Approach Delay (s)		68.6			37.4			63.9			65.0	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		58.8			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		119.9%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	21	2008	59	51	1293		22	11	36	66	14	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5064		1770	5053			1705		1770	1715	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.61	1.00	
Satd. Flow (perm)	1770	5064		1770	5053			1544		1144	1715	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	21	2049	60	53	1333	59	27	13	43	78	16	18
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	16	0
Lane Group Flow (vph)	21	2108	0	53	1390	0	0	60	0	78	18	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3561		157	3666			190		141	211	
v/s Ratio Prot	0.01	c0.42		c0.03	c0.28						0.01	
v/s Ratio Perm								0.04		c0.07		
v/c Ratio	0.18	0.59		0.34	0.38			0.32		0.55	0.09	
Uniform Delay, d1	79.3	13.6		77.0	9.4			72.0		74.2	69.9	
Progression Factor	1.43	0.10		1.55	0.28			1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3		1.0	0.2			1.0		4.6	0.2	
Delay (s)	113.7	1.7		120.4	2.9			72.9		78.9	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		2.8			7.2			72.9			76.2	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		62.2%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	1887	206	162	1369	84	134	42	132	159	46	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5010		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5010		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	30	2007	219	167	1411	87	146	46	143	215	62	28
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	119	0	4	0
Lane Group Flow (vph)	30	2219	0	167	1411	50	0	192	24	0	301	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2218		192	2364	736		306	269		575	
v/s Ratio Prot	0.02	c0.44		c0.09	c0.28			c0.11			c0.09	
v/s Ratio Perm						0.03			0.02			
v/c Ratio	0.19	1.00		0.87	0.60	0.07		0.63	0.09		0.52	
Uniform Delay, d1	76.0	50.1		78.9	35.7	26.6		69.3	62.9		68.0	
Progression Factor	1.01	0.99		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	17.6		31.6	1.1	0.2		9.4	0.7		3.4	
Delay (s)	77.6	67.3		110.5	36.8	26.8		78.7	63.6		71.4	
Level of Service	E	E		F	D	C		E	E		E	
Approach Delay (s)		67.4			43.7			72.2			71.4	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		59.4			HCM 2000 Level of Service					E		
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)					19.3		
Intersection Capacity Utilization		105.0%			ICU Level of Service					G		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	2018	52	177	1677		41	9		84	25	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5066		1770	5078			1680			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.82	
Satd. Flow (perm)	1770	5066		1770	5078			1510			1487	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.95	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	11	2242	58	186	1765		18	48	11	99	31	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	79	0	0	11	0
Lane Group Flow (vph)	11	2298	0	186	1782	0	0	79	0	0	48	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.4			17.4	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.4			17.4	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2413		234	3043			310			305	
v/s Ratio Prot	0.01	c0.45		c0.11	0.35							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.69	0.95		0.79	0.59			0.26			0.16	
Uniform Delay, d1	41.8	21.2		35.6	10.5			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	80.1	9.5		16.8	0.3			0.4			0.2	
Delay (s)	121.9	30.7		52.4	10.8			28.6			27.8	
Level of Service	F	C		D	B			C			C	
Approach Delay (s)		31.2			14.7			28.6			27.8	
Approach LOS		C			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		23.8			HCM 2000 Level of Service					C		
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		84.6			Sum of lost time (s)					15.7		
Intersection Capacity Utilization		71.5%			ICU Level of Service					C		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	196	1955	28	340	1685	576	69	184	553	610	248	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	206	2058	29	366	1812	619	73	196	588	663	270	257
RTOR Reduction (vph)	0	1	0	0	0	85	0	26	282	0	2	127
Lane Group Flow (vph)	206	2086	0	366	1812	534	73	382	94	663	294	104
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.3	38.3	11.8	41.4	41.4
Effective Green, g (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.3	38.3	11.8	41.4	41.4
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1201		519	2318	721	100	407	375	264	471	406
v/s Ratio Prot	0.06	c0.41		c0.21	c0.36		0.04	c0.23		c0.19	c0.17	
v/s Ratio Perm					0.34			0.06				0.07
v/c Ratio	0.81	1.74		0.71	0.78	0.74	0.73	0.94	0.25	2.51	0.62	0.26
Uniform Delay, d1	69.9	58.5		48.2	35.3	34.2	71.1	56.4	46.0	70.8	49.1	43.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	16.9	335.2		4.3	1.8	4.1	23.2	29.4	0.4	691.3	2.6	0.3
Delay (s)	86.8	393.7		52.6	37.0	38.3	94.4	85.8	46.4	762.0	51.7	44.2
Level of Service	F	F		D	D	D	F	D	D	F	D	D
Approach Delay (s)		366.1			39.4			69.2			446.0	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		215.7			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.23										
Actuated Cycle Length (s)		153.3			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		128.1%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Near-Term (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	↔
Volume (vph)	0	527	880	0	456	1727
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	592	936	0	501	1898
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	592	936	0	501	1895
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.17	c0.26		0.28	c0.68
v/s Ratio Perm						
v/c Ratio		0.33	1.09		0.76	1.07
Uniform Delay, d1		11.8	30.3		21.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	58.5		4.9	41.7
Delay (s)		11.9	88.8		26.7	56.2
Level of Service		B	F		C	E
Approach Delay (s)		11.9	88.8		50.1	
Approach LOS		B	F		D	
Intersection Summary						
HCM 2000 Control Delay		53.5			HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio		1.15				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		89.6%			ICU Level of Service	E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	976	0	0	547	260	446	3	111	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1017	0	0	615	292	480	3	119	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	31	0	0	0	0
Lane Group Flow (vph)	0	1017	0	0	809	0	307	264	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases							2					
Actuated Green, G (s)		19.7			19.7		14.7	14.7				
Effective Green, g (s)		19.7			19.7		14.7	14.7				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1644			1564		582	559				
v/s Ratio Prot		0.29			0.24							
v/s Ratio Perm							0.18	0.16				
v/c Ratio		0.62			0.52		0.53	0.47				
Uniform Delay, d1		8.5			8.0		11.1	10.8				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.7			0.3		0.9	0.6				
Delay (s)		9.2			8.3		11.9	11.4				
Level of Service		A			A		B	B				
Approach Delay (s)		9.2			8.3		11.7			0.0		
Approach LOS		A			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		9.5			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		42.4			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		49.5%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Near-Term (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	11	9	4	37	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	18	10	4	54	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	78	54	54			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	78	54	54			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	920	1014	1552			
Direction, Lane #						
Volume Total	18	14	54			
Volume Left	0	10	0			
Volume Right	18	0	0			
cSH	1014	1552	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.6				
Intersection Capacity Utilization		17.4%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St







Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1303	35	0	3164	532	0	0	477	0	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1570	42	0	3439	578	0	0	596	0	0	13
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4037			1632			2791	5648	584	4292	5380	1476
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4037			1632			2791	5648	584	4292	5380	1476
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	55	100	100	88
cM capacity (veh/h)	42			387			7	0	1334	0	0	112
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	628	628	356	1376	1376	1266	596	13				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	42	0	0	578	596	13				
cSH	1700	1700	1700	1700	1700	1700	1334	112				
Volume to Capacity	0.37	0.37	0.21	0.81	0.81	0.74	0.45	0.12				
Queue Length 95th (ft)	0	0	0	0	0	0	59	10				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.9	41.6				
Lane LOS							A	E				
Approach Delay (s)	0.0			0.0			9.9	41.6				
Approach LOS							A	E				
Intersection Summary												
Average Delay				1.0								
Intersection Capacity Utilization				88.1%			ICU Level of Service		E			
Analysis Period (min)				15								

* User Entered Value


















NBC Coastal Campus
2: Pomona Ave & Fourth St

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑↑			↑↑↑↑		↑	
Volume (veh/h)	1164	203	0	3063	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1323	231	0	3403	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1573		2613	596	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1573		2613	596	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	42	
cM capacity (veh/h)			408		19	432	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	529	529	495	1134	1134	1134	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	231	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	432
Volume to Capacity	0.31	0.31	0.29	0.67	0.67	0.67	0.58
Queue Length 95th (ft)	0	0	0	0	0	0	90
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	24.3
Lane LOS							C
Approach Delay (s)	0.0			0.0			24.3
Approach LOS							C
Intersection Summary							
Average Delay			1.2				
Intersection Capacity Utilization			74.0%		ICU Level of Service		D
Analysis Period (min)			15				













NBC Coastal Campus
3: Orange Ave & Third St

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1457	1536	250	43	94	0	0	259	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			1.00	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4642		1770	3539			3522	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4642		1770	3539			3522	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1567	1652	269	58	127	0	0	298	7
RTOR Reduction (vph)	0	0	0	0	7	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	862	2619	0	58	127	0	0	304	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.0	131.0		20.0	46.3			21.1	
Effective Green, g (s)				131.0	131.0		20.0	46.3			21.1	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1055	3219		187	867			393	
v/s Ratio Prot				c0.57	0.56		c0.03	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.82	0.81		0.31	0.15			0.77	
Uniform Delay, d1				20.5	20.4		78.1	55.8			81.6	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				5.0	1.7		0.9	0.1			9.2	
Delay (s)				25.5	22.0		79.0	55.9			90.8	
Level of Service				C	C		E	E			F	
Approach Delay (s)		0.0			22.9			63.2			90.8	
Approach LOS		A			C			E			F	
Intersection Summary												
HCM 2000 Control Delay			30.0	HCM 2000 Level of Service				C				
HCM 2000 Volume to Capacity ratio			0.75									
Actuated Cycle Length (s)			188.9	Sum of lost time (s)				16.8				
Intersection Capacity Utilization			201.0%	ICU Level of Service				H				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑		↑↑	↑↑	↑↑
Volume (vph)	0	501	68	0	0	0	0	128	207	435	1339	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3176	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3176	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	0	545	74	0	0	0	0	149	225	473	1395	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	66	66	0	0	0
Lane Group Flow (vph)	0	545	45	0	0	0	0	191	51	473	1395	0
Turn Type		NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		60.0	60.0					62.2	62.2	35.0	100.0	
Effective Green, g (s)		60.0	60.0					62.2	62.2	35.0	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.20	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1151	522	700	2062	
v/s Ratio Prot		c0.11						0.06		0.14	c0.39	
v/s Ratio Perm			0.03						0.04			
v/c Ratio		0.31	0.08					0.17	0.10	0.68	0.68	
Uniform Delay, d1		40.6	37.3					37.1	36.1	63.1	24.7	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.1	2.6	0.9	
Delay (s)		40.7	37.4					37.2	36.2	65.7	25.6	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		40.3			0.0			36.9			35.7	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay			36.9		HCM 2000 Level of Service					D		
HCM 2000 Volume to Capacity ratio			0.55									
Actuated Cycle Length (s)			171.6		Sum of lost time (s)					14.4		
Intersection Capacity Utilization			201.0%		ICU Level of Service					H		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↕	↕
Volume (vph)	225	7	1143	624	0	1062
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3309			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3309			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	262	8	1229	671	0	1118
RTOR Reduction (vph)	1	0	59	0	0	0
Lane Group Flow (vph)	269	0	1841	0	0	1118
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	17.3		42.1			42.1
Effective Green, g (s)	17.3		42.1			42.1
Actuated g/C Ratio	0.25		0.61			0.61
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	401		2033			2066
v/s Ratio Prot	c0.17		c0.56			0.33
v/s Ratio Perm						
v/c Ratio	0.67		0.91			0.54
Uniform Delay, d1	23.0		11.5			7.6
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	4.2		6.2			0.3
Delay (s)	27.2		17.7			7.9
Level of Service	C		B			A
Approach Delay (s)	27.2		17.7			7.9
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			15.2		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.88			
Actuated Cycle Length (s)			68.5		Sum of lost time (s)	12.1
Intersection Capacity Utilization			78.2%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↕	↕	↕	↕	↕	↕
Volume (vph)	49	3	11	8	0	6	21	1364	27	41	1209	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1693	1583		1706		1770	3529		1770	3523	
Frt Permitted	0.74	0.78	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1308	1380	1583		1516		1770	3529		1770	3523	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	57	3	13	16	0	12	25	1624	32	45	1314	41
RTOR Reduction (vph)	0	0	11	0	24	0	0	1	0	0	1	0
Lane Group Flow (vph)	30	30	2	0	4	0	25	1655	0	45	1354	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	14.9	14.9	14.9		14.9		2.6	61.3		3.9	62.6	
Effective Green, g (s)	14.9	14.9	14.9		14.9		2.6	61.3		3.9	62.6	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.65		0.04	0.66	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	206	218	250		239		48	2296		73	2341	
v/s Ratio Prot							0.01	c0.47		c0.03	0.38	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.15	0.14	0.01		0.02		0.52	0.72		0.62	0.58	
Uniform Delay, d1	34.2	34.1	33.4		33.5		45.2	10.8		44.4	8.6	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		9.8	1.1		14.5	0.3	
Delay (s)	34.5	34.4	33.4		33.5		55.0	12.0		58.9	9.0	
Level of Service	C	C	C		C		E	B		E	A	
Approach Delay (s)		34.3			33.5			12.6			10.6	
Approach LOS		C			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.4		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.61									
Actuated Cycle Length (s)			94.2		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			55.0%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	24	0	1306	8	444	757	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	36	0	1435	9	453	772	0
RTOR Reduction (vph)	0	0	0	0	33	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1435	4	453	772	0
Turn Type					NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.41		c0.26	0.22	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.86	0.01	0.74	0.26	
Uniform Delay, d1					60.6			34.3	20.4	41.8	2.3	
Progression Factor					1.00			0.34	1.00	1.00	1.00	
Incremental Delay, d2					0.1			4.2	0.0	4.9	0.2	
Delay (s)					60.6			16.0	20.5	46.7	2.5	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			16.0			18.8	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.9			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		79.5%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	38	12	2	53	118	120	1162	6	135	392	271
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.88		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3283	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3283	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	35	58	18	2	60	134	133	1291	7	155	451	311
RTOR Reduction (vph)	0	0	17	0	0	113	0	0	4	0	84	0
Lane Group Flow (vph)	35	58	1	0	62	21	133	1291	3	155	678	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Effective Green, g (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Actuated g/C Ratio	0.06	0.06	0.06		0.16	0.16	0.31	0.46	0.46	0.19	0.34	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	97	102	77		295	239	549	1625	618	341	1123	
v/s Ratio Prot	0.02	c0.03			c0.03		0.08	c0.36		c0.09	0.21	
v/s Ratio Perm			0.00			0.01			0.00			
v/c Ratio	0.36	0.57	0.01		0.21	0.09	0.24	0.79	0.01	0.45	0.60	
Uniform Delay, d1	66.0	66.8	64.8		53.1	52.1	37.3	33.4	21.2	51.7	39.5	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.93	
Incremental Delay, d2	2.3	7.1	0.1		0.4	0.2	0.2	4.1	0.0	1.0	2.4	
Delay (s)	68.3	73.9	64.8		53.5	52.2	37.5	37.5	21.3	50.4	39.2	
Level of Service	E	E	E		D	D	D	D	C	D	D	
Approach Delay (s)		70.7			52.6			37.4			41.1	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			41.2		HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio			0.60									
Actuated Cycle Length (s)			145.0		Sum of lost time (s)				19.4			
Intersection Capacity Utilization			86.2%		ICU Level of Service				E			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖			↖↗
Volume (veh/h)	43	190	5	34	158	9
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	51	224	6	42	172	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	381	28			49	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	381	28			49	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	79			89	
cM capacity (veh/h)	553	1048			1558	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	274	49	182			
Volume Left	51	0	172			
Volume Right	224	42	0			
cSH	1285	1700	1558			
Volume to Capacity	0.21	0.03	0.11			
Queue Length 95th (ft)	20	0	9			
Control Delay (s)	9.9	0.0	7.2			
Lane LOS	A		A			
Approach Delay (s)	9.9	0.0	7.2			
Approach LOS	A					
Intersection Summary						
Average Delay		8.0				
Intersection Capacity Utilization		25.9%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖↗	↖		↖↗
Volume (vph)	46	3	1300	368	0	367
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1754		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1754		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	61	4	1368	387	0	573
RTOR Reduction (vph)	4	0	0	118	0	0
Lane Group Flow (vph)	61	0	1368	269	0	573
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		29.3	29.3		29.3
Effective Green, g (s)	3.0		29.3	29.3		29.3
Actuated g/C Ratio	0.07		0.69	0.69		0.69
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	124		2457	1055		2457
v/s Ratio Prot	c0.03		c0.39			0.16
v/s Ratio Perm				0.18		
v/c Ratio	0.49		0.56	0.25		0.23
Uniform Delay, d1	18.9		3.2	2.4		2.4
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	3.1		0.3	0.1		0.0
Delay (s)	21.9		3.5	2.5		2.4
Level of Service	C		A	A		A
Approach Delay (s)	21.9		3.3			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.6		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.55				
Actuated Cycle Length (s)		42.2		Sum of lost time (s)	9.9	
Intersection Capacity Utilization		48.4%		ICU Level of Service	A	
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (veh/h)	0	16	2097	6	6	412
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	28	2255	6	9	606
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2579	1131			2261	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2579	1131			2261	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			96	
cM capacity (veh/h)	20	197			223	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	28	1503	758	9	303	303
Volume Left	0	0	0	9	0	0
Volume Right	28	0	6	0	0	0
cSH	197	1700	1700	223	1700	1700
Volume to Capacity	0.14	0.88	0.45	0.04	0.18	0.18
Queue Length 95th (ft)	12	0	0	3	0	0
Control Delay (s)	26.2	0.0	0.0	21.8	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	26.2	0.0		0.3		
Approach LOS	D					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		68.2%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (vph)	18	90	2008	13	39	373
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	22	111	2159	14	57	541
RTOR Reduction (vph)	0	4	0	1	0	0
Lane Group Flow (vph)	22	107	2159	13	57	541
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.9	26.0	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.9	20.9	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	262	308	2251	1007	82	2707
v/s Ratio Prot	0.01	c0.07	c0.61		c0.03	0.15
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.35	0.96	0.01	0.70	0.20
Uniform Delay, d1	39.4	37.3	18.2	7.2	50.3	3.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	10.9	0.0	22.5	0.0
Delay (s)	39.5	37.9	29.1	7.2	72.9	3.5
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.2		28.9			10.1
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay		25.5		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio		0.83				
Actuated Cycle Length (s)		107.2		Sum of lost time (s)		18.1
Intersection Capacity Utilization		71.9%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK











	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↖	↖	↖	↖
Volume (veh/h)	0	34	1985	27	0	389
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	55	2089	28	0	526
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2367	1059			2118	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2367	1059			2118	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	75			100	
cM capacity (veh/h)	29	221			254	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	55	1393	725	263	263	
Volume Left	0	0	0	0	0	
Volume Right	55	0	28	0	0	
cSH	221	1700	1700	1700	1700	
Volume to Capacity	0.25	0.82	0.43	0.15	0.15	
Queue Length 95th (ft)	24	0	0	0	0	
Control Delay (s)	26.6	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	26.6	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			65.7%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd




















Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖	↖	↖	↖
Volume (vph)	11	7	2011	34	16	365
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	18	11	2095	35	20	451
RTOR Reduction (vph)	0	5	0	8	0	0
Lane Group Flow (vph)	18	6	2095	27	20	451
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.5	59.2	59.2	2.1	68.8
Effective Green, g (s)	1.4	3.5	59.2	59.2	2.1	68.8
Actuated g/C Ratio	0.02	0.05	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	72	2727	1220	48	3170
v/s Ratio Prot	c0.01	0.00	c0.59		c0.01	0.13
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.56	0.09	0.77	0.02	0.42	0.14
Uniform Delay, d1	37.4	35.1	4.9	2.1	36.7	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	20.7	0.5	1.3	0.0	5.8	0.0
Delay (s)	58.1	35.6	6.3	2.1	42.5	0.5
Level of Service	E	D	A	A	D	A
Approach Delay (s)	49.6		6.2			2.3
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay			6.0		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.75			
Actuated Cycle Length (s)			76.8		Sum of lost time (s)	14.1
Intersection Capacity Utilization			68.4%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus Near Term (1 CVN) with Alternative 1 No Hooper
 15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: AM PEAK

										
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	3	0	47	2	0	46	3	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	12	0	87	4	0	73	5	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	12	0	91	73	5					
Volume Left (vph)	0	0	87	0	0					
Volume Right (vph)	0	0	0	0	5					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.2	3.2					
Degree Utilization, x	0.01	0.00	0.11	0.08	0.00					
Capacity (veh/h)	829	1121	814	835	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.4%	ICU Level of Service		A				
Analysis Period (min)			15							








NBC Coastal Campus Near Term (1 CVN) with Alternative 1 No Hooper
 16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	38	0	0	34	233	4	1809	53	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1353	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	4	51	0	0	47	324	4	1924	56	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	0	23	0	0	0
Lane Group Flow (vph)	4	51	0	0	47	268	4	1924	33	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.9	16.9			16.9	16.9	47.7	43.6	43.6			
Effective Green, g (s)	16.9	16.9			16.9	16.9	47.7	43.6	43.6			
Actuated g/C Ratio	0.23	0.23			0.23	0.23	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	309	426			426	362	1142	2087	933			
v/s Ratio Prot		0.03			0.03		0.00	c0.54				
v/s Ratio Perm	0.00					c0.17			0.02			
v/c Ratio	0.01	0.12			0.11	0.74	0.00	0.92	0.04			
Uniform Delay, d1	22.0	22.6			22.6	26.5	4.7	13.6	6.3			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	8.0	0.0	7.3	0.0			
Delay (s)	22.1	22.7			22.7	34.4	4.7	21.0	6.4			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)	22.7				32.9			20.5			0.0	
Approach LOS	C				C			C			A	
Intersection Summary												
HCM 2000 Control Delay			22.5	HCM 2000 Level of Service		C						
HCM 2000 Volume to Capacity ratio			0.87									
Actuated Cycle Length (s)			73.9	Sum of lost time (s)		13.4						
Intersection Capacity Utilization			84.0%	ICU Level of Service		E						
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near Term (1 CVN) with Alternative 1 No Hooper













Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	0	1603	0	333	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	0	1670	0	422	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1256	211	422		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1256	211	422		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	163	795	1134		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	835	835	281	141	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.49	0.49	0.17	0.08	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			47.6%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	420	2	40	50	8	21	27	1464	11	4	122	209
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	1.00		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1595		1770	1661		1770	3535		1770	3204	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1595		1770	1661		1770	3535		1770	3204	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	477	2	45	161	26	68	28	1541	12	6	177	303
RTOR Reduction (vph)	0	31	0	0	64	0	0	1	0	0	177	0
Lane Group Flow (vph)	477	16	0	161	30	0	28	1552	0	6	303	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	28.9	28.9		5.0	5.0		2.1	40.1		0.9	38.9	
Effective Green, g (s)	28.9	28.9		5.0	5.0		2.1	40.1		0.9	38.9	
Actuated g/C Ratio	0.31	0.31		0.05	0.05		0.02	0.43		0.01	0.41	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	545	491		94	88		39	1511		16	1328	
v/s Ratio Prot	c0.27	0.01		c0.09	0.02		c0.02	c0.44		0.00	0.09	
v/s Ratio Perm												
v/c Ratio	0.88	0.03		1.71	0.34		0.72	1.03		0.38	0.23	
Uniform Delay, d1	30.7	22.7		44.4	42.8		45.6	26.8		46.2	17.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	14.6	0.0		361.6	2.3		47.4	30.4		14.1	0.1	
Delay (s)	45.3	22.7		406.0	45.1		92.9	57.3		60.3	17.8	
Level of Service	D	C		F	D		F	E		E	B	
Approach Delay (s)		43.3			272.9			57.9			18.4	
Approach LOS		D			F			E			B	
Intersection Summary												
HCM 2000 Control Delay			67.7									
HCM 2000 Volume to Capacity ratio			1.02									
Actuated Cycle Length (s)			93.8									
Intersection Capacity Utilization			79.2%									
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	8	206	19	0	1321	18	35	24	2	21	43	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5022			5075		1770	1845			1732	
Flt Permitted	0.95	1.00			1.00		0.66	1.00			0.17	
Satd. Flow (perm)	1770	5022			5075		1229	1845			292	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	0.77
Adj. Flow (vph)	9	231	21	0	1452	20	42	29	2	27	56	70
RTOR Reduction (vph)	0	6	0	0	1	0	0	2	0	0	17	0
Lane Group Flow (vph)	9	246	0	0	1471	0	42	29	0	0	136	0
Turn Type	Prot	NA			NA	Perm	NA		Perm	NA		
Protected Phases	1	6			2		4			3		
Permitted Phases						4				3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1899			2061		238	358			48	
v/s Ratio Prot	c0.01	0.05			c0.29			0.02				
v/s Ratio Perm							c0.03				c0.47	
v/c Ratio	0.05	0.13			0.71		0.18	0.08			2.84	
Uniform Delay, d1	71.5	36.6			44.7		60.5	59.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			2.0		0.4	0.1			882.4	
Delay (s)	71.6	36.7			46.7		60.8	59.4			957.4	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		37.9			46.7			60.2			957.4	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		117.2			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.91										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		64.3%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	223	0	885	1330	9	0	0	0	0	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3535							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3535							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	272	0	941	1415	10	0	0	0	0	0	19
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	272	0	941	1425	0	0	0	0	0	0	7
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3212							609
v/s Ratio Prot		0.05		c0.27	c0.40							
v/s Ratio Perm												0.00
v/c Ratio		0.14		0.55	0.44							0.01
Uniform Delay, d1		36.7		31.0	1.3							34.9
Progression Factor		0.42		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.4	0.1							0.0
Delay (s)		15.4		31.4	1.4							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.4			13.3			0.0				35.0
Approach LOS		B			B			A				C
Intersection Summary												
HCM 2000 Control Delay				13.7	HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio				0.52								
Actuated Cycle Length (s)				180.0	Sum of lost time (s)			21.9				
Intersection Capacity Utilization				58.7%	ICU Level of Service			B				
Analysis Period (min)				15								
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	17	234	0	0	129	753	0	0	0	120	0	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	20	279	0	0	139	810	0	0	0	132	0	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	948			279			869	1267	279	863	863	544
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	948			279			869	1267	279	863	863	544
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			100			100	100	100	51	100	99
cM capacity (veh/h)	724			1284			263	164	760	269	284	539
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	299	948	0	138								
Volume Left	20	0	0	132								
Volume Right	0	810	0	7								
cSH	724	1284	1700	276								
Volume to Capacity	0.03	0.00	0.00	0.50								
Queue Length 95th (ft)	2	0	0	66								
Control Delay (s)	1.0	0.0	0.0	30.5								
Lane LOS	A			D								
Approach Delay (s)	1.0	0.0	0.0	30.5								
Approach LOS				D								
Intersection Summary												
Average Delay				3.3								
Intersection Capacity Utilization				66.9%								
Analysis Period (min)				15								

NBC Coastal Campus
22: 3rd St & Palm Ave

Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	345	5	27	858	25	12	15	127	12	11	15
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	9	401	6	29	923	27	15	19	157	15	14	19
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	407	29	949	190	48						
Volume Left (vph)	9	0	29	0	15	15						
Volume Right (vph)	0	6	0	27	157	19						
Hadj (s)	0.53	0.02	0.53	0.01	-0.45	-0.14						
Departure Headway (s)	6.6	6.1	6.4	5.9	6.3	7.1						
Degree Utilization, x	0.02	0.69	0.05	1.0	0.33	0.09						
Capacity (veh/h)	532	570	543	613	542	452						
Control Delay (s)	8.6	20.7	8.6	275.8	12.4	10.8						
Approach Delay (s)	20.4		267.9		12.4	10.8						
Approach LOS	C		F		B	B						
Intersection Summary												
Delay				167.6								
Level of Service				F								
Intersection Capacity Utilization				63.1%								
Analysis Period (min)				15								




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱	↕	↕	↰	↱
Volume (veh/h)	240	482	820	154	18	233
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	304	610	1000	188	25	328
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked	0.80				0.80	0.80
vC, conflicting volume	1188				2312	594
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	749				2145	11
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	56				0	62
cM capacity (veh/h)	689				19	859
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	304	610	667	521	354	
Volume Left	304	0	0	0	25	
Volume Right	0	0	0	188	328	
cSH	689	1700	1700	1700	203	
Volume to Capacity	0.44	0.36	0.39	0.31	1.74	
Queue Length 95th (ft)	57	0	0	0	606	
Control Delay (s)	14.3	0.0	0.0	0.0	392.4	
Lane LOS	B				F	
Approach Delay (s)	4.7		0.0		392.4	
Approach LOS					F	
Intersection Summary						
Average Delay			58.3			
Intersection Capacity Utilization			66.3%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	474	17	27	814	0	73	32	82	2	27	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1719			1857	1583
Flt Permitted	0.20	1.00		0.39	1.00			0.85			0.98	1.00
Satd. Flow (perm)	377	3521		732	3539			1496			1826	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	22	616	22	35	1057	0	111	48	124	3	47	48
RTOR Reduction (vph)	0	3	0	0	0	0	0	36	0	0	0	33
Lane Group Flow (vph)	22	635	0	35	1057	0	0	247	0	0	50	15
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	25.2	25.2		25.2	25.2			15.3			15.3	15.3
Effective Green, g (s)	25.2	25.2		25.2	25.2			15.3			15.3	15.3
Actuated g/C Ratio	0.51	0.51		0.51	0.51			0.31			0.31	0.31
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	191	1785		371	1794			460			562	487
v/s Ratio Prot		0.18			c0.30							
v/s Ratio Perm	0.06			0.05				c0.17			0.03	0.01
v/c Ratio	0.12	0.36		0.09	0.59			0.54			0.09	0.03
Uniform Delay, d1	6.4	7.4		6.3	8.6			14.3			12.2	12.0
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.3	0.1		0.1	0.5			1.2			0.1	0.0
Delay (s)	6.7	7.5		6.5	9.1			15.5			12.3	12.0
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)		7.5			9.0			15.5			12.2	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay		9.5		HCM 2000 Level of Service					A			
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		49.7		Sum of lost time (s)					9.2			
Intersection Capacity Utilization		53.1%		ICU Level of Service					A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

	→	↗	↖	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗			↖	
Volume (veh/h)	559	5	0	0	3	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	608	5	0	0	3	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			613		608	608
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			613		608	608
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			966		459	496
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	608	5	10			
Volume Left	0	0	3			
Volume Right	0	5	7			
cSH	1700	1700	483			
Volume to Capacity	0.36	0.00	0.02			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.6			
Lane LOS			B			
Approach Delay (s)	0.0		12.6			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			39.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

	↗	→	↘	↖	←	↖	↗	↑	↗	↘	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑	↘	↖	↑↑↑			↖			↖	
Volume (vph)	22	708	40	25	1947	45	171	38	53	93	47	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5044		1770	5068			3323			3361	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5044		1770	5068			3323			3361	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	26	843	48	27	2140	49	206	46	64	113	57	32
RTOR Reduction (vph)	0	3	0	0	1	0	0	13	0	0	9	0
Lane Group Flow (vph)	26	888	0	27	2188	0	0	303	0	0	193	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2233		118	2159			646			653	
v/s Ratio Prot	0.01	c0.18		c0.02	c0.43			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.18	0.40		0.23	1.01			0.47			0.30	
Uniform Delay, d1	76.8	33.9		79.6	51.6			64.3			62.0	
Progression Factor	1.00	1.00		1.22	0.79			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.8	20.5			0.5			0.3	
Delay (s)	77.3	34.4		98.3	61.3			64.8			62.2	
Level of Service	E	C		F	E			E			E	
Approach Delay (s)		35.7			61.8			64.8			62.2	
Approach LOS		D			E			E			E	
Intersection Summary												
HCM 2000 Control Delay		55.5			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		75.7%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	3	946	36	21	2126	13	19	5	32	57	11	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5058		1770	5081			1691		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.65	1.00	
Satd. Flow (perm)	1770	5058		1770	5081			1545		1208	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	3	1063	40	24	2416	15	26	7	44	81	16	23
RTOR Reduction (vph)	0	2	0	0	0	0	0	27	0	0	19	0
Lane Group Flow (vph)	3	1101	0	24	2431	0	0	50	0	81	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			257		201	283	
v/s Ratio Prot	0.00	0.22		c0.01	c0.48						0.01	
v/s Ratio Perm								0.03		c0.07		
v/c Ratio	0.08	0.32		0.20	0.65			0.20		0.40	0.07	
Uniform Delay, d1	86.2	11.3		79.5	12.4			64.6		67.0	63.2	
Progression Factor	1.62	0.26		1.43	0.35			1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.2		0.5	0.5			0.4		1.3	0.1	
Delay (s)	140.8	3.2		113.7	4.8			65.0		68.3	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.6			5.9			65.0			66.7	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.4			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		74.8%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	4	1018	66	100	1974	54	152	20	94	174	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.85	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1144	74	120	2378	65	171	22	106	232	49	21
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	88	0	3	0
Lane Group Flow (vph)	4	1214	0	120	2378	35	0	193	18	0	299	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.24		c0.07	c0.47			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.10	0.54		0.61	0.88	0.04		0.63	0.07		0.51	
Uniform Delay, d1	86.2	36.8		76.3	37.1	20.2		69.2	62.4		67.7	
Progression Factor	1.19	0.61		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.9		5.6	4.5	0.1		4.0	0.1		0.8	
Delay (s)	103.8	23.5		81.9	41.6	20.3		73.2	62.5		68.4	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.8			42.9			69.4			68.4	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		41.2			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		92.1%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	15	1292	27	45	2108	13	17	7	51	40	3	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1672			1725	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.77	
Satd. Flow (perm)	1770	5070		1770	5081			1561			1370	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	16	1404	29	52	2451	15	20	8	61	53	4	29
RTOR Reduction (vph)	0	2	0	0	0	0	0	48	0	0	23	0
Lane Group Flow (vph)	16	1431	0	52	2466	0	0	41	0	0	63	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.6		2.8	39.7			15.2			15.2	
Effective Green, g (s)	0.7	37.6		2.8	39.7			15.2			15.2	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2673		69	2829			332			292	
v/s Ratio Prot	0.01	0.28		c0.03	c0.49							
v/s Ratio Perm								0.03			c0.05	
v/c Ratio	0.94	0.54		0.75	0.87			0.12			0.22	
Uniform Delay, d1	35.3	11.1		33.9	13.6			22.7			23.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	188.5	0.2		36.6	3.2			0.2			0.4	
Delay (s)	223.8	11.3		70.5	16.8			22.8			23.5	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		13.7			17.9			22.8			23.5	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		16.7			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		71.3			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		58.4%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	95	1305	31	254	2044	223	79	75	800	244	96	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	110	1517	36	270	2174	237	88	83	889	290	114	95
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	180	0	3	61
Lane Group Flow (vph)	110	1551	0	270	2174	170	88	339	300	290	121	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.4	31.1	31.1	10.4	33.1	33.1
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.4	31.1	31.1	10.4	33.1	33.1
Actuated g/C Ratio	0.05	0.30		0.15	0.40	0.40	0.07	0.27	0.27	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	176	1531		271	2055	639	127	413	401	306	496	427
v/s Ratio Prot	0.03	0.31		c0.15	c0.43		0.05	c0.22		c0.08	0.07	
v/s Ratio Perm						0.11			0.20			0.02
v/c Ratio	0.62	1.01		1.00	1.06	0.27	0.69	0.82	0.75	0.95	0.24	0.06
Uniform Delay, d1	54.1	40.6		49.3	34.7	23.2	52.8	40.1	39.1	52.8	32.1	30.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.8	26.3		53.3	37.3	0.2	15.1	12.3	7.4	37.3	0.3	0.1
Delay (s)	60.9	66.9		102.6	72.0	23.4	67.9	52.4	46.5	90.1	32.3	30.4
Level of Service	E	E		F	E	C	E	D	D	F	C	C
Approach Delay (s)		66.5			70.7			51.0			65.6	
Approach LOS		E			E			D			E	
Intersection Summary												
HCM 2000 Control Delay		65.6			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.99										
Actuated Cycle Length (s)		116.5			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		89.2%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	295	1130	0	161	1390
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	331	1215	0	179	1544
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	331	1215	0	179	1539
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	18
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.34		0.10	c0.55
v/s Ratio Perm						
v/c Ratio		0.12	1.04		0.86	1.00
Uniform Delay, d1		2.5	26.8		34.7	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	37.7		29.2	24.0
Delay (s)		2.5	64.5		63.8	42.0
Level of Service		A	E		E	D
Approach Delay (s)		2.5	64.5		44.3	
Approach LOS		A	E		D	
Intersection Summary						
HCM 2000 Control Delay			47.6		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			1.09			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			71.4%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)







Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	456	0	0	443	543	793	2	149	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3247		1681	1629				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3247		1681	1629				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	524	0	0	482	590	862	2	162	0	0	0
RTOR Reduction (vph)	0	0	0	0	366	0	0	32	0	0	0	0
Lane Group Flow (vph)	0	524	0	0	706	0	526	468	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		17.4			17.4		20.5	20.5				
Effective Green, g (s)		17.4			17.4		20.5	20.5				
Actuated g/C Ratio		0.38			0.38		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1341			1230		750	727				
v/s Ratio Prot		0.15			c0.22							
v/s Ratio Perm							c0.31	0.29				
v/c Ratio		0.39			0.57		0.70	0.64				
Uniform Delay, d1		10.4			11.3		10.2	9.9				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		3.0	2.0				
Delay (s)		10.6			12.0		13.2	11.8				
Level of Service		B			B		B	B				
Approach Delay (s)		10.6			12.0		12.5				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					11.9					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.64							
Actuated Cycle Length (s)					45.9					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					69.6%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												













NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	4	5	721	87	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	16	7	1001	212	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1227	212	212			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1227	212	212			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	196	828	1358			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	16	1008	212			
Volume Left	0	7	0			
Volume Right	16	0	0			
cSH	828	1358	1700			
Volume to Capacity	0.02	0.01	0.12			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	9.4	0.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.4	0.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			51.9%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	3456	18	0	1649	240	0	0	903	0	0	56
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%	0%		0%	0%		0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	3600	19	0	1700	247	0	0	1003	0	0	85
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1967			3639			4301	5597	1249	3064	5482	730
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1967			3639			4301	5597	1249	3064	5482	730
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	41	100	100	76
cM capacity (veh/h)	287			61			0	0	1706	2	0	353
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1440	1440	739	680	680	587	1003	85				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	19	0	0	247	1003	85				
cSH	1700	1700	1700	1700	1700	1700	1706	353				
Volume to Capacity	0.85	0.85	0.43	0.40	0.40	0.35	0.59	0.24				
Queue Length 95th (ft)	0	0	0	0	0	0	102	23				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	10.1	18.4				
Lane LOS							B	C				
Approach Delay (s)	0.0			0.0			10.1	18.4				
Approach LOS							B	C				
Intersection Summary												
Average Delay				1.8								
Intersection Capacity Utilization				131.7%	ICU Level of Service		H					
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3222	131	0	1686	0	184	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3322	135	0	1756	0	224	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			3477		4015	1215	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			3477		4015	1215	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			71		2	168	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1329	1329	799	585	585	585	224
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	135	0	0	0	224
cSH	1700	1700	1700	1700	1700	1700	168
Volume to Capacity	0.78	0.78	0.47	0.34	0.34	0.34	1.34
Queue Length 95th (ft)	0	0	0	0	0	0	335
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	239.6
Lane LOS							F
Approach Delay (s)	0.0			0.0			239.6
Approach LOS							F
Intersection Summary							
Average Delay			9.9				
Intersection Capacity Utilization			85.2%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	
Volume (vph)	0	0	0	961	537	87	86	244	0	0	767	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3527	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3527	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1012	565	92	89	252	0	0	791	15
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	506	1153	0	89	252	0	0	804	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1432		98	1989			1567	
v/s Ratio Prot				c0.33	0.25		c0.05	0.07			c0.23	
v/s Ratio Perm												
v/c Ratio				1.08	0.96dl		0.91	0.13			0.51	
Uniform Delay, d1				31.1	28.6		42.3	9.3			18.0	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				63.6	3.4		61.4	0.0			0.3	
Delay (s)				94.7	32.0		103.7	9.3			18.3	
Level of Service				F	C		F	A			B	
Approach Delay (s)		0.0			51.0			33.9			18.3	
Approach LOS		A			D			C			B	
Intersection Summary												
HCM 2000 Control Delay			39.6			HCM 2000 Level of Service		D				
HCM 2000 Volume to Capacity ratio			0.76									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)		17.2				
Intersection Capacity Utilization		133.7%				ICU Level of Service		H				
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	0	1701	48	0	0	0	0	337	352	672	1077	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3180	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3180	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	0	1869	53	0	0	0	0	392	409	700	1122	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	9	28	0	0	0
Lane Group Flow (vph)	0	1869	24	0	0	0	0	547	217	700	1122	0
Confl. Peds. (#/hr)				20					20			
Turn Type	NA	Perm					NA	Perm	Prot	NA		
Protected Phases	4	4					2		1	6		
Permitted Phases			4					2				
Actuated Green, G (s)		63.4	63.4					56.3	56.3	40.9	100.0	
Effective Green, g (s)		63.4	63.4					56.3	56.3	40.9	100.0	
Actuated g/C Ratio		0.36	0.36					0.32	0.32	0.23	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1842	573					1023	433	802	2022	
v/s Ratio Prot		c0.37						0.17		c0.20	c0.32	
v/s Ratio Perm			0.02						0.16			
v/c Ratio		1.01	0.04					0.53	0.50	0.87	0.55	
Uniform Delay, d1		55.8	36.1					48.6	48.0	64.5	23.5	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		24.7	0.0					0.5	0.9	10.3	0.3	
Delay (s)		80.5	36.2					49.2	48.9	74.9	23.9	
Level of Service		F	D					D	D	E	C	
Approach Delay (s)		79.3		0.0				49.1			43.5	
Approach LOS		E		A				D			D	
Intersection Summary												
HCM 2000 Control Delay		59.6		HCM 2000 Level of Service				E				
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		133.7%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave










Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑↑
Volume (vph)	181	13	831	698	0	1206
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.98			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1582		3247			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1582		3247			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	232	17	934	784	0	1297
RTOR Reduction (vph)	2	0	73	0	0	0
Lane Group Flow (vph)	247	0	1645	0	0	1297
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA		NA	
Protected Phases	8		2		6	
Permitted Phases						
Actuated Green, G (s)	30.0		120.9		120.9	
Effective Green, g (s)	30.0		120.9		120.9	
Actuated g/C Ratio	0.19		0.76		0.76	
Clearance Time (s)	4.1		5.0		5.0	
Vehicle Extension (s)	3.0		3.0		3.0	
Lane Grp Cap (vph)	296		2453		2540	
v/s Ratio Prot	c0.16		c0.51		0.39	
v/s Ratio Perm						
v/c Ratio	0.84		0.67		0.51	
Uniform Delay, d1	62.6		9.7		7.8	
Progression Factor	1.00		1.00		1.00	
Incremental Delay, d2	18.1		1.5		0.7	
Delay (s)	80.7		11.2		8.5	
Level of Service	F		B		A	
Approach Delay (s)	80.7		11.2		8.5	
Approach LOS	F		B		A	
Intersection Summary						
HCM 2000 Control Delay		15.4		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.72				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		78.8%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Near Term (1 CVN) with Alternative 1 No Hooper







Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	11	30	27	11	26	24	1444	52	70	1439	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	0.99		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1723		1770	3521		1770	3487	
Flt Permitted	0.67	0.67	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1188	1193	1583		1459		1770	3521		1770	3487	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	192	14	38	42	17	41	26	1553	56	76	1564	172
RTOR Reduction (vph)	0	0	32	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	102	104	6	0	78	0	26	1608	0	76	1733	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	19.3	19.3	19.3		19.3		4.6	71.0		8.1	74.5	
Effective Green, g (s)	19.3	19.3	19.3		19.3		4.6	71.0		8.1	74.5	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.04	0.63		0.07	0.66	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	203	269		248		71	2208		126	2294	
v/s Ratio Prot							0.01	0.46		c0.04	c0.50	
v/s Ratio Perm	0.09	c0.09	0.00		0.05							
v/c Ratio	0.50	0.51	0.02		0.31		0.37	0.73		0.60	0.76	
Uniform Delay, d1	42.6	42.7	39.1		41.1		52.9	14.5		51.0	13.2	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.0	2.2	0.0		0.7		3.2	1.2		7.9	1.5	
Delay (s)	44.6	44.8	39.1		41.9		56.1	15.7		58.9	14.6	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.9			41.9			16.3			16.5	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		18.9			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		113.2			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		74.7%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	8	0	151	0	1242	0	34	1583	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	12	0	219	0	1321	0	37	1702	0
RTOR Reduction (vph)	0	0	0	0	178	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	53	0	0	1321	0	37	1702	0
Turn Type				Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			44.9		1.7	50.8	
Effective Green, g (s)					14.1			44.9		1.7	50.8	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					304			2118		40	2397	
v/s Ratio Prot					c0.03			0.37		0.02	c0.48	
v/s Ratio Perm												
v/c Ratio					0.17			0.62		0.93	0.71	
Uniform Delay, d1					25.6			9.6		36.6	7.5	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			0.6		112.0	1.0	
Delay (s)					25.8			10.2		148.6	8.5	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			25.8			10.2			11.5	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					12.0			HCM 2000 Level of Service			B	
HCM 2000 Volume to Capacity ratio					0.69							
Actuated Cycle Length (s)					75.0			Sum of lost time (s)			18.9	
Intersection Capacity Utilization					62.0%			ICU Level of Service			B	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑	↱		↰	↑	↱	↰	↑	↱	↰	↱
Volume (vph)	226	36	101	7	55	302	23	726	3	103	1454	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.96	1.00	1.00	0.86	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1515		1852	1514	1770	3539	1360	1770	3516	
Flt Permitted	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1515		1852	1514	1770	3539	1360	1770	3516	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	297	47	133	8	60	328	25	798	3	110	1547	60
RTOR Reduction (vph)	0	0	108	0	0	225	0	0	2	0	1	0
Lane Group Flow (vph)	297	47	25	0	68	103	25	798	1	110	1606	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	25.4	25.4	25.4		17.8	17.8	2.8	59.6	59.6	13.7	70.5	
Effective Green, g (s)	25.4	25.4	25.4		17.8	17.8	2.8	59.6	59.6	13.7	70.5	
Actuated g/C Ratio	0.19	0.19	0.19		0.13	0.13	0.02	0.44	0.44	0.10	0.52	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	330	348	283		242	198	36	1552	596	178	1823	
v/s Ratio Prot	c0.17	0.03			0.04		0.01	0.23		c0.06	c0.46	
v/s Ratio Perm			0.02			c0.07		0.00				
v/c Ratio	0.90	0.14	0.09		0.28	0.52	0.69	0.51	0.00	0.62	0.88	
Uniform Delay, d1	54.0	46.1	45.7		53.3	55.1	66.1	27.7	21.4	58.6	29.0	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	26.1	0.2	0.1		0.6	2.3	44.9	1.2	0.0	6.3	6.5	
Delay (s)	80.1	46.3	45.8		53.9	57.4	111.0	28.9	21.4	64.8	35.5	
Level of Service	F	D	D		D	E	F	C	C	E	D	
Approach Delay (s)		67.2			56.8			31.3			37.4	
Approach LOS		E			E			C			D	
Intersection Summary												
HCM 2000 Control Delay		42.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		135.9			Sum of lost time (s)			19.4				
Intersection Capacity Utilization		77.7%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰			↱
Volume (veh/h)	271	364	4	49	142	4
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	301	404	6	69	161	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915				600
pX, platoon unblocked						
vC, conflicting volume	367	40			75	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	367	40			75	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	47	61			89	
cM capacity (veh/h)	566	1031			1525	
Direction, Lane #						
Volume Total	706	75	166			
Volume Left	301	0	161			
Volume Right	404	69	0			
cSH	1138	1700	1525			
Volume to Capacity	0.62	0.04	0.11			
Queue Length 95th (ft)	113	0	9			
Control Delay (s)	13.2	0.0	7.5			
Lane LOS	B		A			
Approach Delay (s)	13.2	0.0	7.5			
Approach LOS	B					
Intersection Summary						
Average Delay		11.1				
Intersection Capacity Utilization		36.4%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	277	3	762	52	0	1586
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1772		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1772		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	351	4	847	58	0	1782
RTOR Reduction (vph)	1	0	0	33	0	0
Lane Group Flow (vph)	354	0	847	25	0	1782
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	843		1520	633		1520
v/s Ratio Prot	c0.20		0.24			c0.50
v/s Ratio Perm				0.02		
v/c Ratio	0.42		0.56	0.04		1.17
Uniform Delay, d1	18.0		22.5	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.3		0.4	0.0		84.9
Delay (s)	18.4		22.9	17.4		114.9
Level of Service	B		C	B		F
Approach Delay (s)	18.4		22.6			114.9
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay			76.1		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			0.78			
Actuated Cycle Length (s)			105.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			93.8%		ICU Level of Service	F
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗	↖	↗
Volume (veh/h)	5	7	618	4	16	1445
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	10	14	719	5	18	1588
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1550	362			723	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1550	362			723	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	90	98			98	
cM capacity (veh/h)	102	635			875	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	24	479	244	18	794	794
Volume Left	10	0	0	18	0	0
Volume Right	14	0	5	0	0	0
cSH	200	1700	1700	875	1700	1700
Volume to Capacity	0.12	0.28	0.14	0.02	0.47	0.47
Queue Length 95th (ft)	10	0	0	2	0	0
Control Delay (s)	25.4	0.0	0.0	9.2	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	25.4	0.0		0.1		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			49.9%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	31	59	562	13	107	1343
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	34	64	639	15	118	1476
RTOR Reduction (vph)	0	49	0	8	0	0
Lane Group Flow (vph)	34	15	639	7	118	1476
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	6.4	18.6	27.0	27.0	7.1	42.9
Effective Green, g (s)	6.4	13.5	27.0	27.0	7.1	42.9
Actuated g/C Ratio	0.11	0.23	0.46	0.46	0.12	0.73
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	193	364	1630	729	214	2590
v/s Ratio Prot	c0.02	0.01	0.18		0.07	c0.42
v/s Ratio Perm				0.00		
v/c Ratio	0.18	0.04	0.39	0.01	0.55	0.57
Uniform Delay, d1	23.7	17.5	10.4	8.6	24.3	3.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	0.0	0.2	0.0	3.1	0.3
Delay (s)	24.1	17.6	10.6	8.6	27.3	3.9
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.8		10.5			5.6
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			7.6		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.63			
Actuated Cycle Length (s)			58.6		Sum of lost time (s)	18.1
Intersection Capacity Utilization			49.0%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						













NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Near Term (1 CVN) with Alternative 1 No Hooper















Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↕			↕
Volume (veh/h)	0	24	552	20	0	1374
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	32	634	23	0	1493
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1393	329			657	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1393	329			657	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	133	667			926	
Direction, Lane #						
Volume Total	32	423	234	747	747	
Volume Left	0	0	0	0	0	
Volume Right	32	0	23	0	0	
cSH	667	1700	1700	1700	1700	
Volume to Capacity	0.05	0.25	0.14	0.44	0.44	
Queue Length 95th (ft)	4	0	0	0	0	
Control Delay (s)	10.7	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.7	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			41.3%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus Near Term (1 CVN) with Alternative 1 No Hooper
 14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd Timing Plan: PM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	31	27	545	20	24	1349
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	43	38	580	21	26	1482
RTOR Reduction (vph)	0	34	0	9	0	0
Lane Group Flow (vph)	43	4	580	12	26	1482
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	26.9	26.9	1.7	36.1
Effective Green, g (s)	2.6	4.3	26.9	26.9	1.7	36.1
Actuated g/C Ratio	0.06	0.09	0.59	0.59	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	101	150	2101	940	66	2820
v/s Ratio Prot	c0.02	0.00	0.16		0.01	c0.42
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.43	0.02	0.28	0.01	0.39	0.53
Uniform Delay, d1	20.6	18.6	4.5	3.8	21.3	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.9	0.1	0.1	0.0	3.8	0.2
Delay (s)	23.5	18.7	4.5	3.8	25.1	1.8
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.2		4.5			2.2
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.5	HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.64			
Actuated Cycle Length (s)			45.3	Sum of lost time (s)		14.1
Intersection Capacity Utilization			48.2%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus Near Term (1 CVN) with Alternative 1 No Hooper
 15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: PM PEAK

										
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	12	15	88	8	0	185	14	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	12	16	114	10	0	208	16	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	13	16	125	224						
Volume Left (vph)	0	0	114	0						
Volume Right (vph)	0	16	0	16						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.1	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.20						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						
Intersection Summary										
Delay	7.2									
Level of Service	A									
Intersection Capacity Utilization	Err%			ICU Level of Service		H				
Analysis Period (min)	15									

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near Term (1 CVN) with Alternative 1 No Hooper













Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱	↰	↱	↰			
Volume (vph)	11	191	0	0	85	143	13	464	71	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Flt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.69	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1292	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	12	217	0	0	98	164	14	510	78	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	129	0	43	0	0	0	0
Lane Group Flow (vph)	12	217	0	0	98	35	14	510	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.0	18.0	18.0			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.0	18.0	18.0			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.45	0.45	0.45			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	272	393			393	334	800	1600	715			
v/s Ratio Prot		c0.12			0.05		0.01	c0.14				
v/s Ratio Perm	0.01					0.02		0.02				
v/c Ratio	0.04	0.55			0.25	0.10	0.02	0.32	0.05			
Uniform Delay, d1	12.5	14.0			13.1	12.7	6.0	7.0	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.7			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.6	15.7			13.4	12.8	6.0	7.1	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.5			13.0		6.9			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.2			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.39										
Actuated Cycle Length (s)		39.8			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		41.3%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near Term (1 CVN) with Alternative 1 No Hooper









Timing Plan: PM PEAK

							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	0	613	0	1522	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	0	0	697	0	1691	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2039	846	1691		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2039	846	1691		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	49	306	374		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	348	348	1127	564	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.20	0.20	0.66	0.33	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			45.4%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near Term (1 CVN) with Alternative 1 No Hooper









Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	251	7	70	19	4	7	76	303	58	19	1027	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.86		1.00	0.90		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1608		1770	1685		1770	3454		1770	3440	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1608		1770	1685		1770	3454		1770	3440	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	335	9	93	38	8	14	84	333	64	21	1141	262
RTOR Reduction (vph)	0	69	0	0	14	0	0	12	0	0	16	0
Lane Group Flow (vph)	335	33	0	38	8	0	84	385	0	21	1387	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	24.4	24.4		2.7	2.7		5.7	47.3		1.7	43.3	
Effective Green, g (s)	24.4	24.4		2.7	2.7		5.7	47.3		1.7	43.3	
Actuated g/C Ratio	0.26	0.26		0.03	0.03		0.06	0.50		0.02	0.46	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	454	413		50	47		106	1719		31	1567	
v/s Ratio Prot	c0.19	0.02		c0.02	0.00		c0.05	c0.11		0.01	c0.40	
v/s Ratio Perm												
v/c Ratio	0.74	0.08		0.76	0.18		0.79	0.22		0.68	0.88	
Uniform Delay, d1	32.4	28.8		45.8	45.1		44.1	13.5		46.4	23.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	6.2	0.1		48.9	1.8		32.1	0.1		45.6	6.4	
Delay (s)	38.5	28.9		94.8	46.9		76.2	13.5		92.0	29.9	
Level of Service	D	C		F	D		E	B		F	C	
Approach Delay (s)		35.8			77.2			24.5			30.9	
Approach LOS		D			E			C			C	
Intersection Summary												
HCM 2000 Control Delay		31.6										
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		95.0										
Intersection Capacity Utilization		72.6%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	983	56	0	342	36	18	41	5	25	27	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5044			5013		1770	1833			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.15	
Satd. Flow (perm)	1770	5044			5013		1305	1833			269	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	67	1117	64	0	364	38	26	59	7	29	32	26
RTOR Reduction (vph)	0	4	0	0	7	0	0	2	0	0	8	0
Lane Group Flow (vph)	67	1177	0	0	395	0	26	64	0	0	79	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1908			2035		253	356			44	
v/s Ratio Prot	c0.04	c0.23			c0.08			c0.03				
v/s Ratio Perm							0.02				c0.29	
v/c Ratio	0.34	0.62			0.19		0.10	0.18			1.79	
Uniform Delay, d1	73.9	45.4			34.5		59.6	60.5			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	1.5			0.2		0.2	0.2			430.9	
Delay (s)	75.0	46.9			34.7		59.8	60.7			505.9	
Level of Service	E	D			C		E	E			F	
Approach Delay (s)		48.4			34.7			60.5			505.9	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		67.7										
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	1014	0	634	397	1900	39	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3492							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3492							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1139	0	674	422	41	0	0	0	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	1139	0	674	463	0	0	0	0	0	0	4
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3173							609
v/s Ratio Prot		c0.22		c0.20	c0.13							
v/s Ratio Perm												0.00
v/c Ratio		0.59		0.35	0.15							0.01
Uniform Delay, d1		44.8		21.7	0.9							34.9
Progression Factor		0.20		1.00	1.00							1.00
Incremental Delay, d2		1.0		0.1	0.0							0.0
Delay (s)		9.9		21.8	0.9							34.9
Level of Service		A		C	A							C
Approach Delay (s)		9.9			13.3		0.0				34.9	
Approach LOS		A			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		11.7				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.48										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		46.8%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave



















Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑							↑↑
Volume (veh/h)	6	214	0	0	308	201	0	0	0	746	0	15
Sign Control		Free			Free				Stop			Stop
Grade		0%			0%				0%			0%
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	7	249	0	0	350	228	0	0	0	1130	0	23
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	578			249			750	841	249	727	727	464
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	578			249			750	841	249	727	727	464
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	0	100	96
cM capacity (veh/h)	995			1317			314	299	790	338	348	598
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	256	578	0	1153								
Volume Left	7	0	0	1130								
Volume Right	0	228	0	23								
cSH	995	1317	1700	341								
Volume to Capacity	0.01	0.00	0.00	3.39								
Queue Length 95th (ft)	1	0	0	Err								
Control Delay (s)	0.3	0.0	0.0	Err								
Lane LOS	A		A	F								
Approach Delay (s)	0.3	0.0	0.0	Err								
Approach LOS			A	F								
Intersection Summary												
Average Delay		5801.6										
Intersection Capacity Utilization		77.4%				ICU Level of Service		D				
Analysis Period (min)		15										













NBC Coastal Campus
22: 3rd St & Palm Ave

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	937	13	86	482	25	15	39	69	29	34	14
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	10	1201	17	97	542	28	26	68	121	63	74	30
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	10	1218	97	570	216	167						
Volume Left (vph)	10	0	97	0	26	63						
Volume Right (vph)	0	17	0	28	121	30						
Hadj (s)	0.53	0.02	0.53	0.00	-0.28	0.00						
Departure Headway (s)	7.7	7.2	7.6	7.1	7.6	8.1						
Degree Utilization, x	0.02	1.0	0.20	1.0	0.46	0.38						
Capacity (veh/h)	456	511	467	512	451	427						
Control Delay (s)	9.7	666.4	11.4	101.5	16.8	15.9						
Approach Delay (s)	660.9		88.4		16.8	15.9						
Approach LOS	F		F		C	C						
Intersection Summary												
Delay			385.0									
Level of Service			F									
Intersection Capacity Utilization			74.7%		ICU Level of Service				D			
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	235	904	578	40	53	179
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	242	932	672	47	62	211
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	719				2112	359
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	719				2112	359
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	72				0	67
cM capacity (veh/h)	878				32	637
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	242	932	448	271	273	
Volume Left	242	0	0	0	62	
Volume Right	0	0	0	47	211	
cSH	878	1700	1700	1700	119	
Volume to Capacity	0.28	0.55	0.26	0.16	2.30	
Queue Length 95th (ft)	28	0	0	0	590	
Control Delay (s)	10.7	0.0	0.0	0.0	669.1	
Lane LOS	B				F	
Approach Delay (s)	2.2		0.0		669.1	
Approach LOS					F	
Intersection Summary						
Average Delay			85.5			
Intersection Capacity Utilization			68.2%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱		↱		↰	↱	↱
Volume (vph)	29	906	36	32	578	4	57	25	23	13	39	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3519		1770	3536			1760			1840	1583
Flt Permitted	0.41	1.00		0.20	1.00			0.79			0.90	1.00
Satd. Flow (perm)	762	3519		377	3536			1433			1686	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	35	1079	43	35	635	4	70	30	28	17	51	41
RTOR Reduction (vph)	0	4	0	0	0	0	0	22	0	0	0	32
Lane Group Flow (vph)	35	1118	0	35	639	0	0	106	0	0	68	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	21.8	21.8		21.8	21.8			9.3			9.3	9.3
Effective Green, g (s)	21.8	21.8		21.8	21.8			9.3			9.3	9.3
Actuated g/C Ratio	0.54	0.54		0.54	0.54			0.23			0.23	0.23
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	412	1903		203	1912			330			389	365
v/s Ratio Prot		c0.32			0.18							
v/s Ratio Perm	0.05			0.09				c0.07			0.04	0.01
v/c Ratio	0.08	0.59		0.17	0.33			0.32			0.17	0.03
Uniform Delay, d1	4.5	6.2		4.7	5.2			12.9			12.4	12.0
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.5		0.4	0.1			0.6			0.2	0.0
Delay (s)	4.5	6.7		5.1	5.3			13.5			12.6	12.0
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)		6.6			5.3			13.5			12.4	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay		6.9			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.51										
Actuated Cycle Length (s)		40.3			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		46.8%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↱	↱			↰	↱
Volume (veh/h)	954	9	0	0	7	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1163	11	0	0	10	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			1174		1163	1163
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1174		1163	1163
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		95	98
cM capacity (veh/h)			595		215	237
Direction, Lane #						
Volume Total	1163	11	15			
Volume Left	0	0	10			
Volume Right	0	11	4			
cSH	1700	1700	221			
Volume to Capacity	0.68	0.01	0.07			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.0	0.0	22.4			
Lane LOS			C			
Approach Delay (s)	0.0		22.4			
Approach LOS			C			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			60.2%		ICU Level of Service	B
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑↑↑		↔	↑↑↑			↔			↔	
Volume (vph)	43	1782	130	60	892	135	102	93	65	179	82	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Flt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5034		1770	4985			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5034		1770	4985			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	46	1896	138	61	901	136	112	102	71	201	92	30
RTOR Reduction (vph)	0	5	0	0	11	0	0	18	0	0	4	0
Lane Group Flow (vph)	46	2029	0	61	1026	0	0	267	0	0	319	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2005		196	1985			649			658	
v/s Ratio Prot	0.03	c0.40		c0.03	0.21			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.23	1.01		0.31	0.52			0.41			0.48	
Uniform Delay, d1	73.0	54.1		73.7	41.0			63.5			64.5	
Progression Factor	1.00	1.00		1.22	0.83			1.00			1.00	
Incremental Delay, d2	0.6	23.1		0.9	0.9			0.4			0.6	
Delay (s)	73.6	77.3		91.0	34.9			63.9			65.0	
Level of Service	E	E		F	C			E			E	
Approach Delay (s)		77.2			38.0			63.9			65.0	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		63.8			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		119.9%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑↑↑		↔	↑↑↑			↔			↔	
Volume (vph)	21	2073	59	51	1310	57	22	11	36	66	14	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	0.99			0.93			1.00	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.95	
Satd. Flow (prot)	1770	5064		1770	5053			1705			1770	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.61	
Satd. Flow (perm)	1770	5064		1770	5053			1544			1144	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.83	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	21	2115	60	53	1351	59	27	13	43	78	16	18
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	16	0
Lane Group Flow (vph)	21	2174	0	53	1408	0	0	60	0	78	18	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2			22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2			22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12			0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	118	3561		157	3666			190			141	
v/s Ratio Prot	0.01	c0.43		c0.03	c0.28						0.01	
v/s Ratio Perm								0.04			c0.07	
v/c Ratio	0.18	0.61		0.34	0.38			0.32			0.55	
Uniform Delay, d1	79.3	13.9		77.0	9.4			72.0			74.2	
Progression Factor	1.43	0.11		1.55	0.28			1.00			1.00	
Incremental Delay, d2	0.3	0.3		1.0	0.2			1.0			4.6	
Delay (s)	114.0	1.8		120.5	2.9			72.9			78.9	
Level of Service	F	A		F	A			E			E	
Approach Delay (s)		2.9			7.1			72.9			76.2	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.1			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		62.2%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰		↰↰	
Volume (vph)	28	1951	206	162	1385	84	134	42	132	159	46	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5013		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5013		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	30	2076	219	167	1428	87	146	46	143	215	62	28
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	119	0	4	0
Lane Group Flow (vph)	30	2288	0	167	1428	50	0	192	24	0	301	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2			4				
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2219		192	2364	736		306	269		575	
v/s Ratio Prot	0.02	c0.46		c0.09	c0.28			c0.11			c0.09	
v/s Ratio Perm					0.03			0.02				
v/c Ratio	0.19	1.03		0.87	0.60	0.07		0.63	0.09		0.52	
Uniform Delay, d1	76.0	50.1		78.9	35.8	26.6		69.3	62.9		68.0	
Progression Factor	1.01	1.01		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	25.9		31.6	1.2	0.2		9.4	0.7		3.4	
Delay (s)	77.1	76.5		110.5	37.0	26.8		78.7	63.6		71.4	
Level of Service	E	E		F	D	C		E	E		E	
Approach Delay (s)		76.5			43.8			72.2			71.4	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		64.0			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		106.2%			ICU Level of Service				G			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰						↰↰	
Volume (vph)	10	2082	52	177	1693		17	41	9		25	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900		1900	1900	1900		1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9				5.6			5.6
Lane Util. Factor	1.00	0.91		1.00	0.91				1.00		1.00	
Frt	1.00	1.00		1.00	1.00				0.92		0.97	
Flt Protected	0.95	1.00		0.95	1.00				0.99		0.97	
Satd. Flow (prot)	1770	5067		1770	5078				1680		1757	
Flt Permitted	0.95	1.00		0.95	1.00				0.89		0.82	
Satd. Flow (perm)	1770	5067		1770	5078				1510		1487	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.95	0.85	0.85	0.85	0.85	0.81	0.81
Adj. Flow (vph)	11	2313	58	186	1782	18	48	11	99	31	14	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	79	0	0	11	0
Lane Group Flow (vph)	11	2369	0	186	1799	0	0	79	0	0	48	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7				17.4		17.4	
Effective Green, g (s)	0.8	40.3		11.2	50.7				17.4		17.4	
Actuated g/C Ratio	0.01	0.48		0.13	0.60				0.21		0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9				5.6		5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0				3.0		3.0	
Lane Grp Cap (vph)	16	2413		234	3043				310		305	
v/s Ratio Prot	0.01	c0.47		c0.11	0.35							
v/s Ratio Perm									c0.05		0.03	
v/c Ratio	0.69	0.98		0.79	0.59				0.26		0.16	
Uniform Delay, d1	41.8	21.8		35.6	10.5				28.2		27.6	
Progression Factor	1.00	1.00		1.00	1.00				1.00		1.00	
Incremental Delay, d2	80.1	14.2		16.8	0.3				0.4		0.2	
Delay (s)	121.9	36.0		52.4	10.8				28.6		27.8	
Level of Service	F	D		D	B				C		C	
Approach Delay (s)		36.4			14.7				28.6		27.8	
Approach LOS		D			B				C		C	
Intersection Summary												
HCM 2000 Control Delay		26.6			HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		84.6			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		72.8%			ICU Level of Service				C			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	196	2020	28	340	1701	576	69	184	553	610	248	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	206	2126	29	366	1829	619	73	196	588	663	270	257
RTOR Reduction (vph)	0	1	0	0	0	85	0	26	282	0	2	127
Lane Group Flow (vph)	206	2154	0	366	1829	534	73	382	94	663	294	104
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2			4				8
Actuated Green, G (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.3	38.3	11.8	41.4	41.4
Effective Green, g (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.3	38.3	11.8	41.4	41.4
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1201		519	2318	721	100	407	375	264	471	406
v/s Ratio Prot	0.06	c0.42		c0.21	c0.36		0.04	c0.23		c0.19	c0.17	
v/s Ratio Perm					0.34			0.06				0.07
v/c Ratio	0.81	1.79		0.71	0.79	0.74	0.73	0.94	0.25	2.51	0.62	0.26
Uniform Delay, d1	69.9	58.5		48.2	35.4	34.3	71.1	56.4	46.0	70.8	49.1	43.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	16.9	360.5		4.3	1.9	4.1	23.2	29.4	0.4	691.3	2.6	0.3
Delay (s)	86.8	419.0		52.6	37.3	38.4	94.4	85.8	46.4	762.0	51.7	44.2
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		390.0			39.5			69.2			446.0	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		224.6			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.25										
Actuated Cycle Length (s)		153.3			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		129.7%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Volume (vph)	0	527	880	0	456	1743
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	592	936	0	501	1915
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	592	936	0	501	1912
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.17	c0.26		0.28	c0.69
v/s Ratio Perm						
v/c Ratio		0.33	1.09		0.76	1.08
Uniform Delay, d1		11.8	30.3		21.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	58.5		4.9	45.2
Delay (s)		11.9	88.8		26.7	59.7
Level of Service		B	F		C	E
Approach Delay (s)		11.9	88.8		52.9	
Approach LOS		B	F		D	
Intersection Summary						
HCM 2000 Control Delay		55.3			HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio		1.16				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		90.2%			ICU Level of Service	E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	976	0	0	547	260	446	3	111	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1017	0	0	615	292	480	3	119	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	31	0	0	0	0
Lane Group Flow (vph)	0	1017	0	0	809	0	307	264	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases							2					
Actuated Green, G (s)		19.7			19.7		14.7	14.7				
Effective Green, g (s)		19.7			19.7		14.7	14.7				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1644			1564		582	559				
v/s Ratio Prot		0.29			0.24							
v/s Ratio Perm							0.18	0.16				
v/c Ratio		0.62			0.52		0.53	0.47				
Uniform Delay, d1		8.5			8.0		11.1	10.8				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.7			0.3		0.9	0.6				
Delay (s)		9.2			8.3		11.9	11.4				
Level of Service		A			A		B	B				
Approach Delay (s)		9.2			8.3		11.7			0.0		
Approach LOS		A			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		9.5			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		42.4			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		49.5%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy






















Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	11	9	166	684	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	18	10	180	991	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1191	991	991			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1191	991	991			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	94	99			
cM capacity (veh/h)	204	299	697			
Direction, Lane #						
Volume Total	18	190	991			
Volume Left	0	10	0			
Volume Right	18	0	0			
cSH	299	697	1700			
Volume to Capacity	0.06	0.01	0.58			
Queue Length 95th (ft)	5	1	0			
Control Delay (s)	17.8	0.7	0.0			
Lane LOS	C	A				
Approach Delay (s)	17.8	0.7	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		46.0%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Near-Term (1 CVN) with Alternative 3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							 
Volume (veh/h)	0	1315	35	0	3278	532	0	0	477	0	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1584	42	0	3563	578	0	0	596	0	0	13
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4161			1647			2846	5787	589	4420	5519	1517
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4161			1647			2846	5787	589	4420	5519	1517
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	55	100	100	87
cM capacity (veh/h)	37			382			6	0	1337	0	0	105
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	634	634	359	1425	1425	1291	596	13				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	42	0	0	578	596	13				
cSH	1700	1700	1700	1700	1700	1700	1337	105				
Volume to Capacity	0.37	0.37	0.21	0.84	0.84	0.76	0.45	0.13				
Queue Length 95th (ft)	0	0	0	0	0	0	59	11				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.8	44.4				
Lane LOS							A	E				
Approach Delay (s)	0.0			0.0			9.8	44.4				
Approach LOS							A	E				
Intersection Summary												
Average Delay	1.0											
Intersection Capacity Utilization	90.3%			ICU Level of Service					E			
Analysis Period (min)	15											

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Near-Term (1 CVN) with Alternative 3
Timing Plan: AM PEAK

	→	↖	↗	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	1176	203	0	3177	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1336	231	0	3530	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1587		2668	601	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1587		2668	601	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	41	
cM capacity (veh/h)			403		17	429	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	535	535	498	1177	1177	1177	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	231	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	429
Volume to Capacity	0.31	0.31	0.29	0.69	0.69	0.69	0.59
Queue Length 95th (ft)	0	0	0	0	0	0	91
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	24.6
Lane LOS							C
Approach Delay (s)	0.0			0.0			24.6
Approach LOS							C
Intersection Summary							
Average Delay			1.2				
Intersection Capacity Utilization			76.3%		ICU Level of Service		D
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Near-Term (1 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↔↔↔	↔↔↔		↔	↔↔			↔↔	
Volume (vph)	0	0	0	1561	1546	250	42	94	0	0	259	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4641		1770	3539			3522	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4641		1770	3539			3522	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1678	1662	269	57	127	0	0	298	7
RTOR Reduction (vph)	0	0	0	0	6	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	889	2714	0	57	127	0	0	304	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.3			21.1	
Effective Green, g (s)				131.2	131.2		20.0	46.3			21.1	
Actuated g/C Ratio				0.69	0.69		0.11	0.24			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1055	3219		187	866			392	
v/s Ratio Prot				0.58	c0.58		c0.03	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.84	0.84		0.30	0.15			0.78	
Uniform Delay, d1				21.3	21.4		78.1	55.9			81.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				6.2	2.2		0.9	0.1			9.3	
Delay (s)				27.6	23.5		79.1	56.0			91.0	
Level of Service				C	C		E	E			F	
Approach Delay (s)		0.0			24.5			63.1			91.0	
Approach LOS		A			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		31.2		HCM 2000 Level of Service					C			
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		189.1		Sum of lost time (s)					16.8			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Near-Term (1 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔↔	↔					↔↔	↔	↔↔	↔↔	
Volume (vph)	0	502	68	0	0	0	0	127	218	435	1443	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.93	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3167	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3167	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	0	546	74	0	0	0	0	148	237	473	1503	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	66	66	0	0	0
Lane Group Flow (vph)	0	546	45	0	0	0	0	198	55	473	1503	0
Turn Type	NA	Perm					NA	Perm		Prot	NA	
Protected Phases	4						2			1	6	
Permitted Phases		4						2				
Actuated Green, G (s)	60.0	60.0					62.2	62.2		35.0	100.0	
Effective Green, g (s)	60.0	60.0					62.2	62.2		35.0	100.0	
Actuated g/C Ratio	0.35	0.35					0.36	0.36		0.20	0.58	
Clearance Time (s)	5.6	5.6					4.6	4.6		4.2	6.0	
Vehicle Extension (s)	3.0	3.0					3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	1777	553					1147	522		700	2062	
v/s Ratio Prot	c0.11						0.06			0.14	c0.42	
v/s Ratio Perm		0.03						0.04				
v/c Ratio	0.31	0.08					0.17	0.11		0.68	0.73	
Uniform Delay, d1	40.7	37.3					37.2	36.3		63.1	26.0	
Progression Factor	1.00	1.00					1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1					0.1	0.1		2.6	1.3	
Delay (s)	40.8	37.4					37.3	36.4		65.7	27.3	
Level of Service	D	D					D	D		E	C	
Approach Delay (s)	40.4				0.0		37.0				36.5	
Approach LOS	D				A		D				D	
Intersection Summary												
HCM 2000 Control Delay		37.3		HCM 2000 Level of Service					D			
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)					14.4			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Near-Term (1 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↕	↕
Volume (vph)	225	7	1155	624	0	1166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3311			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3311			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	262	8	1242	671	0	1227
RTOR Reduction (vph)	2	0	57	0	0	0
Lane Group Flow (vph)	268	0	1856	0	0	1227
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	17.3		42.9			42.9
Effective Green, g (s)	17.3		42.9			42.9
Actuated g/C Ratio	0.25		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	397		2049			2081
v/s Ratio Prot	c0.17		c0.56			0.36
v/s Ratio Perm						
v/c Ratio	0.68		0.91			0.59
Uniform Delay, d1	23.5		11.4			7.9
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	4.5		6.2			0.4
Delay (s)	28.0		17.6			8.4
Level of Service	C		B			A
Approach Delay (s)	28.0		17.6			8.4
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			15.1		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.88			
Actuated Cycle Length (s)			69.3		Sum of lost time (s)	12.1
Intersection Capacity Utilization			78.6%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Near-Term (1 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↕	↕	↕	↕	↕	↕
Volume (vph)	49	3	11	8	0	6	21	1376	27	41	1313	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1693	1583		1706		1770	3529		1770	3524	
Frt Permitted	0.74	0.78	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1308	1381	1583		1517		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	57	3	13	16	0	12	25	1638	32	45	1427	41
RTOR Reduction (vph)	0	0	11	0	24	0	0	1	0	0	1	0
Lane Group Flow (vph)	30	30	2	0	4	0	25	1669	0	45	1467	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.4	15.4	15.4		15.4		2.7	63.5		4.0	64.8	
Effective Green, g (s)	15.4	15.4	15.4		15.4		2.7	63.5		4.0	64.8	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.65		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	207	219	251		240		49	2310		72	2354	
v/s Ratio Prot							0.01	c0.47		c0.03	0.42	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.14	0.14	0.01		0.02		0.51	0.72		0.62	0.62	
Uniform Delay, d1	35.1	35.1	34.4		34.4		46.5	11.0		45.8	9.2	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		8.7	1.1		15.7	0.5	
Delay (s)	35.5	35.4	34.4		34.5		55.2	12.1		61.5	9.7	
Level of Service	D	D	C		C		E	B		E	A	
Approach Delay (s)		35.2			34.5			12.8			11.2	
Approach LOS		D			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.7		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.61									
Actuated Cycle Length (s)			97.0		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			57.9%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Near-Term (1 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	24	0	1318	8	444	861	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	36	0	1448	9	453	879	0
RTOR Reduction (vph)	0	0	0	0	33	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1448	4	453	879	0
Turn Type					NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.41		c0.26	0.25	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.87	0.01	0.74	0.29	
Uniform Delay, d1					60.6			34.5	20.4	41.8	2.4	
Progression Factor					1.00			0.35	1.00	1.00	1.00	
Incremental Delay, d2					0.1			4.5	0.0	4.9	0.3	
Delay (s)					60.6			16.5	20.5	46.7	2.6	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			16.5			17.6	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.6			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		79.9%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd











Near-Term (1 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	43	13	2	58	123	127	1167	6	191	423	288
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.88		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3285	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3285	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	40	66	20	2	66	140	141	1297	7	220	486	331
RTOR Reduction (vph)	0	0	19	0	0	118	0	0	4	0	82	0
Lane Group Flow (vph)	40	66	1	0	68	22	141	1297	3	220	735	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Effective Green, g (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Actuated g/C Ratio	0.06	0.06	0.06		0.16	0.16	0.31	0.46	0.46	0.19	0.34	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	97	102	77		295	239	549	1625	618	341	1123	
v/s Ratio Prot	0.02	c0.04			c0.04		0.08	c0.37		c0.12	0.22	
v/s Ratio Perm			0.00			0.01			0.00			
v/c Ratio	0.41	0.65	0.01		0.23	0.09	0.26	0.80	0.01	0.65	0.65	
Uniform Delay, d1	66.2	67.1	64.8		53.3	52.1	37.5	33.5	21.2	53.9	40.4	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.93	
Incremental Delay, d2	2.8	13.3	0.1		0.4	0.2	0.2	4.2	0.0	4.1	2.9	
Delay (s)	69.1	80.4	64.8		53.7	52.3	37.7	37.6	21.3	55.6	40.6	
Level of Service	E	F	E		D	D	D	D	C	E	D	
Approach Delay (s)		74.3			52.7			37.6			43.8	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			42.6		HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio			0.65									
Actuated Cycle Length (s)			145.0		Sum of lost time (s)				19.4			
Intersection Capacity Utilization			87.8%		ICU Level of Service				E			
Analysis Period (min)			15									
c Critical Lane Group												











NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Near-Term (1 CVN) with Alternative 3
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	41	195	5	53	218	9
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	48	229	6	66	237	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	523	39			72	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	523	39			72	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	78			84	
cM capacity (veh/h)	434	1032			1527	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	278	72	247			
Volume Left	48	0	237			
Volume Right	229	66	0			
cSH	1249	1700	1527			
Volume to Capacity	0.22	0.04	0.16			
Queue Length 95th (ft)	21	0	14			
Control Delay (s)	10.3	0.0	7.5			
Lane LOS	B		A			
Approach Delay (s)	10.3	0.0	7.5			
Approach LOS	B					
Intersection Summary						
Average Delay		7.9				
Intersection Capacity Utilization		29.2%	ICU Level of Service	A		
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near-Term (1 CVN) with Alternative 3
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	44	3	1312	387	0	398
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1753		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1753		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	59	4	1381	407	0	622
RTOR Reduction (vph)	4	0	0	123	0	0
Lane Group Flow (vph)	59	0	1381	284	0	622
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		29.7	29.7		29.7
Effective Green, g (s)	3.0		29.7	29.7		29.7
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	123		2467	1059		2467
v/s Ratio Prot	c0.03		c0.39			0.18
v/s Ratio Perm				0.19		
v/c Ratio	0.48		0.56	0.27		0.25
Uniform Delay, d1	19.1		3.2	2.4		2.4
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	3.0		0.3	0.1		0.1
Delay (s)	22.0		3.5	2.5		2.4
Level of Service	C		A	A		A
Approach Delay (s)	22.0		3.3			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.5	HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.55			
Actuated Cycle Length (s)			42.6	Sum of lost time (s)		9.9
Intersection Capacity Utilization			48.7%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Near-Term (1 CVN) with Alternative 3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (veh/h)	0	16	2127	6	6	442
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	28	2287	6	9	650
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2633	1147			2294	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2633	1147			2294	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			96	
cM capacity (veh/h)	18	193			217	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	28	1525	769	9	325	325
Volume Left	0	0	0	9	0	0
Volume Right	28	0	6	0	0	0
cSH	193	1700	1700	217	1700	1700
Volume to Capacity	0.14	0.90	0.45	0.04	0.19	0.19
Queue Length 95th (ft)	12	0	0	3	0	0
Control Delay (s)	26.8	0.0	0.0	22.3	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	26.8	0.0		0.3		
Approach LOS	D					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		69.0%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Near-Term (1 CVN) with Alternative 3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (vph)	18	90	2038	13	39	403
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	22	111	2191	14	57	584
RTOR Reduction (vph)	0	4	0	1	0	0
Lane Group Flow (vph)	22	107	2191	13	57	584
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.9	26.0	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.9	20.9	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	262	308	2251	1007	82	2707
v/s Ratio Prot	0.01	c0.07	c0.62		c0.03	0.17
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.35	0.97	0.01	0.70	0.22
Uniform Delay, d1	39.4	37.3	18.6	7.2	50.3	3.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	13.2	0.0	22.5	0.0
Delay (s)	39.5	37.9	31.9	7.2	72.9	3.6
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.2		31.7			9.7
Approach LOS	D		C			A
Intersection Summary						
HCM 2000 Control Delay		27.3		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio		0.85				
Actuated Cycle Length (s)		107.2		Sum of lost time (s)		18.1
Intersection Capacity Utilization		72.7%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Near-Term (1 CVN) with Alternative 3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↖		↖	↖
Volume (veh/h)	0	34	2015	27	0	419
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	55	2121	28	0	566
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2418	1075			2149	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2418	1075			2149	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	75			100	
cM capacity (veh/h)	27	215			247	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	55	1414	735	283	283	
Volume Left	0	0	0	0	0	
Volume Right	55	0	28	0	0	
cSH	215	1700	1700	1700	1700	
Volume to Capacity	0.25	0.83	0.43	0.17	0.17	
Queue Length 95th (ft)	24	0	0	0	0	
Control Delay (s)	27.3	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	27.3	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		66.6%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Near-Term (1 CVN) with Alternative 3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖	↖	↖	↖
Volume (vph)	11	7	2041	34	16	395
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	18	11	2126	35	20	488
RTOR Reduction (vph)	0	5	0	8	0	0
Lane Group Flow (vph)	18	6	2126	27	20	488
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.5	59.2	59.2	2.1	68.8
Effective Green, g (s)	1.4	3.5	59.2	59.2	2.1	68.8
Actuated g/C Ratio	0.02	0.05	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	72	2727	1220	48	3170
v/s Ratio Prot	c0.01	0.00	c0.60		c0.01	0.14
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.56	0.09	0.78	0.02	0.42	0.15
Uniform Delay, d1	37.4	35.1	5.1	2.1	36.7	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	20.7	0.5	1.5	0.0	5.8	0.0
Delay (s)	58.1	35.6	6.5	2.1	42.5	0.5
Level of Service	E	D	A	A	D	A
Approach Delay (s)	49.6		6.4			2.2
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		6.1		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.76				
Actuated Cycle Length (s)		76.8		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		69.3%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (1 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control	Stop			Yield			Stop		Stop	
Volume (vph)	0	3	0	47	2	0	46	3	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	12	0	87	4	0	73	5	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	12	0	91	73	5					
Volume Left (vph)	0	0	87	0	0					
Volume Right (vph)	0	0	0	0	5					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.2	3.2					
Degree Utilization, x	0.01	0.00	0.11	0.08	0.00					
Capacity (veh/h)	829	1121	814	835	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.4%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (1 CVN) with Alternative 3
Timing Plan: AM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↑		↑	↑	↑	↑	↑			
Volume (vph)	3	38	0	0	34	233	4	1839	53	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1353	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	4	51	0	0	47	324	4	1956	56	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	23	0	0	0	0
Lane Group Flow (vph)	4	51	0	0	47	268	4	1956	33	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.9	16.9			16.9	16.9	47.7	43.6	43.6			
Effective Green, g (s)	16.9	16.9			16.9	16.9	47.7	43.6	43.6			
Actuated g/C Ratio	0.23	0.23			0.23	0.23	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	309	426			426	362	1142	2087	933			
v/s Ratio Prot		0.03			0.03		0.00	c0.55				
v/s Ratio Perm	0.00					c0.17			0.02			
v/c Ratio	0.01	0.12			0.11	0.74	0.00	0.94	0.04			
Uniform Delay, d1	22.0	22.6			22.6	26.5	4.7	13.9	6.3			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	8.0	0.0	8.7	0.0			
Delay (s)	22.1	22.7			22.7	34.4	4.7	22.6	6.4			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.7			32.9			22.1			0.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay		23.8						HCM 2000 Level of Service			C	
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		73.9				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		84.8%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near-Term (1 CVN) with Alternative 3

Timing Plan: AM PEAK





















							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	21	40	355	1612	0	172	191
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	84	160	370	1679	0	218	242
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None		None		
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1918	230	459		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1918	230	459		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	79	66		0		
cM capacity (veh/h)	39	773	1098		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	244	370	840	840	145	314	0
Volume Left	84	370	0	0	0	0	0
Volume Right	160	0	0	0	0	242	0
cSH	104	1098	1700	1700	1700	1700	1700
Volume to Capacity	2.35	0.34	0.49	0.49	0.09	0.18	0.00
Queue Length 95th (ft)	543	37	0	0	0	0	0
Control Delay (s)	700.2	9.9	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	A					
Approach Delay (s)	700.2	1.8			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay		63.4					
Intersection Capacity Utilization		61.5%		ICU Level of Service		B	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near-Term (1 CVN) with Alternative 3

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	408	2	40	50	8	21	27	1839	11	4	164	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	1.00		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1595		1770	1661		1770	3536		1770	3423	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1595		1770	1661		1770	3536		1770	3423	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	464	2	45	161	26	68	28	1936	12	6	238	67
RTOR Reduction (vph)	0	31	0	0	64	0	0	1	0	0	23	0
Lane Group Flow (vph)	464	16	0	161	30	0	28	1947	0	6	282	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	28.2	28.2		5.1	5.1		2.1	40.1		0.9	38.9	
Effective Green, g (s)	28.2	28.2		5.1	5.1		2.1	40.1		0.9	38.9	
Actuated g/C Ratio	0.30	0.30		0.05	0.05		0.02	0.43		0.01	0.42	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	535	482		96	90		39	1521		17	1428	
v/s Ratio Prot	c0.26	0.01		c0.09	0.02		c0.02	c0.55		0.00	0.08	
v/s Ratio Perm												
v/c Ratio	0.87	0.03		1.68	0.33		0.72	1.28		0.35	0.20	
Uniform Delay, d1	30.7	22.9		44.1	42.4		45.3	26.6		45.9	17.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	13.9	0.0		345.6	2.2		47.4	131.4		12.2	0.1	
Delay (s)	44.6	22.9		389.7	44.6		92.6	157.9		58.1	17.3	
Level of Service	D	C		F	D		F	F		E	B	
Approach Delay (s)		42.6			262.5			157.0			18.1	
Approach LOS		D			F			F			B	
Intersection Summary												
HCM 2000 Control Delay		132.5						HCM 2000 Level of Service		F		
HCM 2000 Volume to Capacity ratio		1.15										
Actuated Cycle Length (s)		93.2						Sum of lost time (s)		18.9		
Intersection Capacity Utilization		88.9%						ICU Level of Service		E		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

Near-Term (1 CVN) with Alternative 3

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Volume (vph)	8	247	20	0	1690	18	41	24	2	21	43	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5029			5077		1770	1845			1732	
Flt Permitted	0.95	1.00			1.00		0.66	1.00			0.17	
Satd. Flow (perm)	1770	5029			5077		1229	1845			292	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	0.77
Adj. Flow (vph)	9	278	22	0	1857	20	49	29	2	27	56	70
RTOR Reduction (vph)	0	5	0	0	1	0	0	2	0	0	17	0
Lane Group Flow (vph)	9	295	0	0	1876	0	49	29	0	0	136	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1902			2061		238	358			48	
v/s Ratio Prot	c0.01	0.06			c0.37			0.02				
v/s Ratio Perm							c0.04				c0.47	
v/c Ratio	0.05	0.16			0.91		0.21	0.08			2.84	
Uniform Delay, d1	71.5	37.0			50.4		60.8	59.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.2			6.7		0.4	0.1			882.4	
Delay (s)	71.6	37.1			57.1		61.3	59.4			957.4	
Level of Service	E	D			E		E	E			F	
Approach Delay (s)		38.1			57.1			60.6			957.4	
Approach LOS		D			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		111.7			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.00										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		71.5%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

Near-Term (1 CVN) with Alternative 3

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Volume (vph)	0	264	0	407	1699	9	0	0	0	0	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	322	0	433	1807	10	0	0	0	0	0	19
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	322	0	433	1817	0	0	0	0	0	0	7
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.06		0.13	c0.51							
v/s Ratio Perm												0.00
v/c Ratio		0.17		0.25	0.57							0.01
Uniform Delay, d1		37.1		25.7	1.5							34.9
Progression Factor		0.38		1.00	1.00							1.00
Incremental Delay, d2		0.2		0.1	0.2							0.0
Delay (s)		14.2		25.8	1.8							35.0
Level of Service		B		C	A							C
Approach Delay (s)		14.2			6.4		0.0				35.0	
Approach LOS		B			A		A				C	
Intersection Summary												
HCM 2000 Control Delay		7.6			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		68.9%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

Near-Term (1 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	10	239	0	0	130	105	0	0	0	48	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	12	285	0	0	140	113	0	0	0	53	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	253			285			510	561	285	505	505	196
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	253			285			510	561	285	505	505	196
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1313			1278			468	432	754	475	466	845
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	296	253	0	58								
Volume Left	12	0	0	53								
Volume Right	0	113	0	5								
cSH	1313	1278	1700	495								
Volume to Capacity	0.01	0.00	0.00	0.12								
Queue Length 95th (ft)	1	0	0	10								
Control Delay (s)	0.4	0.0	0.0	13.2								
Lane LOS	A			B								
Approach Delay (s)	0.4	0.0	0.0	13.2								
Approach LOS				B								
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				30.7%								A
Analysis Period (min)				15								













NBC Coastal Campus
22: 3rd St & Palm Ave

Near-Term (1 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	278	5	27	211	25	12	15	127	12	11	15
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	9	323	6	29	227	27	15	19	157	15	14	19
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	329	29	254	190	48						
Volume Left (vph)	9	0	29	0	15	15						
Volume Right (vph)	0	6	0	27	157	19						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.1	5.5	5.1	5.7						
Degree Utilization, x	0.02	0.50	0.05	0.39	0.27	0.08						
Capacity (veh/h)	574	631	561	624	629	541						
Control Delay (s)	7.9	12.8	8.2	10.8	10.0	9.2						
Approach Delay (s)	12.7		10.5		10.0	9.2						
Approach LOS	B		B		B	A						
Intersection Summary												
Delay				11.2								
Level of Service				B								
Intersection Capacity Utilization				38.0%								A
Analysis Period (min)				15								

























NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Near-Term (1 CVN) with Alternative 3
Timing Plan: AM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	228	428	335	154	18	70
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	289	542	409	188	25	99
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	596				1621	298
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	596				1621	298
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	70				62	86
cM capacity (veh/h)	976				66	698
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	289	542	272	324	124	
Volume Left	289	0	0	0	25	
Volume Right	0	0	0	188	99	
cSH	976	1700	1700	1700	236	
Volume to Capacity	0.30	0.32	0.16	0.19	0.53	
Queue Length 95th (ft)	31	0	0	0	69	
Control Delay (s)	10.2	0.0	0.0	0.0	36.0	
Lane LOS	B				E	
Approach Delay (s)	3.6		0.0		36.0	
Approach LOS					E	
Intersection Summary						
Average Delay			4.8			
Intersection Capacity Utilization			42.1%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Near-Term (1 CVN) with Alternative 3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	421	16	27	336		66	39		82	2	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3520		1770	3539			1722			1857	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.87			0.98	1.00
Satd. Flow (perm)	929	3520		817	3539			1530			1824	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	22	547	21	35	436	0	100	59	124	3	48	48
RTOR Reduction (vph)	0	4	0	0	0	0	0	33	0	0	0	30
Lane Group Flow (vph)	22	564	0	35	436	0	0	250	0	0	51	18
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.5	13.5		13.5	13.5			13.3			13.3	13.3
Effective Green, g (s)	13.5	13.5		13.5	13.5			13.3			13.3	13.3
Actuated g/C Ratio	0.38	0.38		0.38	0.38			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	348	1320		306	1327			565			673	584
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.16			0.03	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.44			0.08	0.03
Uniform Delay, d1	7.2	8.4		7.3	8.0			8.6			7.4	7.2
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.1			0.6			0.0	0.0
Delay (s)	7.3	8.6		7.5	8.2			9.1			7.4	7.3
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.5			8.1			9.1			7.3	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.4							A		
HCM 2000 Volume to Capacity ratio			0.44									
Actuated Cycle Length (s)			36.0						9.2			
Intersection Capacity Utilization			47.5%							A		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Near-Term (1 CVN) with Alternative 3
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗			↙	
Volume (veh/h)	506	5	0	0	3	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	550	5	0	0	3	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			555		550	550
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			555		550	550
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1015		496	535
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	550	5	10			
Volume Left	0	0	3			
Volume Right	0	5	7			
cSH	1700	1700	521			
Volume to Capacity	0.32	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.0			
Lane LOS			B			
Approach Delay (s)	0.0		12.0			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 3
Timing Plan: AM PEAK





















	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↙
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑↑	↘	↙	↑↑↑			↗			↙	↘
Volume (vph)	22	695	40	25	1838	45	170	38	1900	1900	93	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6				4.6
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95				0.95
Frt	1.00	0.99		1.00	1.00			0.97				0.98
Flt Protected	0.95	1.00		0.95	1.00			0.97				0.97
Satd. Flow (prot)	1770	5043		1770	5067			3323				3361
Flt Permitted	0.95	1.00		0.95	1.00			0.97				0.97
Satd. Flow (perm)	1770	5043		1770	5067			3323				3361
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	26	827	48	27	2020	49	205	46	64	113	57	32
RTOR Reduction (vph)	0	3	0	0	1	0	0	13	0	0	9	0
Lane Group Flow (vph)	26	872	0	27	2068	0	0	302	0	0	193	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2232		118	2159			646			653	
v/s Ratio Prot	0.01	c0.17		c0.02	c0.41			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.18	0.39		0.23	0.96			0.47			0.30	
Uniform Delay, d1	76.8	33.8		79.6	50.1			64.2			62.0	
Progression Factor	1.00	1.00		1.25	0.74			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.8	10.0			0.5			0.3	
Delay (s)	77.3	34.3		100.2	47.0			64.8			62.2	
Level of Service	E	C		F	D			E			E	
Approach Delay (s)		35.5			47.7			64.8			62.2	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		47.0			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		73.6%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

27: Florida St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 3

Timing Plan: AM PEAK























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	933	36	21	2017	13	19	5	32	57	11	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5080			1691		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.65	1.00	
Satd. Flow (perm)	1770	5057		1770	5080			1545		1208	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	3	1048	40	24	2292	15	26	7	44	81	16	23
RTOR Reduction (vph)	0	2	0	0	0	0	0	27	0	0	19	0
Lane Group Flow (vph)	3	1086	0	24	2307	0	0	50	0	81	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3716			257		201	283	
v/s Ratio Prot	0.00	0.21		c0.01	c0.45						0.01	
v/s Ratio Perm								0.03		c0.07		
v/c Ratio	0.08	0.31		0.20	0.62			0.20		0.40	0.07	
Uniform Delay, d1	86.2	11.2		79.5	11.9			64.6		67.0	63.2	
Progression Factor	1.62	0.27		1.41	0.33			1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.2		0.5	0.5			0.4		1.3	0.1	
Delay (s)	140.5	3.2		112.8	4.4			65.0		68.3	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.6			5.5			65.0			66.7	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		72.7%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

28: 13th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 3

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	1005	66	100	1865	54	151	20	94	174	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.85	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5038		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5038		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1129	74	120	2247	65	170	22	106	232	49	21
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	88	0	3	0
Lane Group Flow (vph)	4	1199	0	120	2247	35	0	192	18	0	299	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.24		c0.07	c0.44			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.10	0.54		0.61	0.83	0.04		0.63	0.07		0.51	
Uniform Delay, d1	86.2	36.7		76.3	35.4	20.2		69.1	62.4		67.7	
Progression Factor	1.20	0.62		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.9		5.6	3.2	0.1		3.9	0.1		0.8	
Delay (s)	104.3	23.6		81.9	38.5	20.3		73.1	62.5		68.4	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.8			40.2			69.3			68.4	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		39.6			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		90.0%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	15	1279	27	45	1999	13	17	7	51	40	3	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5080			1672			1725	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.77	
Satd. Flow (perm)	1770	5070		1770	5080			1561			1370	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	16	1390	29	52	2324	15	20	8	61	53	4	29
RTOR Reduction (vph)	0	2	0	0	0	0	0	48	0	0	23	0
Lane Group Flow (vph)	16	1417	0	52	2339	0	0	41	0	0	63	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.6		2.8	39.7			15.2			15.2	
Effective Green, g (s)	0.7	37.6		2.8	39.7			15.2			15.2	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2673		69	2828			332			292	
v/s Ratio Prot	0.01	0.28		c0.03	c0.46							
v/s Ratio Perm								0.03			c0.05	
v/c Ratio	0.94	0.53		0.75	0.83			0.12			0.22	
Uniform Delay, d1	35.3	11.1		33.9	13.0			22.7			23.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	188.5	0.2		36.6	2.1			0.2			0.4	
Delay (s)	223.8	11.3		70.5	15.1			22.8			23.5	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		13.6			16.3			22.8			23.5	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		15.6			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		71.3			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		56.3%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	95	1294	31	254	1935	223	78	75	800	244	96	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	110	1505	36	270	2059	237	87	83	889	290	114	95
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	180	0	3	61
Lane Group Flow (vph)	110	1539	0	270	2059	170	87	339	300	290	121	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.4	31.1	31.1	10.4	33.1	33.1
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.4	31.1	31.1	10.4	33.1	33.1
Actuated g/C Ratio	0.05	0.30		0.15	0.40	0.40	0.07	0.27	0.27	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	176	1530		271	2055	639	127	413	401	306	496	427
v/s Ratio Prot	0.03	0.30		c0.15	c0.40		0.05	c0.22		c0.08	0.07	
v/s Ratio Perm						0.11			0.20			0.02
v/c Ratio	0.62	1.01		1.00	1.00	0.27	0.69	0.82	0.75	0.95	0.24	0.06
Uniform Delay, d1	54.1	40.6		49.3	34.7	23.2	52.8	40.1	39.1	52.8	32.1	30.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.8	24.4		53.3	20.3	0.2	14.2	12.3	7.4	37.3	0.3	0.1
Delay (s)	60.9	65.1		102.6	55.0	23.4	67.0	52.4	46.5	90.1	32.3	30.4
Level of Service	E	E		F	E	C	E	D	D	F	C	C
Approach Delay (s)		64.8			57.1			50.9			65.6	
Approach LOS		E			E			D			E	
Intersection Summary												
HCM 2000 Control Delay		58.9			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.96										
Actuated Cycle Length (s)		116.5			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		87.1%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Near-Term (1 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	295	1131	0	161	1282
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	331	1216	0	179	1424
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	331	1216	0	179	1419
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	18
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.34		0.10	c0.51
v/s Ratio Perm						
v/c Ratio		0.12	1.04		0.86	0.93
Uniform Delay, d1		2.5	26.8		34.7	16.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	38.0		29.2	9.9
Delay (s)		2.5	64.8		63.8	26.4
Level of Service		A	E		E	C
Approach Delay (s)		2.5	64.8		30.6	
Approach LOS		A	E		C	
Intersection Summary						
HCM 2000 Control Delay			40.8		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			1.04			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			67.7%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)







Near-Term (1 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	456	0	0	443	543	793	2	149	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3247		1681	1629				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3247		1681	1629				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	524	0	0	482	590	862	2	162	0	0	0
RTOR Reduction (vph)	0	0	0	0	366	0	0	32	0	0	0	0
Lane Group Flow (vph)	0	524	0	0	706	0	526	468	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		17.4			17.4		20.5	20.5				
Effective Green, g (s)		17.4			17.4		20.5	20.5				
Actuated g/C Ratio		0.38			0.38		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1341			1230		750	727				
v/s Ratio Prot		0.15			c0.22							
v/s Ratio Perm							c0.31	0.29				
v/c Ratio		0.39			0.57		0.70	0.64				
Uniform Delay, d1		10.4			11.3		10.2	9.9				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		3.0	2.0				
Delay (s)		10.6			12.0		13.2	11.8				
Level of Service		B			B		B	B				
Approach Delay (s)		10.6			12.0		12.5				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					11.9					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.64							
Actuated Cycle Length (s)					45.9					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					69.6%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												













NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Near-Term (1 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	4	5	66	14	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	16	7	92	34	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	140	34	34			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	140	34	34			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	850	1039	1577			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	16	99	34			
Volume Left	0	7	0			
Volume Right	16	0	0			
cSH	1039	1577	1700			
Volume to Capacity	0.02	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.5	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		1.3				
Intersection Capacity Utilization		17.6%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St







Near-Term (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	3565	18	0	1677	240	0	0	903	0	0	56
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%			0%	0%		0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	3714	19	0	1729	247	0	0	1003	0	0	85
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1996			3752			4424	5739	1287	3130	5625	740
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1996			3752			4424	5739	1287	3130	5625	740
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	42	100	100	76
cM capacity (veh/h)	279			55			0	0	1728	2	0	347
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1485	1485	761	692	692	593	1003	85				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	19	0	0	247	1003	85				
cSH	1700	1700	1700	1700	1700	1700	1728	347				
Volume to Capacity	0.87	0.87	0.45	0.41	0.41	0.35	0.58	0.24				
Queue Length 95th (ft)	0	0	0	0	0	0	99	24				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.9	18.7				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.9	18.7				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.7								
Intersection Capacity Utilization				133.8%			ICU Level of Service	H				
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Near-Term (1 CVN) with Alternative 3
Timing Plan: PM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↑	
Volume (veh/h)	3331	131	0	1714	0	190	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3434	135	0	1785	0	232	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			3589		4137	1252	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			3589		4137	1252	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			64		2	158	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1374	1374	822	595	595	595	232
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	135	0	0	0	232
cSH	1700	1700	1700	1700	1700	1700	158
Volume to Capacity	0.81	0.81	0.48	0.35	0.35	0.35	1.47
Queue Length 95th (ft)	0	0	0	0	0	0	375
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	293.5
Lane LOS							F
Approach Delay (s)	0.0			0.0			293.5
Approach LOS							F
Intersection Summary							
Average Delay			12.2				
Intersection Capacity Utilization			87.7%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Near-Term (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↑	↑↑↑		↑	↑↑			↑↑	↑
Volume (vph)	0	0	0	986	540		87	244		0	0	767
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Frpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4635		1770	3539				3527
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4635		1770	3539				3527
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1038	568	92	90	252	0	0	0	791
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	0	0	0	2
Lane Group Flow (vph)	0	0	0	519	1169	0	90	252	0	0	0	804
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA				NA
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1431		98	1989				1567
v/s Ratio Prot				c0.34	0.25		c0.05	0.07				c0.23
v/s Ratio Perm												
v/c Ratio				1.10	0.98dl		0.92	0.13				0.51
Uniform Delay, d1				31.1	28.7		42.3	9.3				18.0
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				73.0	3.7		64.3	0.0				0.3
Delay (s)				104.1	32.5		106.6	9.3				18.3
Level of Service				F	C		F	A				B
Approach Delay (s)		0.0			54.4			34.9				18.3
Approach LOS		A			D			C				B
Intersection Summary												
HCM 2000 Control Delay			41.8				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.77									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)			17.2		
Intersection Capacity Utilization		134.1%					ICU Level of Service			H		
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Near-Term (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	0	1711	49	0	0	0	0	338	451	672	1102	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3123	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3123	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	0	1880	54	0	0	0	0	393	524	700	1148	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	9	28	0	0	0
Lane Group Flow (vph)	0	1880	25	0	0	0	0	620	260	700	1148	0
Confl. Peds. (#/hr)				20					20			
Turn Type	NA	Perm					NA	Perm	Prot	NA		
Protected Phases	4	4					2		1	6		
Permitted Phases			4					2				
Actuated Green, G (s)		63.4	63.4					56.3	56.3	40.9	100.0	
Effective Green, g (s)		63.4	63.4					56.3	56.3	40.9	100.0	
Actuated g/C Ratio		0.36	0.36					0.32	0.32	0.23	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1842	573					1004	433	802	2022	
v/s Ratio Prot		c0.37						c0.20		c0.20	0.32	
v/s Ratio Perm			0.02						0.19			
v/c Ratio		1.02	0.04					0.62	0.60	0.87	0.57	
Uniform Delay, d1		55.8	36.2					50.2	49.9	64.5	23.8	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		26.3	0.0					1.1	2.2	10.3	0.4	
Delay (s)		82.1	36.2					51.4	52.1	74.9	24.2	
Level of Service		F	D					D	D	E	C	
Approach Delay (s)		80.8			0.0			51.6			43.4	
Approach LOS		F			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		60.4		HCM 2000 Level of Service					E			
HCM 2000 Volume to Capacity ratio		0.84										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)					14.4			
Intersection Capacity Utilization		134.1%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave











Near-Term (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑↑
Volume (vph)	181	13	929	704	0	1232
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1582		3263			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1582		3263			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	232	17	1044	791	0	1325
RTOR Reduction (vph)	2	0	65	0	0	0
Lane Group Flow (vph)	247	0	1770	0	0	1325
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA		NA	
Protected Phases	8		2		6	
Permitted Phases						
Actuated Green, G (s)	30.0		120.9		120.9	
Effective Green, g (s)	30.0		120.9		120.9	
Actuated g/C Ratio	0.19		0.76		0.76	
Clearance Time (s)	4.1		5.0		5.0	
Vehicle Extension (s)	3.0		3.0		3.0	
Lane Grp Cap (vph)	296		2465		2540	
v/s Ratio Prot	c0.16		c0.54		0.39	
v/s Ratio Perm						
v/c Ratio	0.84		0.72		0.52	
Uniform Delay, d1	62.6		10.4		7.9	
Progression Factor	1.00		1.00		1.00	
Incremental Delay, d2	18.1		1.8		0.8	
Delay (s)	80.7		12.3		8.7	
Level of Service	F		B		A	
Approach Delay (s)	80.7		12.3		8.7	
Approach LOS	F		B		A	
Intersection Summary						
HCM 2000 Control Delay		15.9		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.76				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		81.7%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Near-Term (1 CVN) with Alternative 3








Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	11	30	27	11	26	24	1548	52	70	1465	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1723		1770	3522		1770	3487	
Flt Permitted	0.67	0.67	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1188	1193	1583		1459		1770	3522		1770	3487	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	192	14	38	42	17	41	26	1665	56	76	1592	172
RTOR Reduction (vph)	0	0	32	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	102	104	6	0	78	0	26	1720	0	76	1761	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4		4							
Actuated Green, G (s)	19.3	19.3	19.3		19.3		4.6	71.0		8.1	74.5	
Effective Green, g (s)	19.3	19.3	19.3		19.3		4.6	71.0		8.1	74.5	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.04	0.63		0.07	0.66	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	203	269		248		71	2209		126	2294	
v/s Ratio Prot							0.01	0.49		c0.04	c0.51	
v/s Ratio Perm	0.09	c0.09	0.00		0.05							
v/c Ratio	0.50	0.51	0.02		0.31		0.37	0.78		0.60	0.77	
Uniform Delay, d1	42.6	42.7	39.1		41.1		52.9	15.4		51.0	13.4	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.0	2.2	0.0		0.7		3.2	1.8		7.9	1.6	
Delay (s)	44.6	44.8	39.1		41.9		56.1	17.2		58.9	15.0	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.9			41.9			17.7			16.8	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		19.5			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		113.2			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		75.4%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Near-Term (1 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	8	0	151	0	1346	0	34	1609	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	12	0	219	0	1432	0	37	1730	0
RTOR Reduction (vph)	0	0	0	0	178	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	53	0	0	1432	0	37	1730	0
Turn Type				Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					14.1			44.9		1.7	50.8	
Effective Green, g (s)					14.1			44.9		1.7	50.8	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					304			2118		40	2397	
v/s Ratio Prot					c0.03			0.40		0.02	c0.49	
v/s Ratio Perm												
v/c Ratio					0.17			0.68		0.93	0.72	
Uniform Delay, d1					25.6			10.1		36.6	7.6	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			0.9		112.0	1.1	
Delay (s)					25.8			11.0		148.6	8.7	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			25.8			11.0			11.7	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					12.3			HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio					0.70							
Actuated Cycle Length (s)					75.0			Sum of lost time (s)		18.9		
Intersection Capacity Utilization					62.7%			ICU Level of Service		B		
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Near-Term (1 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	252	42	108	7	61	348	25	769	3	117	1462	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.96	1.00	1.00	0.86	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1517		1853	1512	1770	3539	1354	1770	3515	
Flt Permitted	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1517		1853	1512	1770	3539	1354	1770	3515	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	332	55	142	8	66	378	27	845	3	124	1555	64
RTOR Reduction (vph)	0	0	114	0	0	213	0	0	2	0	2	0
Lane Group Flow (vph)	332	55	28	0	74	165	27	845	1	124	1617	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.8	27.8	27.8		19.7	19.7	2.9	58.0	58.0	15.0	70.1	
Effective Green, g (s)	27.8	27.8	27.8		19.7	19.7	2.9	58.0	58.0	15.0	70.1	
Actuated g/C Ratio	0.20	0.20	0.20		0.14	0.14	0.02	0.41	0.41	0.11	0.50	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	351	370	301		260	212	36	1467	561	189	1761	
v/s Ratio Prot	c0.19	0.03			0.04		0.02	0.24		c0.07	c0.46	
v/s Ratio Perm			0.02			c0.11		0.00				
v/c Ratio	0.95	0.15	0.09		0.28	0.78	0.75	0.58	0.00	0.66	0.92	
Uniform Delay, d1	55.3	46.3	45.8		53.8	58.0	68.1	31.5	24.0	60.0	32.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	33.9	0.2	0.1		0.6	16.3	59.8	1.7	0.0	7.9	9.2	
Delay (s)	89.2	46.5	45.9		54.4	74.3	127.9	33.1	24.0	67.9	41.4	
Level of Service	F	D	D		D	E	F	C	C	E	D	
Approach Delay (s)		73.1			71.0			36.0			43.3	
Approach LOS		E			E			D			D	
Intersection Summary												
HCM 2000 Control Delay		49.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.90										
Actuated Cycle Length (s)		139.9			Sum of lost time (s)			19.4				
Intersection Capacity Utilization		79.5%			ICU Level of Service			D				
Analysis Period (min)		15										

c Critical Lane Group

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

Near-Term (1 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	290	414	4	50	157	4
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	322	460	6	70	178	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	402	41			76	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	402	41			76	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	40	55			88	
cM capacity (veh/h)	533	1030			1523	
Direction, Lane #						
Volume Total	782	76	183			
Volume Left	322	0	178			
Volume Right	460	70	0			
cSH	1111	1700	1523			
Volume to Capacity	0.70	0.04	0.12			
Queue Length 95th (ft)	155	0	10			
Control Delay (s)	15.5	0.0	7.5			
Lane LOS	C		A			
Approach Delay (s)	15.5	0.0	7.5			
Approach LOS	C					
Intersection Summary						
Average Delay		13.0				
Intersection Capacity Utilization		38.3%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near-Term (1 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕		↕
Volume (vph)	296	4	806	53	0	1594
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1771		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1771		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	375	5	896	59	0	1791
RTOR Reduction (vph)	1	0	0	34	0	0
Lane Group Flow (vph)	379	0	896	25	0	1791
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	843		1520	633		1520
v/s Ratio Prot	c0.21		0.25			c0.51
v/s Ratio Perm				0.02		
v/c Ratio	0.45		0.59	0.04		1.18
Uniform Delay, d1	18.3		22.9	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.6	0.0		87.4
Delay (s)	18.7		23.5	17.4		117.4
Level of Service	B		C	B		F
Approach Delay (s)	18.7		23.1			117.4
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay			76.6		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			0.80			
Actuated Cycle Length (s)			105.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			94.0%		ICU Level of Service	F
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Near-Term (1 CVN) with Alternative 3

Timing Plan: PM PEAK







Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕	↕	↕
Volume (veh/h)	5	7	652	4	16	1478
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	10	14	758	5	18	1624
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1608	381			763	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1608	381			763	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	98			98	
cM capacity (veh/h)	94	617			846	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	24	505	257	18	812	812
Volume Left	10	0	0	18	0	0
Volume Right	14	0	5	0	0	0
cSH	185	1700	1700	846	1700	1700
Volume to Capacity	0.13	0.30	0.15	0.02	0.48	0.48
Queue Length 95th (ft)	11	0	0	2	0	0
Control Delay (s)	27.3	0.0	0.0	9.3	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	27.3	0.0		0.1		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			50.9%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

Near-Term (1 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	31	59	596	13	107	1376
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	34	64	677	15	118	1512
RTOR Reduction (vph)	0	47	0	8	0	0
Lane Group Flow (vph)	34	17	677	7	118	1512
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases				2		
Actuated Green, G (s)	9.4	21.7	27.9	27.9	7.2	43.9
Effective Green, g (s)	9.4	16.6	27.9	27.9	7.2	43.9
Actuated g/C Ratio	0.15	0.27	0.45	0.45	0.12	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	265	419	1577	705	203	2481
v/s Ratio Prot	c0.02	0.01	0.19		0.07	c0.43
v/s Ratio Perm				0.00		
v/c Ratio	0.13	0.04	0.43	0.01	0.58	0.61
Uniform Delay, d1	23.0	17.1	11.9	9.7	26.3	4.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.2	0.0	4.2	0.4
Delay (s)	23.3	17.1	12.1	9.7	30.5	5.3
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.3		12.0			7.1
Approach LOS	B		B			A

Intersection Summary




HCM 2000 Control Delay	9.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	62.6	Sum of lost time (s)	18.1
Intersection Capacity Utilization	50.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

Near-Term (1 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	24	586	20	0	1407
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	32	674	23	0	1529
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1450	348			697	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1450	348			697	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	122	648			895	







Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	32	449	248	765	765
Volume Left	0	0	0	0	0
Volume Right	32	0	23	0	0
cSH	648	1700	1700	1700	1700
Volume to Capacity	0.05	0.26	0.15	0.45	0.45
Queue Length 95th (ft)	4	0	0	0	0
Control Delay (s)	10.8	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.8	0.0		0.0	
Approach LOS	B				

Intersection Summary

Average Delay	0.2				
Intersection Capacity Utilization	42.2%		ICU Level of Service	A	
Analysis Period (min)	15				





NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Near-Term (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	31	27	579	20	24	1382
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	43	38	616	21	26	1519
RTOR Reduction (vph)	0	34	0	8	0	0
Lane Group Flow (vph)	43	4	616	13	26	1519
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	27.3	27.3	1.7	36.5
Effective Green, g (s)	2.6	4.3	27.3	27.3	1.7	36.5
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	148	2114	945	65	2826
v/s Ratio Prot	c0.02	0.00	0.17		0.01	c0.43
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.43	0.02	0.29	0.01	0.40	0.54
Uniform Delay, d1	20.8	18.8	4.5	3.7	21.5	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.1	0.1	0.0	4.0	0.2
Delay (s)	23.8	18.9	4.6	3.7	25.5	1.8
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.5		4.5			2.2
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.6		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.66			
Actuated Cycle Length (s)			45.7		Sum of lost time (s)	14.1
Intersection Capacity Utilization			49.1%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	12	15	88	8	0	185	14	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	12	16	114	10	0	208	16	0	0
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1	SB 2	NW 1	NW 2
Volume Total (vph)	13	16	125	224						
Volume Left (vph)	0	0	114	0						
Volume Right (vph)	0	16	0	16						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.1	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.20						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						
Intersection Summary										
Delay				7.2						
Level of Service				A						
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (1 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱	↰	↱	↰			
Volume (vph)	11	191	0	0	85	143	13	498	71	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.69	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1292	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	12	217	0	0	98	164	14	547	78	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	129	0	43	0	0	0	0
Lane Group Flow (vph)	12	217	0	0	98	35	14	547	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.5	8.5			8.5	8.5	18.0	18.0	18.0			
Effective Green, g (s)	8.5	8.5			8.5	8.5	18.0	18.0	18.0			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.45	0.45	0.45			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	275	396			396	337	798	1596	714			
v/s Ratio Prot		c0.12			0.05		0.01	c0.15				
v/s Ratio Perm	0.01					0.02		0.02				
v/c Ratio	0.04	0.55			0.25	0.10	0.02	0.34	0.05			
Uniform Delay, d1	12.5	14.0			13.0	12.6	6.1	7.1	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.6			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.5	15.5			13.4	12.8	6.1	7.2	6.2			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.0		7.1			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.1			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.41										
Actuated Cycle Length (s)		39.9			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		42.2%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd









Near-Term (1 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱	↰
Volume (veh/h)	189	351	88	458	0	1508	47
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	756	1404	100	520	0	1676	52
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2162	864	1728		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2162	864	1728		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	0	72		0		
cM capacity (veh/h)	29	297	361		0		
Direction, Lane #							
Volume Total	2160	100	260	260	1117	611	0
Volume Left	756	100	0	0	0	0	0
Volume Right	1404	0	0	0	0	52	0
cSH	71	361	1700	1700	1700	1700	1700
Volume to Capacity	30.56	0.28	0.15	0.15	0.66	0.36	0.00
Queue Length 95th (ft)	Err	28	0	0	0	0	0
Control Delay (s)	Err	18.7	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C					
Approach Delay (s)	Err	3.0			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			4791.2				
Intersection Capacity Utilization			90.1%		ICU Level of Service		
Analysis Period (min)			15				E









NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near-Term (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	7	70	19	4	7	76	396	58	19	1399	201
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.86		1.00	0.90		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1608		1770	1685		1770	3471		1770	3473	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1608		1770	1685		1770	3471		1770	3473	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	120	9	93	38	8	14	84	435	64	21	1554	223
RTOR Reduction (vph)	0	75	0	0	14	0	0	8	0	0	9	0
Lane Group Flow (vph)	120	27	0	38	8	0	84	491	0	21	1769	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	18.1	18.1		2.7	2.7		5.8	49.7		1.6	45.5	
Effective Green, g (s)	18.1	18.1		2.7	2.7		5.8	49.7		1.6	45.5	
Actuated g/C Ratio	0.20	0.20		0.03	0.03		0.06	0.55		0.02	0.50	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	352	319		52	49		112	1895		31	1736	
v/s Ratio Prot	c0.07	0.02		c0.02	0.00		c0.05	c0.14		0.01	c0.51	
v/s Ratio Perm												
v/c Ratio	0.34	0.09		0.73	0.17		0.75	0.26		0.68	1.02	
Uniform Delay, d1	31.3	29.7		43.8	43.1		41.9	10.9		44.4	22.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.1		40.9	1.7		24.2	0.1		45.6	26.4	
Delay (s)	31.9	29.8		84.7	44.7		66.1	11.0		90.1	49.2	
Level of Service	C	C		F	D		E	B		F	D	
Approach Delay (s)		30.9			70.0			18.9			49.6	
Approach LOS		C			E			B			D	
Intersection Summary												
HCM 2000 Control Delay		41.8										
HCM 2000 Volume to Capacity ratio		0.80										
Actuated Cycle Length (s)		91.0										
Intersection Capacity Utilization		72.9%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Near-Term (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	1348	62	0	433	36	19	41	5	25	27	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5052			5027		1770	1833			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.15	
Satd. Flow (perm)	1770	5052			5027		1305	1833			269	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	67	1532	70	0	461	38	27	59	7	29	32	26
RTOR Reduction (vph)	0	2	0	0	5	0	0	2	0	0	8	0
Lane Group Flow (vph)	67	1600	0	0	494	0	27	64	0	0	79	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1911			2041		253	356			44	
v/s Ratio Prot	c0.04	c0.32			c0.10			c0.03				
v/s Ratio Perm							0.02				c0.29	
v/c Ratio	0.34	0.84			0.24		0.11	0.18			1.79	
Uniform Delay, d1	73.9	50.9			35.2		59.6	60.5			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	4.6			0.3		0.2	0.2			430.9	
Delay (s)	75.0	55.5			35.5		59.8	60.7			505.9	
Level of Service	E	E			D		E	E			F	
Approach Delay (s)		56.2			35.5			60.5			505.9	
Approach LOS		E			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		68.7										
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		68.6%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

Near-Term (1 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	1379	0	516	488	39	0	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3500							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3500							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1549	0	549	519	41	0	0	0	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	1549	0	549	560	0	0	0	0	0	0	4
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3181							609
v/s Ratio Prot		c0.30		c0.16	c0.16							
v/s Ratio Perm												0.00
v/c Ratio		0.81		0.29	0.18							0.01
Uniform Delay, d1		50.0		20.7	0.9							34.9
Progression Factor		0.20		1.00	1.00							1.00
Incremental Delay, d2		1.9		0.1	0.0							0.0
Delay (s)		11.9		20.8	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		11.9			10.8		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		11.5				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.53										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		50.5%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave



















Near-Term (1 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑							↑↑
Volume (veh/h)	4	215	0	0	313	41	0	0	0	105	0	9
Sign Control		Free			Free			Stop				Stop
Grade		0%			0%			0%				0%
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	5	250	0	0	356	47	0	0	0	159	0	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	402			250			652	662	250	638	638	379
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	402			250			652	662	250	638	638	379
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	59	100	98
cM capacity (veh/h)	1156			1316			372	381	789	388	393	668
Direction, Lane #												
Volume Total	255	402	0	173								
Volume Left	5	0	0	159								
Volume Right	0	47	0	14								
cSH	1156	1316	1700	401								
Volume to Capacity	0.00	0.00	0.00	0.43								
Queue Length 95th (ft)	0	0	0	53								
Control Delay (s)	0.2	0.0	0.0	20.6								
Lane LOS	A			A			C					
Approach Delay (s)	0.2	0.0	0.0	20.6								
Approach LOS				A			C					
Intersection Summary												
Average Delay		4.3										
Intersection Capacity Utilization		32.0%				ICU Level of Service		A				
Analysis Period (min)		15										










NBC Coastal Campus
22: 3rd St & Palm Ave

Near-Term (1 CVN) with Alternative 3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	297	13	86	327	25	15	39	69	29	34	14
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	10	381	17	97	367	28	26	68	121	63	74	30
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	10	397	97	396	216	167						
Volume Left (vph)	10	0	97	0	26	63						
Volume Right (vph)	0	17	0	28	121	30						
Hadj (s)	0.53	0.00	0.53	-0.02	-0.28	0.00						
Departure Headway (s)	7.3	6.8	7.2	6.7	6.7	7.2						
Degree Utilization, x	0.02	0.75	0.19	0.73	0.40	0.33						
Capacity (veh/h)	464	512	477	521	470	427						
Control Delay (s)	9.3	26.1	10.7	24.4	14.2	13.7						
Approach Delay (s)	25.6		21.7		14.2	13.7						
Approach LOS	D		C		B	B						
Intersection Summary												
Delay			20.7									
Level of Service			C									
Intersection Capacity Utilization			41.9%		ICU Level of Service		A					
Analysis Period (min)			15									




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Near-Term (1 CVN) with Alternative 3
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	74	425	458	40	53	144
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	76	438	533	47	62	169
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)	908					
pX, platoon unblocked						
vC, conflicting volume	579			1147	290	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	579			1147	290	
tC, single (s)	4.1			6.8	6.9	
tC, 2 stage (s)						
tF (s)	2.2			3.5	3.3	
p0 queue free %	92			65	76	
cM capacity (veh/h)	991			178	707	
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	76	438	355	224	232	
Volume Left	76	0	0	0	62	
Volume Right	0	0	0	47	169	
cSH	991	1700	1700	1700	393	
Volume to Capacity	0.08	0.26	0.21	0.13	0.59	
Queue Length 95th (ft)	6	0	0	0	91	
Control Delay (s)	8.9	0.0	0.0	0.0	26.6	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		26.6	
Approach LOS					D	
Intersection Summary						
Average Delay			5.2			
Intersection Capacity Utilization			40.8%	ICU Level of Service	A	
Analysis Period (min)			15			










NBC Coastal Campus
24: 7th St & Palm Ave

Near-Term (1 CVN) with Alternative 3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	434	30	32	460	4	55	26	23	13	45	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3535			1761			1842	1583
Flt Permitted	0.46	1.00		0.45	1.00			0.79			0.89	1.00
Satd. Flow (perm)	865	3505		829	3535			1435			1665	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	35	517	36	35	505	4	67	32	28	17	59	41
RTOR Reduction (vph)	0	7	0	0	1	0	0	22	0	0	0	32
Lane Group Flow (vph)	35	546	0	35	508	0	0	105	0	0	76	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases	2			6			8			4		
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	14.7	14.7		14.7	14.7			6.5			6.5	6.5
Effective Green, g (s)	14.7	14.7		14.7	14.7			6.5			6.5	6.5
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.21			0.21	0.21
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	418	1694		400	1709			306			356	338
v/s Ratio Prot	c0.16			0.14								
v/s Ratio Perm	0.04			0.04				c0.07			0.05	0.01
v/c Ratio	0.08	0.32		0.09	0.30			0.34			0.21	0.03
Uniform Delay, d1	4.2	4.8		4.2	4.7			10.1			9.8	9.4
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.7			0.3	0.0
Delay (s)	4.3	4.9		4.3	4.8			10.8			10.1	9.5
Level of Service	A	A		A	A			B			B	A
Approach Delay (s)	4.9			4.8				10.8			9.9	
Approach LOS	A			A				B			A	
Intersection Summary												
HCM 2000 Control Delay	5.8			HCM 2000 Level of Service				A				
HCM 2000 Volume to Capacity ratio	0.33											
Actuated Cycle Length (s)	30.4			Sum of lost time (s)				9.2				
Intersection Capacity Utilization	45.3%			ICU Level of Service				A				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Near-Term (1 CVN) with Alternative 3
Timing Plan: PM PEAK

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	482	9	0	0	7	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	588	11	0	0	10	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)			767			
pX, platoon unblocked						
vC, conflicting volume			599		588	588
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			599		588	588
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			978		472	509
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	588	11	15			
Volume Left	0	0	10			
Volume Right	0	11	4			
cSH	1700	1700	482			
Volume to Capacity	0.35	0.01	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.7			
Lane LOS			B			
Approach Delay (s)	0.0		12.7			
Approach LOS			B			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			35.4%	ICU Level of Service		A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	43	1675	130	60	865	135	101	93	65	179	82	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5030		1770	4983			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5030		1770	4983			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	46	1782	138	61	874	136	111	102	71	201	92	30
RTOR Reduction (vph)	0	5	0	0	11	0	0	19	0	0	4	0
Lane Group Flow (vph)	46	1915	0	61	999	0	0	265	0	0	319	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2003		196	1984			649			658	
v/s Ratio Prot	0.03	c0.38		c0.03	0.20			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.23	0.96		0.31	0.50			0.41			0.48	
Uniform Delay, d1	73.0	52.6		73.7	40.8			63.4			64.5	
Progression Factor	1.00	1.00		1.23	0.81			1.00			1.00	
Incremental Delay, d2	0.6	11.4		0.9	0.9			0.4			0.6	
Delay (s)	73.6	64.0		91.2	33.8			63.9			65.0	
Level of Service	E	E		F	C			E			E	
Approach Delay (s)		64.3			37.0			63.9			65.0	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		56.3			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		119.9%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	21	1966	59	51	1283		22	11	36	66	14	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5063		1770	5053			1705		1770	1715	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.61	1.00	
Satd. Flow (perm)	1770	5063		1770	5053			1544		1144	1715	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	21	2006	60	53	1323	59	27	13	43	78	16	18
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	16	0
Lane Group Flow (vph)	21	2065	0	53	1380	0	0	60	0	78	18	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3560		157	3666			190		141	211	
v/s Ratio Prot	0.01	c0.41		c0.03	c0.27						0.01	
v/s Ratio Perm								0.04		c0.07		
v/c Ratio	0.18	0.58		0.34	0.38			0.32		0.55	0.09	
Uniform Delay, d1	79.3	13.4		77.0	9.3			72.0		74.2	69.9	
Progression Factor	1.43	0.10		1.55	0.29			1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3		1.0	0.2			1.0		4.6	0.2	
Delay (s)	114.0	1.6		120.8	2.9			72.9		78.9	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		2.8			7.3			72.9			76.2	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		62.2%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	1844	206	162	1358	84	133	42	132	159	46	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5009		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5009		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	30	1962	219	167	1400	87	145	46	143	215	62	28
RTOR Reduction (vph)	0	8	0	0	0	37	0	0	119	0	4	0
Lane Group Flow (vph)	30	2173	0	167	1400	50	0	191	24	0	301	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2217		192	2364	736		306	269		575	
v/s Ratio Prot	0.02	c0.43		c0.09	c0.28			c0.11			c0.09	
v/s Ratio Perm						0.03			0.02			
v/c Ratio	0.19	0.98		0.87	0.59	0.07		0.62	0.09		0.52	
Uniform Delay, d1	76.0	49.4		78.9	35.6	26.6		69.3	62.9		68.0	
Progression Factor	1.02	0.98		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	13.5		31.6	1.1	0.2		9.3	0.7		3.4	
Delay (s)	78.0	61.9		110.5	36.6	26.8		78.6	63.6		71.4	
Level of Service	E	E		F	D	C		E	E		E	
Approach Delay (s)		62.1			43.6			72.1			71.4	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		56.7			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		104.1%			ICU Level of Service				G			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	1975	52	177	1666		17	41	9		25	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900		1900	1900	1900		1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9				5.6			5.6
Lane Util. Factor	1.00	0.91		1.00	0.91				1.00		1.00	
Frt	1.00	1.00		1.00	1.00				0.92		0.97	
Flt Protected	0.95	1.00		0.95	1.00				0.99		0.97	
Satd. Flow (prot)	1770	5066		1770	5078				1680		1757	
Flt Permitted	0.95	1.00		0.95	1.00				0.89		0.82	
Satd. Flow (perm)	1770	5066		1770	5078				1510		1487	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.95	0.85	0.85	0.85	0.85	0.81	0.81
Adj. Flow (vph)	11	2194	58	186	1754		18	48	11	99	31	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	79	0	0	11	0
Lane Group Flow (vph)	11	2250	0	186	1771	0	0	79	0	0	48	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7				17.4			17.4
Effective Green, g (s)	0.8	40.3		11.2	50.7				17.4			17.4
Actuated g/C Ratio	0.01	0.48		0.13	0.60				0.21			0.21
Clearance Time (s)	5.2	4.9		5.2	4.9				5.6			5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0				3.0			3.0
Lane Grp Cap (vph)	16	2413		234	3043				310			305
v/s Ratio Prot	0.01	c0.44		c0.11	0.35							
v/s Ratio Perm									c0.05			0.03
v/c Ratio	0.69	0.93		0.79	0.58				0.26			0.16
Uniform Delay, d1	41.8	20.9		35.6	10.4				28.2			27.6
Progression Factor	1.00	1.00		1.00	1.00				1.00			1.00
Incremental Delay, d2	80.1	7.4		16.8	0.3				0.4			0.2
Delay (s)	121.9	28.2		52.4	10.7				28.6			27.8
Level of Service	F	C		D	B				C			C
Approach Delay (s)		28.7			14.7				28.6			27.8
Approach LOS		C			B				C			C
Intersection Summary												
HCM 2000 Control Delay		22.5			HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		84.6			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		70.7%			ICU Level of Service				C			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	196	1912	28	340	1675	576	68	184	553	610	248	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	206	2013	29	366	1801	619	72	196	588	663	270	257
RTOR Reduction (vph)	0	1	0	0	0	86	0	26	282	0	2	127
Lane Group Flow (vph)	206	2041	0	366	1801	533	72	382	94	663	294	104
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.3	38.3	11.8	41.4	41.4
Effective Green, g (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.3	38.3	11.8	41.4	41.4
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1201		519	2318	721	100	407	375	264	471	406
v/s Ratio Prot	0.06	c0.40		c0.21	c0.35		0.04	c0.23		c0.19	c0.17	
v/s Ratio Perm					0.34			0.06				0.07
v/c Ratio	0.81	1.70		0.71	0.78	0.74	0.72	0.94	0.25	2.51	0.62	0.26
Uniform Delay, d1	69.9	58.5		48.2	35.1	34.2	71.1	56.4	46.0	70.8	49.1	43.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	16.9	318.4		4.3	1.7	4.0	21.9	29.4	0.4	691.3	2.6	0.3
Delay (s)	86.8	376.9		52.6	36.8	38.2	93.0	85.8	46.4	762.0	51.7	44.2
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		350.3			39.2			69.1			446.0	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		210.0			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.22										
Actuated Cycle Length (s)		153.3			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		127.1%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Near-Term (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Volume (vph)	0	527	880	0	456	1717
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	592	936	0	501	1887
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	592	936	0	501	1884
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.17	c0.26		0.28	c0.68
v/s Ratio Perm						
v/c Ratio		0.33	1.09		0.76	1.06
Uniform Delay, d1		11.8	30.3		21.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	58.5		4.9	39.5
Delay (s)		11.9	88.8		26.7	54.0
Level of Service		B	F		C	D
Approach Delay (s)		11.9	88.8		48.3	
Approach LOS		B	F		D	
Intersection Summary						
HCM 2000 Control Delay		52.5			HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio		1.14				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		89.3%			ICU Level of Service	E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	976	0	0	547	260	446	3	111	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1017	0	0	615	292	480	3	119	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	31	0	0	0	0
Lane Group Flow (vph)	0	1017	0	0	809	0	307	264	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases							2					
Actuated Green, G (s)		19.7			19.7		14.7	14.7				
Effective Green, g (s)		19.7			19.7		14.7	14.7				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1644			1564		582	559				
v/s Ratio Prot		0.29			0.24							
v/s Ratio Perm							0.18	0.16				
v/c Ratio		0.62			0.52		0.53	0.47				
Uniform Delay, d1		8.5			8.0		11.1	10.8				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.7			0.3		0.9	0.6				
Delay (s)		9.2			8.3		11.9	11.4				
Level of Service		A			A		B	B				
Approach Delay (s)		9.2			8.3		11.7			0.0		
Approach LOS		A			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		9.5			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		42.4			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		49.5%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Near-Term (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	11	9	4	37	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	18	10	4	54	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	78	54	54			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	78	54	54			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	920	1014	1552			
Direction, Lane #						
Volume Total	18	14	54			
Volume Left	0	10	0			
Volume Right	18	0	0			
cSH	1014	1552	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.6				
Intersection Capacity Utilization		17.4%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St










Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1309	35	0	3223	532	0	0	477	0	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1577	42	0	3503	578	0	0	596	0	0	13
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4102			1639			2819	5720	587	4358	5452	1497
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4102			1639			2819	5720	587	4358	5452	1497
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	55	100	100	88
cM capacity (veh/h)	39			385			7	0	1336	0	0	108
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	631	631	358	1401	1401	1279	596	13				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	42	0	0	578	596	13				
cSH	1700	1700	1700	1700	1700	1700	1336	108				
Volume to Capacity	0.37	0.37	0.21	0.82	0.82	0.75	0.45	0.12				
Queue Length 95th (ft)	0	0	0	0	0	0	59	10				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.8	43.0				
Lane LOS							A	E				
Approach Delay (s)	0.0			0.0			9.8	43.0				
Approach LOS							A	E				
Intersection Summary												
Average Delay			1.0									
Intersection Capacity Utilization			89.3%			ICU Level of Service			E			
Analysis Period (min)			15									

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1170	203	0	3122	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1330	231	0	3469	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1580	2641		599	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1580	2641		599	
tC, single (s)			4.1	6.8		6.9	
tC, 2 stage (s)							
tF (s)			2.2	3.5		3.3	
p0 queue free %			100	100		42	
cM capacity (veh/h)			405	18		430	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	532	532	497	1156	1156	1156	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	231	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	430
Volume to Capacity	0.31	0.31	0.29	0.68	0.68	0.68	0.58
Queue Length 95th (ft)	0	0	0	0	0	0	90
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	24.4
Lane LOS							C
Approach Delay (s)	0.0				0.0	24.4	
Approach LOS							C
Intersection Summary							
Average Delay			1.2				
Intersection Capacity Utilization			75.2%	ICU Level of Service		D	
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↔↔↔	↔↔↔		↔	↔			↔↔	
Volume (vph)	0	0	0	1506	1546	250	42	94	0	0	259	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			1.00	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4642		1770	3539			3522	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4642		1770	3539			3522	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1619	1662	269	57	127	0	0	298	7
RTOR Reduction (vph)	0	0	0	0	6	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	874	2670	0	57	127	0	0	304	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.3			21.1	
Effective Green, g (s)				131.2	131.2		20.0	46.3			21.1	
Actuated g/C Ratio				0.69	0.69		0.11	0.24			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1055	3220		187	866			392	
v/s Ratio Prot				0.57	c0.58		c0.03	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.83	0.83		0.30	0.15			0.78	
Uniform Delay, d1				20.8	20.9		78.1	55.9			81.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				5.5	1.9		0.9	0.1			9.3	
Delay (s)				26.3	22.8		79.1	56.0			91.0	
Level of Service				C	C		E	E			F	
Approach Delay (s)		0.0			23.6			63.1			91.0	
Approach LOS		A			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		30.5		HCM 2000 Level of Service					C			
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		189.1		Sum of lost time (s)					16.8			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔↔	↔					↔↔	↔	↔↔	↔↔	
Volume (vph)	0	502	68	0	0	0	0	127	212	435	1388	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3173	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3173	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	0	546	74	0	0	0	0	148	230	473	1446	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	66	66	0	0	0
Lane Group Flow (vph)	0	546	45	0	0	0	0	192	54	473	1446	0
Turn Type		NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		60.0	60.0					62.2	62.2	35.0	100.0	
Effective Green, g (s)		60.0	60.0					62.2	62.2	35.0	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.20	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1150	522	700	2062	
v/s Ratio Prot		c0.11						0.06		0.14	c0.41	
v/s Ratio Perm			0.03						0.04			
v/c Ratio		0.31	0.08					0.17	0.10	0.68	0.70	
Uniform Delay, d1		40.7	37.3					37.1	36.2	63.1	25.3	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.1	2.6	1.1	
Delay (s)		40.8	37.4					37.2	36.3	65.7	26.4	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		40.4			0.0			36.9			36.0	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		37.1		HCM 2000 Level of Service					D			
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)					14.4			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↕	↕
Volume (vph)	225	7	1149	624	0	1112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3310			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3310			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	262	8	1235	671	0	1171
RTOR Reduction (vph)	1	0	58	0	0	0
Lane Group Flow (vph)	269	0	1848	0	0	1171
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	17.3		42.4			42.4
Effective Green, g (s)	17.3		42.4			42.4
Actuated g/C Ratio	0.25		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	400		2039			2071
v/s Ratio Prot	c0.17		c0.56			0.35
v/s Ratio Perm						
v/c Ratio	0.67		0.91			0.57
Uniform Delay, d1	23.2		11.5			7.8
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	4.4		6.3			0.4
Delay (s)	27.6		17.7			8.1
Level of Service	C		B			A
Approach Delay (s)	27.6		17.7			8.1
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			15.2		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.88			
Actuated Cycle Length (s)			68.8		Sum of lost time (s)	12.1
Intersection Capacity Utilization			78.4%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↕	↕	↕	↕	↕	↕
Volume (vph)	49	3	11	8	0	6	21	1370	27	41	1259	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1693	1583		1706		1770	3529		1770	3524	
Frt Permitted	0.74	0.78	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1308	1381	1583		1517		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	57	3	13	16	0	12	25	1631	32	45	1368	41
RTOR Reduction (vph)	0	0	11	0	24	0	0	1	0	0	1	0
Lane Group Flow (vph)	30	30	2	0	4	0	25	1662	0	45	1408	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.3	15.3	15.3		15.3		2.7	63.4		4.0	64.7	
Effective Green, g (s)	15.3	15.3	15.3		15.3		2.7	63.4		4.0	64.7	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.65		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	206	218	250		239		49	2311		73	2355	
v/s Ratio Prot							0.01	c0.47		c0.03	0.40	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.15	0.14	0.01		0.02		0.51	0.72		0.62	0.60	
Uniform Delay, d1	35.1	35.1	34.4		34.4		46.4	10.9		45.6	8.9	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		8.7	1.1		14.5	0.4	
Delay (s)	35.4	35.4	34.4		34.4		55.1	12.0		60.1	9.3	
Level of Service	D	D	C		C		E	B		E	A	
Approach Delay (s)		35.2			34.4			12.6			10.9	
Approach LOS		D			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.5							B		
HCM 2000 Volume to Capacity ratio			0.61									
Actuated Cycle Length (s)			96.8				Sum of lost time (s)			14.1		
Intersection Capacity Utilization			56.4%				ICU Level of Service			B		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	24	0	1312	8	444	807	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	36	0	1442	9	453	823	0
RTOR Reduction (vph)	0	0	0	0	33	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1442	4	453	823	0
Turn Type					NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.41		c0.26	0.23	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.87	0.01	0.74	0.28	
Uniform Delay, d1					60.6			34.4	20.4	41.8	2.3	
Progression Factor					1.00			0.35	1.00	1.00	1.00	
Incremental Delay, d2					0.1			4.4	0.0	4.9	0.2	
Delay (s)					60.6			16.4	20.5	46.7	2.5	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			16.4			18.2	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.8										
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		145.0										
Intersection Capacity Utilization		79.7%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd











Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	43	13	2	58	123	127	1160	6	191	369	288
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.88		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3264	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3264	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	40	66	20	2	66	140	141	1289	7	220	424	331
RTOR Reduction (vph)	0	0	19	0	0	118	0	0	4	0	96	0
Lane Group Flow (vph)	40	66	1	0	68	22	141	1289	3	220	659	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Effective Green, g (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Actuated g/C Ratio	0.06	0.06	0.06		0.16	0.16	0.31	0.46	0.46	0.19	0.34	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	97	102	77		295	239	549	1625	618	341	1116	
v/s Ratio Prot	0.02	c0.04			c0.04		0.08	c0.36		c0.12	0.20	
v/s Ratio Perm			0.00			0.01			0.00			
v/c Ratio	0.41	0.65	0.01		0.23	0.09	0.26	0.79	0.01	0.65	0.59	
Uniform Delay, d1	66.2	67.1	64.8		53.3	52.1	37.5	33.3	21.2	53.9	39.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.93	
Incremental Delay, d2	2.8	13.3	0.1		0.4	0.2	0.2	4.1	0.0	4.1	2.3	
Delay (s)	69.1	80.4	64.8		53.7	52.3	37.7	37.4	21.3	55.7	38.7	
Level of Service	E	F	E		D	D	D	D	C	E	D	
Approach Delay (s)		74.3			52.7			37.4			42.5	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			42.1							D		
HCM 2000 Volume to Capacity ratio			0.65									
Actuated Cycle Length (s)			145.0							19.4		
Intersection Capacity Utilization			86.2%							E		
Analysis Period (min)			15									
c Critical Lane Group												











NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	41	195	5	53	218	9
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	48	229	6	66	237	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	523	39			72	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	523	39			72	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	78			84	
cM capacity (veh/h)	434	1032			1527	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	278	72	247			
Volume Left	48	0	237			
Volume Right	229	66	0			
cSH	1249	1700	1527			
Volume to Capacity	0.22	0.04	0.16			
Queue Length 95th (ft)	21	0	14			
Control Delay (s)	10.3	0.0	7.5			
Lane LOS	B		A			
Approach Delay (s)	10.3	0.0	7.5			
Approach LOS	B					
Intersection Summary						
Average Delay		7.9				
Intersection Capacity Utilization		29.2%	ICU Level of Service	A		
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	44	3	1305	387	0	344
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1754		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1754		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	59	4	1374	407	0	538
RTOR Reduction (vph)	4	0	0	124	0	0
Lane Group Flow (vph)	59	0	1374	283	0	538
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		29.5	29.5		29.5
Effective Green, g (s)	3.0		29.5	29.5		29.5
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	124		2462	1057		2462
v/s Ratio Prot	c0.03		c0.39			0.15
v/s Ratio Perm				0.19		
v/c Ratio	0.48		0.56	0.27		0.22
Uniform Delay, d1	18.9		3.2	2.4		2.3
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	2.9		0.3	0.1		0.0
Delay (s)	21.8		3.5	2.5		2.4
Level of Service	C		A	A		A
Approach Delay (s)	21.8		3.3			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.6	HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.55			
Actuated Cycle Length (s)			42.4	Sum of lost time (s)		9.9
Intersection Capacity Utilization			48.5%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (veh/h)	0	16	2121	6	6	388
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	28	2281	6	9	571
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2587	1144			2287	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2587	1144			2287	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			96	
cM capacity (veh/h)	20	194			218	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	28	1520	767	9	285	285
Volume Left	0	0	0	9	0	0
Volume Right	28	0	6	0	0	0
cSH	194	1700	1700	218	1700	1700
Volume to Capacity	0.14	0.89	0.45	0.04	0.17	0.17
Queue Length 95th (ft)	12	0	0	3	0	0
Control Delay (s)	26.7	0.0	0.0	22.2	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	26.7	0.0		0.3		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			68.8%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (vph)	18	90	2032	13	39	349
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	22	111	2185	14	57	506
RTOR Reduction (vph)	0	4	0	1	0	0
Lane Group Flow (vph)	22	107	2185	13	57	506
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases				2		
Actuated Green, G (s)	15.9	26.0	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.9	20.9	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	262	308	2251	1007	82	2707
v/s Ratio Prot	0.01	c0.07	c0.62		c0.03	0.14
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.35	0.97	0.01	0.70	0.19
Uniform Delay, d1	39.4	37.3	18.5	7.2	50.3	3.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	12.8	0.0	22.5	0.0
Delay (s)	39.5	37.9	31.3	7.2	72.9	3.5
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.2		31.2			10.5
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay			27.5		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.84			
Actuated Cycle Length (s)			107.2		Sum of lost time (s)	18.1
Intersection Capacity Utilization			72.6%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↖	↖	↖	↖
Volume (veh/h)	0	34	2009	27	0	365
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	55	2115	28	0	493
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2376	1072			2143	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2376	1072			2143	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	75			100	
cM capacity (veh/h)	29	216			249	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	55	1410	733	247	247	
Volume Left	0	0	0	0	0	
Volume Right	55	0	28	0	0	
cSH	216	1700	1700	1700	1700	
Volume to Capacity	0.25	0.83	0.43	0.15	0.15	
Queue Length 95th (ft)	24	0	0	0	0	
Control Delay (s)	27.2	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	27.2	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay			0.6			
Intersection Capacity Utilization			66.4%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖	↖	↖	↖
Volume (vph)	11	7	2035	34	16	341
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	18	11	2120	35	20	421
RTOR Reduction (vph)	0	5	0	8	0	0
Lane Group Flow (vph)	18	6	2120	27	20	421
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.5	59.2	59.2	2.1	68.8
Effective Green, g (s)	1.4	3.5	59.2	59.2	2.1	68.8
Actuated g/C Ratio	0.02	0.05	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	72	2727	1220	48	3170
v/s Ratio Prot	c0.01	0.00	c0.60		c0.01	0.12
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.56	0.09	0.78	0.02	0.42	0.13
Uniform Delay, d1	37.4	35.1	5.0	2.1	36.7	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	20.7	0.5	1.4	0.0	5.8	0.0
Delay (s)	58.1	35.6	6.5	2.1	42.5	0.5
Level of Service	E	D	A	A	D	A
Approach Delay (s)	49.6		6.4			2.4
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay			6.2		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.76			
Actuated Cycle Length (s)			76.8		Sum of lost time (s)	14.1
Intersection Capacity Utilization			69.1%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus Near Term (1 CVN) with Alternative 3 No Hooper
 15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	3	0	47	2	0	46	3	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	12	0	87	4	0	73	5	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	12	0	91	73	5					
Volume Left (vph)	0	0	87	0	0					
Volume Right (vph)	0	0	0	0	5					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.2	3.2					
Degree Utilization, x	0.01	0.00	0.11	0.08	0.00					
Capacity (veh/h)	829	1121	814	835	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.4%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus Near Term (1 CVN) with Alternative 3 No Hooper
 16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↑		↑	↑	↑	↑	↑			
Volume (vph)	3	38	0	0	34	233	4	1833	53	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1353	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	4	51	0	0	47	324	4	1950	56	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	23	0	0	0	0
Lane Group Flow (vph)	4	51	0	0	47	268	4	1950	33	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.9	16.9			16.9	16.9	47.7	43.6	43.6			
Effective Green, g (s)	16.9	16.9			16.9	16.9	47.7	43.6	43.6			
Actuated g/C Ratio	0.23	0.23			0.23	0.23	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	309	426			426	362	1142	2087	933			
v/s Ratio Prot		0.03			0.03		0.00	c0.55				
v/s Ratio Perm	0.00					c0.17			0.02			
v/c Ratio	0.01	0.12			0.11	0.74	0.00	0.93	0.04			
Uniform Delay, d1	22.0	22.6			22.6	26.5	4.7	13.8	6.3			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	8.0	0.0	8.5	0.0			
Delay (s)	22.1	22.7			22.7	34.4	4.7	22.3	6.4			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.7			32.9			21.8			0.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay		23.5						HCM 2000 Level of Service		C		
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		73.9				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		84.7%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near Term (1 CVN) with Alternative 3 No Hooper









Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔
Volume (veh/h)	0	0	0	1627	0	309	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	0	1695	0	391	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1239	196	391		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1239	196	391		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	168	813	1164		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	847	847	261	130	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.50	0.50	0.15	0.08	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			48.3%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	418	2	40	50	8	21	27	1490	11	4	125	182
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	1.00		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1595		1770	1661		1770	3535		1770	3224	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1595		1770	1661		1770	3535		1770	3224	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	475	2	45	161	26	68	28	1568	12	6	181	264
RTOR Reduction (vph)	0	31	0	0	64	0	0	1	0	0	155	0
Lane Group Flow (vph)	475	16	0	161	30	0	28	1579	0	6	290	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	28.8	28.8		5.1	5.1		2.1	40.1		0.9	38.9	
Effective Green, g (s)	28.8	28.8		5.1	5.1		2.1	40.1		0.9	38.9	
Actuated g/C Ratio	0.31	0.31		0.05	0.05		0.02	0.43		0.01	0.41	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	543	489		96	90		39	1511		16	1337	
v/s Ratio Prot	c0.27	0.01		c0.09	0.02		c0.02	c0.45		0.00	0.09	
v/s Ratio Perm												
v/c Ratio	0.87	0.03		1.68	0.33		0.72	1.05		0.38	0.22	
Uniform Delay, d1	30.8	22.7		44.4	42.7		45.6	26.8		46.2	17.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	14.6	0.0		345.6	2.2		47.4	36.0		14.1	0.1	
Delay (s)	45.4	22.8		390.0	44.9		92.9	62.8		60.3	17.7	
Level of Service	D	C		F	D		F	E		E	B	
Approach Delay (s)		43.3			262.8			63.3			18.3	
Approach LOS		D			F			E			B	
Intersection Summary												
HCM 2000 Control Delay	70.4			HCM 2000 Level of Service					E			
HCM 2000 Volume to Capacity ratio	1.03											
Actuated Cycle Length (s)	93.8			Sum of lost time (s)					18.9			
Intersection Capacity Utilization	79.8%			ICU Level of Service					D			
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	8	209	19	0	1346	18	36	24	2	21	43	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5023			5075		1770	1845			1732	
Flt Permitted	0.95	1.00			1.00		0.66	1.00			0.17	
Satd. Flow (perm)	1770	5023			5075		1229	1845			292	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	0.77
Adj. Flow (vph)	9	235	21	0	1479	20	43	29	2	27	56	70
RTOR Reduction (vph)	0	6	0	0	1	0	0	2	0	0	17	0
Lane Group Flow (vph)	9	250	0	0	1498	0	43	29	0	0	136	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1900			2061		238	358			48	
v/s Ratio Prot	c0.01	0.05			c0.30			0.02				
v/s Ratio Perm							c0.03				c0.47	
v/c Ratio	0.05	0.13			0.73		0.18	0.08			2.84	
Uniform Delay, d1	71.5	36.6			45.0		60.5	59.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			2.1		0.4	0.1			882.4	
Delay (s)	71.6	36.8			47.2		60.9	59.4			957.4	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		37.9			47.2			60.3			957.4	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		116.4			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.91										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		64.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

















Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	226	0	806	1355	9	0	0	0	0	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	276	0	857	1441	10	0	0	0	0	0	19
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	276	0	857	1451	0	0	0	0	0	0	7
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.05		c0.25	c0.41							
v/s Ratio Perm												0.00
v/c Ratio		0.14		0.50	0.45							0.01
Uniform Delay, d1		36.8		30.0	1.3							34.9
Progression Factor		0.41		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.2	0.1							0.0
Delay (s)		15.2		30.2	1.4							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.2			12.1			0.0				35.0
Approach LOS		B			B			A				C
Intersection Summary												
HCM 2000 Control Delay		12.6			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.49										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		59.4%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

Near Term (1 CVN) with Alternative 3 No Hooper



















Timing Plan: AM PEAK

																			
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR							
Lane Configurations																			
Volume (veh/h)	15	234	0	0	129	646	0	0	0	108	0	6							
Sign Control		Free			Free			Stop			Stop								
Grade		0%			0%			0%			0%								
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91							
Hourly flow rate (vph)	18	279	0	0	139	695	0	0	0	119	0	7							
Pedestrians																			
Lane Width (ft)																			
Walking Speed (ft/s)																			
Percent Blockage																			
Right turn flare (veh)																			
Median type	None			None															
Median storage (veh)																			
Upstream signal (ft)																			
pX, platoon unblocked																			
vC, conflicting volume	833			279			807	1148	279	800	800	486							
vC1, stage 1 conf vol																			
vC2, stage 2 conf vol																			
vCu, unblocked vol	833			279			807	1148	279	800	800	486							
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2							
tC, 2 stage (s)																			
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3							
p0 queue free %	98			100			100	100	100	60	100	99							
cM capacity (veh/h)	800			1284			291	194	760	298	311	581							
Direction, Lane #	EB 1	WB 1	NB 1	SB 1															
Volume Total	296	833	0	125															
Volume Left	18	0	0	119															
Volume Right	0	695	0	7															
cSH	800	1284	1700	306															
Volume to Capacity	0.02	0.00	0.00	0.41															
Queue Length 95th (ft)	2	0	0	48															
Control Delay (s)	0.8	0.0	0.0	24.7															
Lane LOS	A			A	C														
Approach Delay (s)	0.8	0.0	0.0	24.7															
Approach LOS				A	C														
Intersection Summary																			
Average Delay				2.7															
Intersection Capacity Utilization				59.6%	ICU Level of Service			B											
Analysis Period (min)				15															

NBC Coastal Campus
22: 3rd St & Palm Ave

Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	333	5	27	751	25	12	15	127	12	11	15
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	9	387	6	29	808	27	15	19	157	15	14	19
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	393	29	834	190	48						
Volume Left (vph)	9	0	29	0	15	15						
Volume Right (vph)	0	6	0	27	157	19						
Hadj (s)	0.53	0.02	0.53	0.01	-0.45	-0.14						
Departure Headway (s)	6.6	6.1	6.4	5.9	6.3	7.1						
Degree Utilization, x	0.02	0.67	0.05	1.0	0.33	0.09						
Capacity (veh/h)	532	570	545	624	545	456						
Control Delay (s)	8.6	19.4	8.6	191.8	12.3	10.8						
Approach Delay (s)	19.2		185.6		12.3	10.8						
Approach LOS	C		F		B	B						
Intersection Summary												
Delay				113.6								
Level of Service				F								
Intersection Capacity Utilization				57.4%	ICU Level of Service			B				
Analysis Period (min)				15								




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱	↕	↕	↰	↱
Volume (veh/h)	238	473	739	154	18	206
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	301	599	901	188	25	290
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked	0.84				0.84	0.84
vC, conflicting volume	1089				2196	545
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	714				2039	63
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	59				0	65
cM capacity (veh/h)	737				24	827
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	301	599	601	488	315	
Volume Left	301	0	0	0	25	
Volume Right	0	0	0	188	290	
cSH	737	1700	1700	1700	226	
Volume to Capacity	0.41	0.35	0.35	0.29	1.40	
Queue Length 95th (ft)	50	0	0	0	446	
Control Delay (s)	13.2	0.0	0.0	0.0	244.1	
Lane LOS	B				F	
Approach Delay (s)	4.4		0.0		244.1	
Approach LOS					F	
Intersection Summary						
Average Delay			35.1			
Intersection Capacity Utilization			62.3%		ICU Level of Service	B
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	466	17	27	735	0	71	34	82	2	27	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1720			1857	1583
Flt Permitted	0.24	1.00		0.40	1.00			0.86			0.98	1.00
Satd. Flow (perm)	439	3521		744	3539			1506			1825	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	22	605	22	35	955	0	108	52	124	3	47	48
RTOR Reduction (vph)	0	3	0	0	0	0	0	35	0	0	0	33
Lane Group Flow (vph)	22	624	0	35	955	0	0	249	0	0	50	15
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	21.9	21.9		21.9	21.9			14.8			14.8	14.8
Effective Green, g (s)	21.9	21.9		21.9	21.9			14.8			14.8	14.8
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.32			0.32	0.32
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	209	1679		354	1688			485			588	510
v/s Ratio Prot		0.18			c0.27							
v/s Ratio Perm	0.05			0.05				c0.17			0.03	0.01
v/c Ratio	0.11	0.37		0.10	0.57			0.51			0.09	0.03
Uniform Delay, d1	6.6	7.6		6.6	8.6			12.6			10.8	10.6
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.2	0.1		0.1	0.4			0.9			0.1	0.0
Delay (s)	6.8	7.8		6.7	9.0			13.5			10.9	10.7
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)		7.7			9.0			13.5			10.8	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay			9.3		HCM 2000 Level of Service				A			
HCM 2000 Volume to Capacity ratio			0.54									
Actuated Cycle Length (s)			45.9		Sum of lost time (s)				9.2			
Intersection Capacity Utilization			50.9%		ICU Level of Service				A			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗			↙	↘
Volume (veh/h)	551	5	0	0	3	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	599	5	0	0	3	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			604		599	599
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			604		599	599
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			973		465	502
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	599	5	10			
Volume Left	0	0	3			
Volume Right	0	5	7			
cSH	1700	1700	489			
Volume to Capacity	0.35	0.00	0.02			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.5			
Lane LOS			B			
Approach Delay (s)	0.0		12.5			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			39.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↙
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑↑	↘	↙	↑↑↑			↙			↙	↘
Volume (vph)	22	701	40	25	1892	45	170	38	53	93	47	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5044		1770	5068			3323			3361	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5044		1770	5068			3323			3361	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	26	835	48	27	2079	49	205	46	64	113	57	32
RTOR Reduction (vph)	0	3	0	0	1	0	0	13	0	0	9	0
Lane Group Flow (vph)	26	880	0	27	2127	0	0	302	0	0	193	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2233		118	2159			646			653	
v/s Ratio Prot	0.01	c0.17		c0.02	c0.42			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.18	0.39		0.23	0.99			0.47			0.30	
Uniform Delay, d1	76.8	33.8		79.6	51.1			64.2			62.0	
Progression Factor	1.00	1.00		1.24	0.77			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.8	14.1			0.5			0.3	
Delay (s)	77.3	34.4		99.2	53.3			64.8			62.2	
Level of Service	E	C		F	D			E			E	
Approach Delay (s)		35.6			53.8			64.8			62.2	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		50.6			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		74.6%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	
Volume (vph)	3	939	36	21	2071	13	19	5	32	57	11	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5080			1691		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.65	1.00	
Satd. Flow (perm)	1770	5057		1770	5080			1545		1208	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	3	1055	40	24	2353	15	26	7	44	81	16	23
RTOR Reduction (vph)	0	2	0	0	0	0	0	27	0	0	19	0
Lane Group Flow (vph)	3	1093	0	24	2368	0	0	50	0	81	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases						4				8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3716			257		201	283	
v/s Ratio Prot	0.00	0.22		c0.01	c0.47						0.01	
v/s Ratio Perm								0.03		c0.07		
v/c Ratio	0.08	0.31		0.20	0.64			0.20		0.40	0.07	
Uniform Delay, d1	86.2	11.2		79.5	12.1			64.6		67.0	63.2	
Progression Factor	1.62	0.27		1.42	0.34			1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.2		0.5	0.5			0.4		1.3	0.1	
Delay (s)	140.1	3.2		113.7	4.6			65.0		68.3	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.6			5.7			65.0			66.7	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		73.7%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	
Volume (vph)	4	1011	66	100	1920	54	151	20	94	174	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.85	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1136	74	120	2313	65	170	22	106	232	49	21
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	88	0	3	0
Lane Group Flow (vph)	4	1206	0	120	2313	35	0	192	18	0	299	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.24		c0.07	c0.45			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.10	0.54		0.61	0.86	0.04		0.63	0.07		0.51	
Uniform Delay, d1	86.2	36.7		76.3	36.2	20.2		69.1	62.4		67.7	
Progression Factor	1.19	0.62		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.9		5.6	3.7	0.1		3.9	0.1		0.8	
Delay (s)	104.0	23.5		81.9	40.0	20.3		73.1	62.5		68.4	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.8			41.5			69.3			68.4	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		40.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		91.0%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	15	1285	27	45	2054	13	17	7	51	40	3	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1672			1725	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.77	
Satd. Flow (perm)	1770	5070		1770	5081			1561			1370	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	16	1397	29	52	2388	15	20	8	61	53	4	29
RTOR Reduction (vph)	0	2	0	0	0	0	0	48	0	0	23	0
Lane Group Flow (vph)	16	1424	0	52	2403	0	0	41	0	0	63	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.6		2.8	39.7			15.2			15.2	
Effective Green, g (s)	0.7	37.6		2.8	39.7			15.2			15.2	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2673		69	2829			332			292	
v/s Ratio Prot	0.01	0.28		c0.03	c0.47							
v/s Ratio Perm								0.03			c0.05	
v/c Ratio	0.94	0.53		0.75	0.85			0.12			0.22	
Uniform Delay, d1	35.3	11.1		33.9	13.3			22.7			23.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	188.5	0.2		36.6	2.6			0.2			0.4	
Delay (s)	223.8	11.3		70.5	15.9			22.8			23.5	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		13.6			17.0			22.8			23.5	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		16.1			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		71.3			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		57.3%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	95	1300	31	254	1989	223	78	75	800	244	96	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	110	1512	36	270	2116	237	87	83	889	290	114	95
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	180	0	3	61
Lane Group Flow (vph)	110	1546	0	270	2116	170	87	339	300	290	121	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.4	31.1	31.1	10.4	33.1	33.1
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.4	31.1	31.1	10.4	33.1	33.1
Actuated g/C Ratio	0.05	0.30		0.15	0.40	0.40	0.07	0.27	0.27	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	176	1531		271	2055	639	127	413	401	306	496	427
v/s Ratio Prot	0.03	0.31		c0.15	c0.42		0.05	c0.22		c0.08	0.07	
v/s Ratio Perm						0.11			0.20			0.02
v/c Ratio	0.62	1.01		1.00	1.03	0.27	0.69	0.82	0.75	0.95	0.24	0.06
Uniform Delay, d1	54.1	40.6		49.3	34.7	23.2	52.8	40.1	39.1	52.8	32.1	30.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.8	25.4		53.3	27.9	0.2	14.2	12.3	7.4	37.3	0.3	0.1
Delay (s)	60.9	66.1		102.6	62.6	23.4	67.0	52.4	46.5	90.1	32.3	30.4
Level of Service	E	E		F	E	C	E	D	D	F	C	C
Approach Delay (s)		65.7			63.2			50.9			65.6	
Approach LOS		E			E			D			E	
Intersection Summary												
HCM 2000 Control Delay		61.9			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.98										
Actuated Cycle Length (s)		116.5			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		88.2%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	295	1131	0	161	1336
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	331	1216	0	179	1484
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	331	1216	0	179	1479
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	18
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.34		0.10	c0.53
v/s Ratio Perm						
v/c Ratio		0.12	1.04		0.86	0.97
Uniform Delay, d1		2.5	26.8		34.7	17.3
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	38.0		29.2	15.4
Delay (s)		2.5	64.8		63.8	32.6
Level of Service		A	E		E	C
Approach Delay (s)		2.5	64.8		36.0	
Approach LOS		A	E		D	
Intersection Summary						
HCM 2000 Control Delay			43.4		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			1.06			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			69.6%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	456	0	0	443	543	793	2	149	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3247		1681	1629				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3247		1681	1629				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	524	0	0	482	590	862	2	162	0	0	0
RTOR Reduction (vph)	0	0	0	0	366	0	0	32	0	0	0	0
Lane Group Flow (vph)	0	524	0	0	706	0	526	468	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		17.4			17.4		20.5	20.5				
Effective Green, g (s)		17.4			17.4		20.5	20.5				
Actuated g/C Ratio		0.38			0.38		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1341			1230		750	727				
v/s Ratio Prot		0.15			c0.22							
v/s Ratio Perm							c0.31	0.29				
v/c Ratio		0.39			0.57		0.70	0.64				
Uniform Delay, d1		10.4			11.3		10.2	9.9				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		3.0	2.0				
Delay (s)		10.6			12.0		13.2	11.8				
Level of Service		B			B		B	B				
Approach Delay (s)		10.6			12.0		12.5				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					11.9					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.64							
Actuated Cycle Length (s)					45.9					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					69.6%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (veh/h)	0	4	5	612	75	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	16	7	850	183	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1047	183	183			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1047	183	183			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	251	860	1392			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	16	857	183			
Volume Left	0	7	0			
Volume Right	16	0	0			
cSH	860	1392	1700			
Volume to Capacity	0.02	0.00	0.11			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	9.3	0.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.3	0.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			46.2%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↗	↖	↗	↗	↖	↗	↗	↖	↗	↗
Volume (veh/h)	0	3511	18	0	1664	240	0	0	903	0	0	56
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%			0%			0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	3657	19	0	1715	247	0	0	1003	0	0	85
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1983			3696			4363	5670	1268	3098	5555	736
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1983			3696			4363	5670	1268	3098	5555	736
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	42	100	100	76
cM capacity (veh/h)	283			58			0	0	1717	2	0	350
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1463	1463	750	686	686	591	1003	85				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	19	0	0	247	1003	85				
cSH	1700	1700	1700	1700	1700	1700	1717	350				
Volume to Capacity	0.86	0.86	0.44	0.40	0.40	0.35	0.58	0.24				
Queue Length 95th (ft)	0	0	0	0	0	0	101	23				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	10.0	18.6				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			10.0	18.6				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.7								
Intersection Capacity Utilization				132.8%						H		
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3277	131	0	1701	0	190	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3378	135	0	1772	0	232	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			3533		4077	1234	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			3533		4077	1234	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			67		2	163	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1351	1351	811	591	591	591	232
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	135	0	0	0	232
cSH	1700	1700	1700	1700	1700	1700	163
Volume to Capacity	0.79	0.79	0.48	0.35	0.35	0.35	1.42
Queue Length 95th (ft)	0	0	0	0	0	0	364
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	274.8
Lane LOS							F
Approach Delay (s)	0.0			0.0			274.8
Approach LOS							F
Intersection Summary							
Average Delay			11.5				
Intersection Capacity Utilization			86.7%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	
Volume (vph)	0	0	0	973	540		87	244		0	0	767
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4636		1770	3539				3527
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4636		1770	3539				3527
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1024	568	92	90	252	0	0	0	791
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	0	0	0	2
Lane Group Flow (vph)	0	0	0	512	1162	0	90	252	0	0	0	804
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA				NA
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1432		98	1989				1567
v/s Ratio Prot				c0.34	0.25		c0.05	0.07				c0.23
v/s Ratio Perm												
v/c Ratio				1.09	0.97dl		0.92	0.13				0.51
Uniform Delay, d1				31.1	28.7		42.3	9.3				18.0
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				67.9	3.6		64.3	0.0				0.3
Delay (s)				99.0	32.3		106.6	9.3				18.3
Level of Service				F	C		F	A				B
Approach Delay (s)		0.0			52.6			34.9				18.3
Approach LOS		A			D			C				B
Intersection Summary												
HCM 2000 Control Delay			40.7				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.76									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)			17.2		
Intersection Capacity Utilization		133.9%					ICU Level of Service			H		
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	0	1711	49	0	0	0	0	338	397	672	1089	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.95	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3151	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3151	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	0	1880	54	0	0	0	0	393	462	700	1134	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	9	28	0	0	0
Lane Group Flow (vph)	0	1880	25	0	0	0	0	583	235	700	1134	0
Confl. Peds. (#/hr)				20					20			
Turn Type	NA	Perm					NA	Perm	Prot	NA		
Protected Phases	4	4					2		1	6		
Permitted Phases			4					2				
Actuated Green, G (s)		63.4	63.4					56.3	56.3	40.9	100.0	
Effective Green, g (s)		63.4	63.4					56.3	56.3	40.9	100.0	
Actuated g/C Ratio		0.36	0.36					0.32	0.32	0.23	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1842	573					1013	433	802	2022	
v/s Ratio Prot		c0.37						c0.19		c0.20	0.32	
v/s Ratio Perm			0.02						0.17			
v/c Ratio		1.02	0.04					0.58	0.54	0.87	0.56	
Uniform Delay, d1		55.8	36.2					49.4	48.8	64.5	23.7	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		26.3	0.0					0.8	1.4	10.3	0.4	
Delay (s)		82.1	36.2					50.2	50.1	74.9	24.0	
Level of Service		F	D					D	D	E	C	
Approach Delay (s)		80.8		0.0				50.2			43.4	
Approach LOS		F		A				D			D	
Intersection Summary												
HCM 2000 Control Delay		60.3		HCM 2000 Level of Service					E			
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)					14.4			
Intersection Capacity Utilization		133.9%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave













Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑↑
Volume (vph)	181	13	875	704	0	1218
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1582		3254			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1582		3254			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	232	17	983	791	0	1310
RTOR Reduction (vph)	2	0	69	0	0	0
Lane Group Flow (vph)	247	0	1705	0	0	1310
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA		NA	
Protected Phases	8		2		6	
Permitted Phases						
Actuated Green, G (s)	30.0		120.9		120.9	
Effective Green, g (s)	30.0		120.9		120.9	
Actuated g/C Ratio	0.19		0.76		0.76	
Clearance Time (s)	4.1		5.0		5.0	
Vehicle Extension (s)	3.0		3.0		3.0	
Lane Grp Cap (vph)	296		2458		2540	
v/s Ratio Prot	c0.16		c0.52		0.39	
v/s Ratio Perm						
v/c Ratio	0.84		0.69		0.52	
Uniform Delay, d1	62.6		10.0		7.8	
Progression Factor	1.00		1.00		1.00	
Incremental Delay, d2	18.1		1.6		0.8	
Delay (s)	80.7		11.7		8.6	
Level of Service	F		B		A	
Approach Delay (s)	80.7		11.7		8.6	
Approach LOS	F		B		A	
Intersection Summary						
HCM 2000 Control Delay		15.6		HCM 2000 Level of Service		
HCM 2000 Volume to Capacity ratio		0.74			B	
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		
Intersection Capacity Utilization		80.2%		ICU Level of Service		
Analysis Period (min)		15			D	
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Near Term (1 CVN) with Alternative 3 No Hooper







Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	11	30	27	11	26	24	1494	52	70	1451	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.94		1.00	0.99		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1723		1770	3521		1770	3487	
Flt Permitted	0.67	0.67	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1188	1193	1583		1459		1770	3521		1770	3487	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	192	14	38	42	17	41	26	1606	56	76	1577	172
RTOR Reduction (vph)	0	0	32	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	102	104	6	0	78	0	26	1661	0	76	1746	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	19.3	19.3	19.3		19.3		4.6	71.0		8.1	74.5	
Effective Green, g (s)	19.3	19.3	19.3		19.3		4.6	71.0		8.1	74.5	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.04	0.63		0.07	0.66	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	203	269		248		71	2208		126	2294	
v/s Ratio Prot							0.01	0.47		c0.04	c0.50	
v/s Ratio Perm	0.09	c0.09	0.00		0.05							
v/c Ratio	0.50	0.51	0.02		0.31		0.37	0.75		0.60	0.76	
Uniform Delay, d1	42.6	42.7	39.1		41.1		52.9	14.9		51.0	13.3	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.0	2.2	0.0		0.7		3.2	1.5		7.9	1.5	
Delay (s)	44.6	44.8	39.1		41.9		56.1	16.4		58.9	14.8	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.9			41.9			17.0			16.6	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		19.2										
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		113.2							14.8			
Intersection Capacity Utilization		75.1%							D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	8	0	151	0	1292	0	34	1595	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	12	0	219	0	1374	0	37	1715	0
RTOR Reduction (vph)	0	0	0	0	178	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	53	0	0	1374	0	37	1715	0
Turn Type				Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			44.9		1.7	50.8	
Effective Green, g (s)					14.1			44.9		1.7	50.8	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					304			2118		40	2397	
v/s Ratio Prot					c0.03			0.39		0.02	c0.48	
v/s Ratio Perm												
v/c Ratio					0.17			0.65		0.93	0.72	
Uniform Delay, d1					25.6			9.9		36.6	7.6	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			0.7		112.0	1.0	
Delay (s)					25.8			10.6		148.6	8.6	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			25.8			10.6			11.6	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					12.1							
HCM 2000 Volume to Capacity ratio					0.69							
Actuated Cycle Length (s)					75.0					18.9		
Intersection Capacity Utilization					62.3%					B		
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑	↱		↰	↑	↱	↰	↑	↱	↰	↱
Volume (vph)	252	42	108	7	61	348	25	704	3	117	1448	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.96	1.00	1.00	0.86	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1518		1853	1512	1770	3539	1355	1770	3515	
Flt Permitted	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1518		1853	1512	1770	3539	1355	1770	3515	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	332	55	142	8	66	378	27	774	3	124	1540	64
RTOR Reduction (vph)	0	0	114	0	0	220	0	0	2	0	2	0
Lane Group Flow (vph)	332	55	28	0	74	158	27	774	1	124	1602	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.8	27.8	27.8		19.3	19.3	2.9	58.1	58.1	14.9	70.1	
Effective Green, g (s)	27.8	27.8	27.8		19.3	19.3	2.9	58.1	58.1	14.9	70.1	
Actuated g/C Ratio	0.20	0.20	0.20		0.14	0.14	0.02	0.42	0.42	0.11	0.50	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	352	371	302		256	209	36	1473	564	189	1766	
v/s Ratio Prot	c0.19	0.03			0.04		0.02	0.22		c0.07	c0.46	
v/s Ratio Perm			0.02			c0.10			0.00			
v/c Ratio	0.94	0.15	0.09		0.29	0.76	0.75	0.53	0.00	0.66	0.91	
Uniform Delay, d1	55.1	46.1	45.6		53.9	57.8	67.9	30.4	23.8	59.8	31.7	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	33.3	0.2	0.1		0.6	14.5	59.8	1.3	0.0	7.9	8.3	
Delay (s)	88.4	46.3	45.7		54.6	72.3	127.7	31.7	23.8	67.8	40.0	
Level of Service	F	D	D		D	E	F	C	C	E	D	
Approach Delay (s)		72.6			69.4			34.9			42.0	
Approach LOS		E			E			C			D	
Intersection Summary												
HCM 2000 Control Delay		48.5								D		
HCM 2000 Volume to Capacity ratio		0.89										
Actuated Cycle Length (s)		139.5				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		79.1%				ICU Level of Service		D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰			↱
Volume (veh/h)	290	414	4	50	157	4
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	322	460	6	70	178	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	402	41			76	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	402	41			76	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	40	55			88	
cM capacity (veh/h)	533	1030			1523	
Direction, Lane #						
Volume Total	782	76	183			
Volume Left	322	0	178			
Volume Right	460	70	0			
cSH	1111	1700	1523			
Volume to Capacity	0.70	0.04	0.12			
Queue Length 95th (ft)	155	0	10			
Control Delay (s)	15.5	0.0	7.5			
Lane LOS	C		A			
Approach Delay (s)	15.5	0.0	7.5			
Approach LOS	C					
Intersection Summary						
Average Delay		13.0				
Intersection Capacity Utilization		38.3%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	296	4	741	53	0	1580
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1771		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1771		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	375	5	823	59	0	1775
RTOR Reduction (vph)	1	0	0	34	0	0
Lane Group Flow (vph)	379	0	823	25	0	1775
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	843		1520	633		1520
v/s Ratio Prot	c0.21		0.23			c0.50
v/s Ratio Perm				0.02		
v/c Ratio	0.45		0.54	0.04		1.17
Uniform Delay, d1	18.3		22.3	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.4	0.0		83.0
Delay (s)	18.7		22.7	17.4		112.9
Level of Service	B		C	B		F
Approach Delay (s)	18.7		22.3			112.9
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay			74.8		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			0.79			
Actuated Cycle Length (s)			105.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			93.6%		ICU Level of Service	F
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy







Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗	↖	↗
Volume (veh/h)	5	7	598	4	16	1465
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	10	14	695	5	18	1610
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1538	350			700	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1538	350			700	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	90	98			98	
cM capacity (veh/h)	104	646			893	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	24	464	236	18	805	805
Volume Left	10	0	0	18	0	0
Volume Right	14	0	5	0	0	0
cSH	204	1700	1700	893	1700	1700
Volume to Capacity	0.12	0.27	0.14	0.02	0.47	0.47
Queue Length 95th (ft)	10	0	0	2	0	0
Control Delay (s)	25.0	0.0	0.0	9.1	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	25.0	0.0		0.1		
Approach LOS	C					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			50.5%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Near Term (1 CVN) with Alternative 3 No Hooper




Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	31	59	542	13	107	1363
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	34	64	616	15	118	1498
RTOR Reduction (vph)	0	47	0	8	0	0
Lane Group Flow (vph)	34	17	616	7	118	1498
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases				2		
Actuated Green, G (s)	9.4	21.7	27.7	27.7	7.2	43.7
Effective Green, g (s)	9.4	16.6	27.7	27.7	7.2	43.7
Actuated g/C Ratio	0.15	0.27	0.44	0.44	0.12	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	266	421	1570	702	204	2478
v/s Ratio Prot	c0.02	0.01	0.17		0.07	c0.42
v/s Ratio Perm				0.00		
v/c Ratio	0.13	0.04	0.39	0.01	0.58	0.60
Uniform Delay, d1	22.9	17.0	11.7	9.7	26.2	4.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.2	0.0	3.9	0.4
Delay (s)	23.2	17.0	11.8	9.7	30.1	5.3
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.2		11.8			7.1
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			8.9		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.62			
Actuated Cycle Length (s)			62.4		Sum of lost time (s)	18.1
Intersection Capacity Utilization			49.6%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						







NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Near Term (1 CVN) with Alternative 3 No Hooper





Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	24	532	20	0	1394
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	32	611	23	0	1515
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1381	317			634	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1381	317			634	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	135	678			945	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	32	408	227	758	758	
Volume Left	0	0	0	0	0	
Volume Right	32	0	23	0	0	
cSH	678	1700	1700	1700	1700	
Volume to Capacity	0.05	0.24	0.13	0.45	0.45	
Queue Length 95th (ft)	4	0	0	0	0	
Control Delay (s)	10.6	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.6	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			41.9%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus Near Term (1 CVN) with Alternative 3 No Hooper
 14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	31	27	525	20	24	1369
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	43	38	559	21	26	1504
RTOR Reduction (vph)	0	34	0	8	0	0
Lane Group Flow (vph)	43	4	559	13	26	1504
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	27.3	27.3	1.7	36.5
Effective Green, g (s)	2.6	4.3	27.3	27.3	1.7	36.5
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	148	2114	945	65	2826
v/s Ratio Prot	c0.02	0.00	0.16		0.01	c0.42
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.43	0.02	0.26	0.01	0.40	0.53
Uniform Delay, d1	20.8	18.8	4.4	3.7	21.5	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.1	0.1	0.0	4.0	0.2
Delay (s)	23.8	18.9	4.5	3.7	25.5	1.8
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.5		4.4			2.2
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.5		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.65			
Actuated Cycle Length (s)			45.7		Sum of lost time (s)	14.1
Intersection Capacity Utilization			48.8%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus Near Term (1 CVN) with Alternative 3 No Hooper
 15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	12	15	88	8	0	185	14	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	12	16	114	10	0	208	16	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	13	16	125	224						
Volume Left (vph)	0	0	114	0						
Volume Right (vph)	0	16	0	16						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.1	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.20						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱	↰	↱	↰			
Volume (vph)	11	191	0	0	85	143	13	444	71	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.69	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1292	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	12	217	0	0	98	164	14	488	78	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	129	0	43	0	0	0	0
Lane Group Flow (vph)	12	217	0	0	98	35	14	488	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.0	18.0	18.0			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.0	18.0	18.0			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.45	0.45	0.45			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	272	393			393	334	800	1600	715			
v/s Ratio Prot		c0.12			0.05		0.01	c0.14				
v/s Ratio Perm	0.01					0.02		0.02				
v/c Ratio	0.04	0.55			0.25	0.10	0.02	0.30	0.05			
Uniform Delay, d1	12.5	14.0			13.1	12.7	6.0	6.9	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.7			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.6	15.7			13.4	12.8	6.0	7.0	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.5			13.0		6.9			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.2			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.38										
Actuated Cycle Length (s)		39.8			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		40.9%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near Term (1 CVN) with Alternative 3 No Hooper









Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱	↰
Volume (veh/h)	0	0	0	593	0	1542	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	0	0	674	0	1713	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2050	857	1713		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2050	857	1713		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	48	301	366		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	337	337	1142	571	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.20	0.20	0.67	0.34	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			46.0%		ICU Level of Service		
Analysis Period (min)			15				

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near Term (1 CVN) with Alternative 3 No Hooper









Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	224	7	70	19	4	7	76	310	58	19	1053	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.90		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1608		1770	1685		1770	3455		1770	3444	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1608		1770	1685		1770	3455		1770	3444	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	299	9	93	38	8	14	84	341	64	21	1170	256
RTOR Reduction (vph)	0	70	0	0	14	0	0	12	0	0	15	0
Lane Group Flow (vph)	299	32	0	38	8	0	84	393	0	21	1411	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	23.3	23.3		2.7	2.7		5.7	47.4		1.7	43.4	
Effective Green, g (s)	23.3	23.3		2.7	2.7		5.7	47.4		1.7	43.4	
Actuated g/C Ratio	0.25	0.25		0.03	0.03		0.06	0.50		0.02	0.46	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	438	398		50	48		107	1742		32	1590	
v/s Ratio Prot	c0.17	0.02		c0.02	0.00		c0.05	c0.11		0.01	c0.41	
v/s Ratio Perm												
v/c Ratio	0.68	0.08		0.76	0.18		0.79	0.23		0.66	0.89	
Uniform Delay, d1	32.0	27.1		45.3	44.6		43.5	13.0		45.9	23.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.4	0.1		48.9	1.7		30.5	0.1		39.4	6.4	
Delay (s)	36.4	27.2		94.3	46.3		74.0	13.1		85.2	29.5	
Level of Service	D	C		F	D		E	B		F	C	
Approach Delay (s)		34.0			76.7			23.6			30.3	
Approach LOS		C			E			C			C	
Intersection Summary												
HCM 2000 Control Delay		30.7										
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		94.0						18.9				
Intersection Capacity Utilization		71.6%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	1008	57	0	368	36	18	41	5	25	27	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Frt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5044			5018		1770	1833			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.15	
Satd. Flow (perm)	1770	5044			5018		1305	1833			269	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	67	1145	65	0	391	38	26	59	7	29	32	26
RTOR Reduction (vph)	0	4	0	0	7	0	0	2	0	0	8	0
Lane Group Flow (vph)	67	1206	0	0	422	0	26	64	0	0	79	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1908			2037		253	356			44	
v/s Ratio Prot	c0.04	c0.24			c0.08			c0.03				
v/s Ratio Perm							0.02				c0.29	
v/c Ratio	0.34	0.63			0.21		0.10	0.18			1.79	
Uniform Delay, d1	73.9	45.7			34.7		59.6	60.5			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	1.6			0.2		0.2	0.2			430.9	
Delay (s)	75.0	47.3			34.9		59.8	60.7			505.9	
Level of Service	E	D			C		E	E			F	
Approach Delay (s)		48.8			34.9			60.5			505.9	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		67.3										
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		180.0						22.3				
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	1039	0	615	387	39	0	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3491							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3491							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1167	0	654	412	41	0	0	0	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	1167	0	654	453	0	0	0	0	0	0	4
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3172							609
v/s Ratio Prot		c0.23		c0.19	c0.13							
v/s Ratio Perm												0.00
v/c Ratio		0.61		0.34	0.14							0.01
Uniform Delay, d1		45.1		21.5	0.9							34.9
Progression Factor		0.19		1.00	1.00							1.00
Incremental Delay, d2		1.1		0.1	0.0							0.0
Delay (s)		9.9		21.6	0.9							34.9
Level of Service		A		C	A							C
Approach Delay (s)		9.9			13.1		0.0				34.9	
Approach LOS		A			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		11.6				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.48										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		46.8%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave



















Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	5	214	0	0	308	175	0	0	0	640	0	14
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	6	249	0	0	350	199	0	0	0	970	0	21
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	549			249			731	809	249	710	710	449
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	549			249			731	809	249	710	710	449
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	0	100	97
cM capacity (veh/h)	1021			1317			324	312	790	347	357	610
Direction, Lane #												
Volume Total	255	549	0	991								
Volume Left	6	0	0	970								
Volume Right	0	199	0	21								
cSH	1021	1317	1700	350								
Volume to Capacity	0.01	0.00	0.00	2.83								
Queue Length 95th (ft)	0	0	0	2112								
Control Delay (s)	0.3	0.0	0.0	854.1								
Lane LOS	A			F								
Approach Delay (s)	0.3	0.0	0.0	854.1								
Approach LOS				F								
Intersection Summary												
Average Delay		471.7										
Intersection Capacity Utilization		69.9%				ICU Level of Service		C				
Analysis Period (min)		15										













NBC Coastal Campus
22: 3rd St & Palm Ave

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	831	13	86	456	25	15	39	69	29	34	14
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	10	1065	17	97	512	28	26	68	121	63	74	30
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	10	1082	97	540	216	167						
Volume Left (vph)	10	0	97	0	26	63						
Volume Right (vph)	0	17	0	28	121	30						
Hadj (s)	0.53	0.02	0.53	0.00	-0.28	0.00						
Departure Headway (s)	7.7	7.2	7.6	7.1	7.6	8.1						
Degree Utilization, x	0.02	1.0	0.20	1.0	0.46	0.38						
Capacity (veh/h)	456	510	467	516	451	428						
Control Delay (s)	9.7	544.8	11.4	82.6	16.8	15.9						
Approach Delay (s)	539.7		71.8		16.8	15.9						
Approach LOS	F		F		C	C						
Intersection Summary												
Delay			303.7									
Level of Service			F									
Intersection Capacity Utilization			69.2%		ICU Level of Service		C					
Analysis Period (min)			15									




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

									
Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Lane Configurations									
Volume (veh/h)	208	825	558	40	53	173			
Sign Control		Free	Free		Stop				
Grade		0%	0%		0%				
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85			
Hourly flow rate (vph)	214	851	649	47	62	204			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type	None		None						
Median storage (veh)									
Upstream signal (ft)	908								
pX, platoon unblocked									
vC, conflicting volume	695				1951	348			
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	695				1951	348			
tC, single (s)	4.1				6.8	6.9			
tC, 2 stage (s)									
tF (s)	2.2				3.5	3.3			
p0 queue free %	76				0	69			
cM capacity (veh/h)	896				43	648			
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1				
Volume Total	214	851	433	263	266				
Volume Left	214	0	0	0	62				
Volume Right	0	0	0	47	204				
cSH	896	1700	1700	1700	150				
Volume to Capacity	0.24	0.50	0.25	0.15	1.77				
Queue Length 95th (ft)	23	0	0	0	489				
Control Delay (s)	10.3	0.0	0.0	0.0	424.7				
Lane LOS	B				F				
Approach Delay (s)	2.1		0.0		424.7				
Approach LOS					F				
Intersection Summary									
Average Delay			56.8						
Intersection Capacity Utilization			63.7%	ICU Level of Service	B				
Analysis Period (min)			15						










NBC Coastal Campus
24: 7th St & Palm Ave

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	828	35	32	559	4	56	25	23	13	40	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3518		1770	3536			1759			1840	1583
Flt Permitted	0.42	1.00		0.23	1.00			0.79			0.91	1.00
Satd. Flow (perm)	778	3518		434	3536			1434			1692	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	35	986	42	35	614	4	68	30	28	17	53	41
RTOR Reduction (vph)	0	4	0	0	0	0	0	21	0	0	0	31
Lane Group Flow (vph)	35	1024	0	35	618	0	0	105	0	0	70	10
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases	2			6			8			4		
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	20.4	20.4		20.4	20.4			9.3			9.3	9.3
Effective Green, g (s)	20.4	20.4		20.4	20.4			9.3			9.3	9.3
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.24			0.24	0.24
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	408	1844		227	1854			342			404	378
v/s Ratio Prot	c0.29			0.17								
v/s Ratio Perm	0.04			0.08				c0.07			0.04	0.01
v/c Ratio	0.09	0.56		0.15	0.33			0.31			0.17	0.03
Uniform Delay, d1	4.6	6.2		4.8	5.3			12.2			11.7	11.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.4		0.3	0.1			0.5			0.2	0.0
Delay (s)	4.7	6.6		5.1	5.4			12.7			12.0	11.4
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)	6.5			5.4				12.7			11.7	
Approach LOS	A			A				B			B	
Intersection Summary												
HCM 2000 Control Delay	6.8			HCM 2000 Level of Service				A				
HCM 2000 Volume to Capacity ratio	0.48											
Actuated Cycle Length (s)	38.9			Sum of lost time (s)				9.2				
Intersection Capacity Utilization	46.7%			ICU Level of Service				A				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	876	9	0	0	7	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1068	11	0	0	10	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)			767			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			1079		1068	1068
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1079		1068	1068
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		96	98
cM capacity (veh/h)			646		245	269
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	1068	11	15			
Volume Left	0	0	10			
Volume Right	0	11	4			
cSH	1700	1700	252			
Volume to Capacity	0.63	0.01	0.06			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.0	0.0	20.2			
Lane LOS			C			
Approach Delay (s)	0.0		20.2			
Approach LOS			C			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			56.1%		ICU Level of Service B	
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	43	1729	130	60	878	135	101	93	65	179	82	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5032		1770	4984			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5032		1770	4984			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	46	1839	138	61	887	136	111	102	71	201	92	30
RTOR Reduction (vph)	0	5	0	0	11	0	0	19	0	0	4	0
Lane Group Flow (vph)	46	1972	0	61	1012	0	0	265	0	0	319	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2004		196	1985			649			658	
v/s Ratio Prot	0.03	c0.39		c0.03	0.20			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.23	0.98		0.31	0.51			0.41			0.48	
Uniform Delay, d1	73.0	53.6		73.7	40.9			63.4			64.5	
Progression Factor	1.00	1.00		1.22	0.82			1.00			1.00	
Incremental Delay, d2	0.6	16.4		0.9	0.9			0.4			0.6	
Delay (s)	73.6	70.0		91.0	34.4			63.9			65.0	
Level of Service	E	E		F	C			E			E	
Approach Delay (s)		70.0			37.6			63.9			65.0	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		59.7			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		119.9%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	21	2020	59	51	1296		22	11	36	66	14	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5064		1770	5053			1705		1770	1715	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.61	1.00	
Satd. Flow (perm)	1770	5064		1770	5053			1544		1144	1715	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	21	2061	60	53	1336	59	27	13	43	78	16	18
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	16	0
Lane Group Flow (vph)	21	2120	0	53	1393	0	0	60	0	78	18	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3561		157	3666			190		141	211	
v/s Ratio Prot	0.01	c0.42		c0.03	c0.28						0.01	
v/s Ratio Perm								0.04		c0.07		
v/c Ratio	0.18	0.60		0.34	0.38			0.32		0.55	0.09	
Uniform Delay, d1	79.3	13.6		77.0	9.4			72.0		74.2	69.9	
Progression Factor	1.43	0.10		1.55	0.28			1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3		1.0	0.2			1.0		4.6	0.2	
Delay (s)	113.8	1.7		120.7	2.9			72.9		78.9	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		2.8			7.2			72.9			76.2	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		62.2%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔↔↔		↔	↔↔↔	↔		↔	↔		↔↔	
Volume (vph)	28	1898	206	162	1372	84	133	42	132	159	46	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5011		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5011		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	30	2019	219	167	1414	87	145	46	143	215	62	28
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	119	0	4	0
Lane Group Flow (vph)	30	2231	0	167	1414	50	0	191	24	0	301	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2			4				
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2218		192	2364	736		306	269		575	
v/s Ratio Prot	0.02	c0.45		c0.09	c0.28			c0.11			c0.09	
v/s Ratio Perm					0.03			0.02				
v/c Ratio	0.19	1.01		0.87	0.60	0.07		0.62	0.09		0.52	
Uniform Delay, d1	76.0	50.1		78.9	35.7	26.6		69.3	62.9		68.0	
Progression Factor	1.02	0.99		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	18.9		31.6	1.1	0.2		9.3	0.7		3.4	
Delay (s)	77.7	68.7		110.5	36.8	26.8		78.6	63.6		71.4	
Level of Service	E	E		F	D	C		E	E		E	
Approach Delay (s)		68.8			43.7			72.1			71.4	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		60.1			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		105.2%			ICU Level of Service				G			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔↔↔		↔	↔↔↔						↔↔	
Volume (vph)	10	2029	52	177	1680		17	41	9		25	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900		1900	1900	1900		1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9				5.6			5.6
Lane Util. Factor	1.00	0.91		1.00	0.91				1.00		1.00	
Frt	1.00	1.00		1.00	1.00				0.92		0.97	
Flt Protected	0.95	1.00		0.95	1.00				0.99		0.97	
Satd. Flow (prot)	1770	5066		1770	5078				1680		1757	
Flt Permitted	0.95	1.00		0.95	1.00				0.89		0.82	
Satd. Flow (perm)	1770	5066		1770	5078				1510		1487	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.95	0.85	0.85	0.85	0.85	0.81	0.81
Adj. Flow (vph)	11	2254	58	186	1768		18	48	11	99	31	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	79	0	0	11	0
Lane Group Flow (vph)	11	2310	0	186	1785	0	0	79	0	0	48	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7				17.4			17.4
Effective Green, g (s)	0.8	40.3		11.2	50.7				17.4			17.4
Actuated g/C Ratio	0.01	0.48		0.13	0.60				0.21			0.21
Clearance Time (s)	5.2	4.9		5.2	4.9				5.6			5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0				3.0			3.0
Lane Grp Cap (vph)	16	2413		234	3043				310			305
v/s Ratio Prot	0.01	c0.46		c0.11	0.35							
v/s Ratio Perm									c0.05			0.03
v/c Ratio	0.69	0.96		0.79	0.59				0.26			0.16
Uniform Delay, d1	41.8	21.3		35.6	10.5				28.2			27.6
Progression Factor	1.00	1.00		1.00	1.00				1.00			1.00
Incremental Delay, d2	80.1	10.1		16.8	0.3				0.4			0.2
Delay (s)	121.9	31.4		52.4	10.8				28.6			27.8
Level of Service	F	C		D	B				C			C
Approach Delay (s)		31.8			14.7				28.6			27.8
Approach LOS		C			B				C			C
Intersection Summary												
HCM 2000 Control Delay		24.2			HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		84.6			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		71.7%			ICU Level of Service				C			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	196	1966	28	340	1689	576	68	184	553	610	248	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	206	2069	29	366	1816	619	72	196	588	663	270	257
RTOR Reduction (vph)	0	1	0	0	0	85	0	26	282	0	2	127
Lane Group Flow (vph)	206	2097	0	366	1816	534	72	382	94	663	294	104
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.3	38.3	11.8	41.4	41.4
Effective Green, g (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.3	38.3	11.8	41.4	41.4
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1201		519	2318	721	100	407	375	264	471	406
v/s Ratio Prot	0.06	c0.41		c0.21	c0.36		0.04	c0.23		c0.19	c0.17	
v/s Ratio Perm					0.34			0.06				0.07
v/c Ratio	0.81	1.75		0.71	0.78	0.74	0.72	0.94	0.25	2.51	0.62	0.26
Uniform Delay, d1	69.9	58.5		48.2	35.3	34.2	71.1	56.4	46.0	70.8	49.1	43.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	16.9	339.3		4.3	1.8	4.1	21.9	29.4	0.4	691.3	2.6	0.3
Delay (s)	86.8	397.8		52.6	37.1	38.3	93.0	85.8	46.4	762.0	51.7	44.2
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		370.0			39.4			69.1			446.0	
Approach LOS		F			D			E			F	

Intersection Summary			
HCM 2000 Control Delay	217.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	153.3	Sum of lost time (s)	21.9
Intersection Capacity Utilization	128.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Volume (vph)	0	527	880	0	456	1730
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	592	936	0	501	1901
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	592	936	0	501	1898
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.17	c0.26		0.28	c0.68
v/s Ratio Perm						
v/c Ratio		0.33	1.09		0.76	1.07
Uniform Delay, d1		11.8	30.3		21.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	58.5		4.9	42.4
Delay (s)		11.9	88.8		26.7	56.9
Level of Service		B	F		C	E
Approach Delay (s)		11.9	88.8		50.6	
Approach LOS		B	F		D	

Intersection Summary			
HCM 2000 Control Delay	53.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	89.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	976	0	0	547	260	446	3	111	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1017	0	0	615	292	480	3	119	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	31	0	0	0	0
Lane Group Flow (vph)	0	1017	0	0	809	0	307	264	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases							2					
Actuated Green, G (s)		19.7			19.7		14.7	14.7				
Effective Green, g (s)		19.7			19.7		14.7	14.7				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1644			1564		582	559				
v/s Ratio Prot		0.29			0.24							
v/s Ratio Perm							0.18	0.16				
v/c Ratio		0.62			0.52		0.53	0.47				
Uniform Delay, d1		8.5			8.0		11.1	10.8				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.7			0.3		0.9	0.6				
Delay (s)		9.2			8.3		11.9	11.4				
Level of Service		A			A		B	B				
Approach Delay (s)		9.2			8.3		11.7			0.0		
Approach LOS		A			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		9.5			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		42.4			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		49.5%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	11	9	139	577	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	18	10	151	836	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1007	836	836			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1007	836	836			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	95	99			
cM capacity (veh/h)	264	367	798			
Direction, Lane #						
Volume Total	18	161	836			
Volume Left	0	10	0			
Volume Right	18	0	0			
cSH	367	798	1700			
Volume to Capacity	0.05	0.01	0.49			
Queue Length 95th (ft)	4	1	0			
Control Delay (s)	15.3	0.7	0.0			
Lane LOS	C	A				
Approach Delay (s)	15.3	0.7	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		40.4%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near-Term (1 CVN) with Alternative 1 Mitigated

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↕
Volume (vph)	46	3	1309	368	0	432
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Flt Protected	0.96		1.00	1.00		1.00
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1754		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	61	4	1378	387	0	675
RTOR Reduction (vph)	4	0	0	118	0	0
Lane Group Flow (vph)	61	0	1378	269	0	675
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		29.4	29.4		29.4
Effective Green, g (s)	3.0		29.4	29.4		29.4
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	124		2459	1056		2459
v/s Ratio Prot	c0.03		c0.39			0.19
v/s Ratio Perm				0.18		
v/c Ratio	0.49		0.56	0.25		0.27
Uniform Delay, d1	18.9		3.2	2.4		2.4
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	3.1		0.3	0.1		0.1
Delay (s)	22.0		3.5	2.5		2.5
Level of Service	C		A	A		A
Approach Delay (s)	22.0		3.3			2.5
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.6		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.55				
Actuated Cycle Length (s)		42.3		Sum of lost time (s)		9.9
Intersection Capacity Utilization		48.6%		ICU Level of Service		A
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd









Near-Term (1 CVN) with Alternative 1 Mitigated

Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↔	↔	↕	↕	↕	↕	↕
Volume (vph)	26	47	426	1585	0	169	229
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt Protected	1.00	0.85	1.00	1.00		1.00	0.85
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.96	0.96	0.92	0.79	0.79
Adj. Flow (vph)	28	51	444	1651	0	214	290
RTOR Reduction (vph)	0	0	0	0	0	0	214
Lane Group Flow (vph)	28	51	444	1651	0	214	76
Turn Type	Perm	Prot	Prot	NA	Prot	NA	Perm
Protected Phases		4	5	2	1	6	
Permitted Phases	4						6
Actuated Green, G (s)	15.8	15.8	27.1	52.9		20.8	20.8
Effective Green, g (s)	15.8	15.8	27.1	52.9		20.8	20.8
Actuated g/C Ratio	0.20	0.20	0.34	0.66		0.26	0.26
Clearance Time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	351	314	602	2351		924	413
v/s Ratio Prot		c0.03	0.25	c0.47		0.06	
v/s Ratio Perm	0.02						0.05
v/c Ratio	0.08	0.16	0.74	0.70		0.23	0.18
Uniform Delay, d1	26.0	26.4	23.1	8.4		23.1	22.8
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	0.2	4.7	1.0		0.1	0.2
Delay (s)	26.1	26.7	27.8	9.4		23.2	23.0
Level of Service	C	C	C	A		C	C
Approach Delay (s)	26.5			13.3		23.1	
Approach LOS	C			B		C	
Intersection Summary							
HCM 2000 Control Delay		15.5		HCM 2000 Level of Service			B
HCM 2000 Volume to Capacity ratio		0.62					
Actuated Cycle Length (s)		79.6		Sum of lost time (s)		15.9	
Intersection Capacity Utilization		69.6%		ICU Level of Service		C	
Analysis Period (min)		15					
c Critical Lane Group							









NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near-Term (1 CVN) with Alternative 1 Mitigated
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	409	2	40	50	8	21	27	1883	11	4	169	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	0.95	0.95		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.97		1.00	0.89		1.00	1.00		1.00	0.97	
Flt Protected	0.95	0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1655		1770	1661		1770	3536		1770	3425	
Flt Permitted	0.95	0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1655		1770	1661		1770	3536		1770	3425	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	465	2	45	161	26	68	28	1982	12	6	245	67
RTOR Reduction (vph)	0	0	0	0	62	0	0	0	0	0	16	0
Lane Group Flow (vph)	260	252	0	161	32	0	28	1994	0	6	296	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	26.3	26.3		11.5	11.5		3.8	73.8		1.0	71.0	
Effective Green, g (s)	26.3	26.3		11.5	11.5		3.8	73.8		1.0	71.0	
Actuated g/C Ratio	0.20	0.20		0.09	0.09		0.03	0.56		0.01	0.54	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	336	331		154	145		51	1984		13	1849	
v/s Ratio Prot	c0.15	0.15		c0.09	0.02		c0.02	c0.56		0.00	0.09	
v/s Ratio Perm												
v/c Ratio	0.77	0.76		1.05	0.22		0.55	1.00		0.46	0.16	
Uniform Delay, d1	49.8	49.6		60.0	55.8		63.0	28.9		65.0	15.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	10.6	9.9		85.1	0.8		11.5	21.4		23.8	0.0	
Delay (s)	60.4	59.5		145.1	56.6		74.6	50.2		88.8	15.3	
Level of Service	E	E		F	E		E	D		F	B	
Approach Delay (s)		60.0			112.5			50.6			16.7	
Approach LOS		E			F			D			B	
Intersection Summary												
HCM 2000 Control Delay		53.7										
HCM 2000 Volume to Capacity ratio		0.96										
Actuated Cycle Length (s)		131.5			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		80.1%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 1 Mitigated
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	700	40	25	1881	45	171	38	53	93	47	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00		1.00	0.91		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5044		1770	5068		1770	1700		1770	1762	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5044		1770	5068		1770	1700		1770	1762	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	26	833	48	27	2067	49	206	46	64	113	57	32
RTOR Reduction (vph)	0	3	0	0	1	0	0	28	0	0	11	0
Lane Group Flow (vph)	26	878	0	27	2115	0	206	82	0	113	78	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	15.0	86.7		12.0	83.7		25.0	38.0		25.0	38.0	
Effective Green, g (s)	15.0	86.7		12.0	83.7		25.0	38.0		25.0	38.0	
Actuated g/C Ratio	0.08	0.48		0.07	0.47		0.14	0.21		0.14	0.21	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	147	2429		118	2356		245	358		245	371	
v/s Ratio Prot	0.01	c0.17		c0.02	c0.42		c0.12	c0.05		0.06	0.04	
v/s Ratio Perm												
v/c Ratio	0.18	0.36		0.23	0.90		0.84	0.23		0.46	0.21	
Uniform Delay, d1	76.8	29.3		79.6	44.2		75.6	58.8		71.3	58.6	
Progression Factor	1.00	1.00		1.17	0.78		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.4		0.8	4.8		22.1	0.3		1.4	0.3	
Delay (s)	77.3	29.7		93.6	39.1		97.6	59.2		72.7	58.9	
Level of Service	E	C		F	D		F	E		E	E	
Approach Delay (s)		31.1			39.8			84.2			66.6	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		43.0										
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		74.4%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 1 Mitigated
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	1011	66	100	1909	54	152	20	94	174	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1136	74	120	2300	65	171	22	106	232	49	21
RTOR Reduction (vph)	0	4	0	0	0	27	0	0	95	0	3	0
Lane Group Flow (vph)	4	1206	0	120	2300	38	0	193	11	0	299	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Effective Green, g (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Actuated g/C Ratio	0.02	0.48		0.11	0.57	0.57		0.10	0.10		0.20	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2427		196	2901	903		184	163		682	
v/s Ratio Prot	0.00	0.24		c0.07	c0.45			c0.11			c0.09	
v/s Ratio Perm					0.02			0.01				
v/c Ratio	0.10	0.50		0.61	0.79	0.04		1.05	0.07		0.44	
Uniform Delay, d1	86.2	31.8		76.3	30.3	17.0		80.7	72.9		62.8	
Progression Factor	1.14	0.66		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.7		5.6	2.3	0.1		79.8	0.2		0.5	
Delay (s)	99.3	21.6		81.9	32.6	17.1		160.5	73.0		63.3	
Level of Service	F	C		F	C	B		F	E		E	
Approach Delay (s)		21.8			34.6			129.5			63.3	
Approach LOS		C			C			F			E	
Intersection Summary												
HCM 2000 Control Delay		39.6			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		90.8%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 1 Mitigated
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	1298	31	254	1978	223	79	75	800	244	96	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9		5.2	5.6	5.6	5.2	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00		1.00	0.95	0.95	0.97	0.95
Flt	1.00	1.00		1.00	1.00	0.85		1.00	0.88	0.85	1.00	0.99
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	5068		3433	5085	1583		1770	1549	1504	3433	1748
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	5068		3433	5085	1583		1770	1549	1504	3433	1748
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.90		0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	110	1509	36	270	2104	237		88	83	889	290	114
RTOR Reduction (vph)	0	2	0	0	0	60		0	106	108	0	2
Lane Group Flow (vph)	110	1543	0	270	2104	177		88	386	372	290	122
Turn Type	Prot	NA		Prot	NA	Perm		Prot	NA	Perm	Prot	NA
Protected Phases	1	6		5	2			7	4		3	8
Permitted Phases					2				4			8
Actuated Green, G (s)	5.1	48.1		13.3	56.3	56.3		9.3	36.5	36.5	11.8	39.0
Effective Green, g (s)	5.1	48.1		13.3	56.3	56.3		9.3	36.5	36.5	11.8	39.0
Actuated g/C Ratio	0.04	0.37		0.10	0.43	0.43		0.07	0.28	0.28	0.09	0.30
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9		5.2	5.6	5.6	5.2	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	133	1852		346	2175	677		125	429	417	307	518
v/s Ratio Prot	0.03	0.30		c0.08	c0.41			0.05	c0.25		c0.08	0.07
v/s Ratio Perm					0.11				0.25			0.02
v/c Ratio	0.83	0.83		0.78	0.97	0.26		0.70	0.90	0.89	0.94	0.24
Uniform Delay, d1	62.8	38.1		57.7	36.8	24.3		59.8	45.8	45.7	59.6	35.0
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	32.5	3.4		10.9	12.4	0.2		16.5	21.6	20.7	36.6	0.2
Delay (s)	95.3	41.5		68.6	49.2	24.5		76.3	67.4	66.4	96.2	35.3
Level of Service	F	D		E	D	C		E	E	E	F	D
Approach Delay (s)		45.1			48.9				67.7			70.3
Approach LOS		D			D				E			E
Intersection Summary												
HCM 2000 Control Delay		53.1			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.95										
Actuated Cycle Length (s)		131.6			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		88.0%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near-Term (1 CVN) with Alternative 1 Mitigated
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (vph)	277	3	840	52	0	1602
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1772		3539	1467		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1772		3539	1467		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	351	4	933	58	0	1800
RTOR Reduction (vph)	1	0	0	30	0	0
Lane Group Flow (vph)	354	0	933	28	0	1800
Confl. Peds. (#/hr)	20	20			20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		55.1	55.1		55.1
Effective Green, g (s)	50.0		55.1	55.1		55.1
Actuated g/C Ratio	0.43		0.48	0.48		0.48
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	770		1695	702		1695
v/s Ratio Prot	c0.20		0.26			c0.51
v/s Ratio Perm				0.02		
v/c Ratio	0.46		0.55	0.04		1.06
Uniform Delay, d1	23.0		21.2	15.9		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.4	0.0		40.4
Delay (s)	23.4		21.6	15.9		70.4
Level of Service	C		C	B		E
Approach Delay (s)	23.4		21.2			70.4
Approach LOS	C		C			E
Intersection Summary						
HCM 2000 Control Delay		49.6		HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio		0.78				
Actuated Cycle Length (s)		115.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		94.2%		ICU Level of Service		F
Analysis Period (min)		15				
c Critical Lane Group						









NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near-Term (1 CVN) with Alternative 1 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↗
Volume (vph)	226	421	105	451	0	1481	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Frt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.92	0.90	0.90
Adj. Flow (vph)	246	458	119	512	0	1646	63
RTOR Reduction (vph)	0	0	0	0	0	0	33
Lane Group Flow (vph)	246	458	119	512	0	1646	30
Turn Type	Perm	Prot	Prot	NA	Prot	NA	Perm
Protected Phases		4	5	2	1	6	
Permitted Phases	4						6
Actuated Green, G (s)	34.9	34.9	8.0	67.2		54.2	54.2
Effective Green, g (s)	34.9	34.9	8.0	67.2		54.2	54.2
Actuated g/C Ratio	0.31	0.31	0.07	0.59		0.48	0.48
Clearance Time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	546	488	125	2104		1697	759
v/s Ratio Prot		c0.29	c0.07	0.14		c0.47	
v/s Ratio Perm	0.14						0.02
v/c Ratio	0.45	0.94	0.95	0.24		0.97	0.04
Uniform Delay, d1	31.4	38.0	52.3	10.9		28.6	15.6
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.6	25.8	65.3	0.1		15.1	0.0
Delay (s)	31.9	63.9	117.6	10.9		43.7	15.6
Level of Service	C	E	F	B		D	B
Approach Delay (s)	52.7			31.0		42.7	
Approach LOS	D			C		D	
Intersection Summary							
HCM 2000 Control Delay		42.6		HCM 2000 Level of Service			D
HCM 2000 Volume to Capacity ratio		0.96					
Actuated Cycle Length (s)		113.0		Sum of lost time (s)		15.9	
Intersection Capacity Utilization		76.1%		ICU Level of Service		D	
Analysis Period (min)		15					
c Critical Lane Group							









NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near-Term (1 CVN) with Alternative 1 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	91	7	70	19	4	7	76	407	58	19	1441	201
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	0.95	0.95		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.88		1.00	0.90		1.00	0.98		1.00	0.98	
Flt Protected	0.95	0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1545		1770	1685		1770	3473		1770	3474	
Flt Permitted	0.95	0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1545		1770	1685		1770	3473		1770	3474	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	121	9	93	38	8	14	84	447	64	21	1601	223
RTOR Reduction (vph)	0	0	0	0	14	0	0	6	0	0	7	0
Lane Group Flow (vph)	109	114	0	38	8	0	84	505	0	21	1817	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	19.8	19.8		4.0	4.0		7.5	76.6		2.1	71.2	
Effective Green, g (s)	19.8	19.8		4.0	4.0		7.5	76.6		2.1	71.2	
Actuated g/C Ratio	0.16	0.16		0.03	0.03		0.06	0.63		0.02	0.59	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	274	251		58	55		109	2191		30	2037	
v/s Ratio Prot	0.06	c0.07		c0.02	0.01		c0.05	0.15		0.01	c0.52	
v/s Ratio Perm												
v/c Ratio	0.40	0.45		0.66	0.15		0.77	0.23		0.70	0.89	
Uniform Delay, d1	45.5	45.9		58.0	57.1		56.1	9.7		59.3	21.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.0	1.3		23.6	1.3		27.9	0.1		52.7	5.4	
Delay (s)	46.4	47.2		81.6	58.4		84.0	9.7		112.1	27.2	
Level of Service	D	D		F	E		F	A		F	C	
Approach Delay (s)		46.8			73.1			20.2			28.2	
Approach LOS		D			E			C			C	
Intersection Summary												
HCM 2000 Control Delay		28.9										
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		121.4			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		73.9%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 1 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	43	1717	130	60	875	135	102	93	65	179	82	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.94		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5032		1770	4984		1770	1748		1770	1794	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5032		1770	4984		1770	1748		1770	1794	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	46	1827	138	61	884	136	112	102	71	201	92	30
RTOR Reduction (vph)	0	5	0	0	11	0	0	14	0	0	6	0
Lane Group Flow (vph)	46	1960	0	61	1009	0	112	159	0	201	116	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	20.0	78.7		20.0	78.7		25.0	38.0		25.0	38.0	
Effective Green, g (s)	20.0	78.7		20.0	78.7		25.0	38.0		25.0	38.0	
Actuated g/C Ratio	0.11	0.44		0.11	0.44		0.14	0.21		0.14	0.21	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	2200		196	2179		245	369		245	378	
v/s Ratio Prot	0.03	c0.39		c0.03	0.20		0.06	c0.09		c0.11	0.06	
v/s Ratio Perm												
v/c Ratio	0.23	0.89		0.31	0.46		0.46	0.43		0.82	0.31	
Uniform Delay, d1	73.0	46.7		73.7	35.7		71.3	61.6		75.3	59.9	
Progression Factor	1.00	1.00		1.17	0.74		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	5.0		0.9	0.7		1.4	0.8		19.3	0.5	
Delay (s)	73.6	51.7		87.3	27.1		72.6	62.4		94.6	60.3	
Level of Service	E	D		F	C		E	E		F	E	
Approach Delay (s)		52.2			30.5			66.4			81.7	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		49.5										
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		111.6%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 1 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	1887	206	162	1369	84	134	42	132	159	46	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5010		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5010		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	30	2007	219	167	1411	87	146	46	143	215	62	28
RTOR Reduction (vph)	0	7	0	0	0	35	0	0	131	0	4	0
Lane Group Flow (vph)	30	2219	0	167	1411	52	0	192	12	0	301	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	85.7		20.0	90.1	90.1		15.0	15.0		40.0	
Effective Green, g (s)	16.0	85.7		20.0	90.1	90.1		15.0	15.0		40.0	
Actuated g/C Ratio	0.09	0.48		0.11	0.50	0.50		0.08	0.08		0.22	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2385		196	2545	792		149	131		749	
v/s Ratio Prot	0.02	c0.44		c0.09	c0.28			c0.11			c0.09	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.19	0.93		0.85	0.55	0.07		1.29	0.09		0.40	
Uniform Delay, d1	76.0	44.3		78.5	31.1	23.2		82.5	76.2		59.8	
Progression Factor	0.98	0.84		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	6.9		28.2	0.9	0.2		170.9	1.4		1.6	
Delay (s)	74.9	44.3		106.8	31.9	23.4		253.4	77.6		61.4	
Level of Service	E	D		F	C	C		F	E		E	
Approach Delay (s)		44.8			39.0			178.3			61.4	
Approach LOS		D			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		53.6			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		95.5%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 1 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	196	1955	28	340	1685	576	69	184	553	610	248	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	206	2058	29	366	1812	619	73	196	588	663	270	257
RTOR Reduction (vph)	0	1	0	0	0	86	0	26	155	0	2	136
Lane Group Flow (vph)	206	2086	0	366	1812	533	73	382	221	663	294	95
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	10.2	49.7		19.6	59.1	59.1	10.8	38.3	38.3	23.8	51.3	51.3
Effective Green, g (s)	10.2	49.7		19.6	59.1	59.1	10.8	38.3	38.3	23.8	51.3	51.3
Actuated g/C Ratio	0.07	0.32		0.13	0.39	0.39	0.07	0.25	0.25	0.16	0.33	0.33
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	228	1645		438	1960	610	124	407	375	532	584	503
v/s Ratio Prot	0.06	c0.41		c0.11	c0.36		0.04	c0.23		c0.19	0.17	
v/s Ratio Perm						0.34			0.15			0.06
v/c Ratio	0.90	1.27		0.84	0.92	0.87	0.59	0.94	0.59	1.25	0.50	0.19
Uniform Delay, d1	71.1	51.8		65.3	45.0	43.6	69.1	56.4	50.6	64.8	40.8	36.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	34.6	125.7		12.9	7.9	13.1	7.0	29.4	2.5	125.9	0.7	0.2
Delay (s)	105.6	177.5		78.2	52.9	56.8	76.1	85.8	53.1	190.6	41.5	36.4
Level of Service	F	F		E	D	E	E	F	D	F	D	D
Approach Delay (s)		171.0			57.1			70.6			123.6	
Approach LOS		F			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		106.4			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.11										
Actuated Cycle Length (s)		153.3			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		104.7%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus Mitigated Near Term (1 CVN) with Alternative 1 No Hooper
10: SR-75 (Silver Strand Blvd) & Tulagi Rd Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖ ↗		↖ ↗	↖ ↗		↖ ↗
Volume (vph)	46	3	1300	368	0	367
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.99		1.00	0.96		1.00
Flt Protected	0.99		1.00	0.85		1.00
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1754		3539	1520		3539
Satd. Flow (perm)	0.96		1.00	1.00		1.00
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	61	4	1368	387	0	573
RTOR Reduction (vph)	4	0	0	118	0	0
Lane Group Flow (vph)	61	0	1368	269	0	573
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		29.3	29.3		29.3
Effective Green, g (s)	3.0		29.3	29.3		29.3
Actuated g/C Ratio	0.07		0.69	0.69		0.69
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	124		2457	1055		2457
v/s Ratio Prot	c0.03		c0.39			0.16
v/s Ratio Perm				0.18		
v/c Ratio	0.49		0.56	0.25		0.23
Uniform Delay, d1	18.9		3.2	2.4		2.4
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	3.1		0.3	0.1		0.0
Delay (s)	21.9		3.5	2.5		2.4
Level of Service	C		A	A		A
Approach Delay (s)	21.9		3.3			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.6		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.55			
Actuated Cycle Length (s)			42.2		Sum of lost time (s)	9.9
Intersection Capacity Utilization			48.4%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus Mitigated Near Term (1 CVN) with Alternative 1 No Hooper
19: 7th St & SR-75 (Silver Strand Blvd) Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗
Volume (vph)	8	206	19	0	1321	18	35	24		21	43	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99			1.00		1.00	0.99		1.00	0.92	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5022			5075		1770	1845		1770	1708	
Flt Permitted	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5022			5075		1770	1845		1770	1708	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	9	231	21	0	1452	20	42	29	2	27	56	70
RTOR Reduction (vph)	0	6	0	0	1	0	0	2	0	0	25	0
Lane Group Flow (vph)	9	246	0	0	1471	0	42	29	0	27	101	0
Turn Type	Prot	NA			NA		Prot	NA		Prot	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases								4			3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1899			2061		344	358		295	284	
v/s Ratio Prot	c0.01	0.05			c0.29		c0.02			0.02		
v/s Ratio Perm								0.02			c0.06	
v/c Ratio	0.05	0.13			0.71		0.12	0.08		0.09	0.36	
Uniform Delay, d1	71.5	36.6			44.7		59.8	59.4		63.5	66.4	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1			2.0		0.2	0.1		0.1	0.8	
Delay (s)	71.6	36.7			46.7		60.0	59.4		63.6	67.2	
Level of Service	E	D			D		E	E		E	E	
Approach Delay (s)		37.9			46.7			59.8			66.6	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		47.6			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.43										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		64.3%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

Mitigated Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	234	0	0	129	753	0	0	0	120	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00				1.00	1.00	
Frt		1.00			1.00	0.85				1.00	0.85	
Flt Protected		1.00			1.00	1.00				0.95	1.00	
Satd. Flow (prot)		1857			1863	1583				1770	1583	
Flt Permitted		0.98			1.00	1.00				0.76	1.00	
Satd. Flow (perm)		1825			1863	1583				1410	1583	
Peak-hour factor, PHF	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Adj. Flow (vph)	20	279	0	0	139	810	0	0	0	132	0	7
RTOR Reduction (vph)	0	0	0	0	0	452	0	0	0	0	5	0
Lane Group Flow (vph)	0	299	0	0	139	358	0	0	0	132	2	0
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		4			8		2				6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)		14.2			14.2	14.2				9.9	9.9	
Effective Green, g (s)		14.2			14.2	14.2				9.9	9.9	
Actuated g/C Ratio		0.44			0.44	0.44				0.31	0.31	
Clearance Time (s)		4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)		807			824	700				434	488	
v/s Ratio Prot					0.07						0.00	
v/s Ratio Perm		0.16				c0.23				c0.09		
v/c Ratio		0.37			0.17	0.51				0.30	0.00	
Uniform Delay, d1		6.0			5.4	6.5				8.5	7.7	
Progression Factor		1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2		0.3			0.1	0.6				0.4	0.0	
Delay (s)		6.3			5.5	7.1				8.9	7.7	
Level of Service		A			A	A				A	A	
Approach Delay (s)		6.3			6.9		0.0				8.8	
Approach LOS		A			A		A				A	
Intersection Summary												
HCM 2000 Control Delay		6.9			HCM 2000 Level of Service					A		
HCM 2000 Volume to Capacity ratio		0.43										
Actuated Cycle Length (s)		32.1			Sum of lost time (s)					8.0		
Intersection Capacity Utilization		66.5%			ICU Level of Service					C		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
22: 3rd St & Palm Ave

Mitigated Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	345	5	27	858		25	12	15	127	12	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0			4.0
Lane Util. Factor	1.00	1.00		1.00	1.00				1.00			1.00
Frt	1.00	1.00		1.00	1.00				0.89			0.95
Flt Protected	0.95	1.00		0.95	1.00				1.00			0.98
Satd. Flow (prot)	1770	1859		1770	1855				1650			1736
Flt Permitted	0.17	1.00		0.51	1.00				0.98			0.92
Satd. Flow (perm)	315	1859		946	1855				1615			1614
Peak-hour factor, PHF	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.81	0.80	0.80
Adj. Flow (vph)	9	401	6	29	923		27	15	19	157	15	14
RTOR Reduction (vph)	0	1	0	0	1	0	0	0	128	0	0	16
Lane Group Flow (vph)	9	406	0	29	949	0	0	63	0	0	32	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8				2		6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	32.1	32.1		32.1	32.1				8.9		8.9	
Effective Green, g (s)	32.1	32.1		32.1	32.1				8.9		8.9	
Actuated g/C Ratio	0.66	0.66		0.66	0.66				0.18		0.18	
Clearance Time (s)	4.0	4.0		4.0	4.0				4.0		4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0				3.0		3.0	
Lane Grp Cap (vph)	206	1217		619	1215				293		293	
v/s Ratio Prot		0.22			c0.51							
v/s Ratio Perm	0.03			0.03					c0.04		0.02	
v/c Ratio	0.04	0.33		0.05	0.78				0.21		0.11	
Uniform Delay, d1	3.0	3.7		3.0	6.0				17.1		16.7	
Progression Factor	1.00	1.00		1.00	1.00				1.00		1.00	
Incremental Delay, d2	0.1	0.2		0.0	3.3				0.4		0.2	
Delay (s)	3.1	3.9		3.0	9.3				17.4		16.9	
Level of Service	A	A		A	A				B		B	
Approach Delay (s)		3.9			9.1				17.4		16.9	
Approach LOS		A			A				B		B	
Intersection Summary												
HCM 2000 Control Delay		9.0			HCM 2000 Level of Service					A		
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		49.0			Sum of lost time (s)					8.0		
Intersection Capacity Utilization		63.1%			ICU Level of Service					B		
Analysis Period (min)		15										
c Critical Lane Group												




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Mitigated Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱	↕	↕	↰	↱
Volume (veh/h)	240	482	820	154	0	251
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	304	610	1000	188	0	354
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked	0.80				0.80	0.80
vC, conflicting volume	1188				2312	594
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	749				2145	11
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	56				100	59
cM capacity (veh/h)	689				19	859
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	304	610	667	521	354	
Volume Left	304	0	0	0	0	
Volume Right	0	0	0	188	354	
cSH	689	1700	1700	1700	859	
Volume to Capacity	0.44	0.36	0.39	0.31	0.41	
Queue Length 95th (ft)	57	0	0	0	51	
Control Delay (s)	14.3	0.0	0.0	0.0	12.1	
Lane LOS	B				B	
Approach Delay (s)	4.7		0.0		12.1	
Approach LOS					B	
Intersection Summary						
Average Delay			3.5			
Intersection Capacity Utilization			49.8%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Mitigated Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	708	40	25	1947	45	171	38	53	93	47	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.91		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5044		1770	5068		1770	1700		1770	1762	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5044		1770	5068		1770	1700		1770	1762	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	26	843	48	27	2140	49	206	46	64	113	57	32
RTOR Reduction (vph)	0	3	0	0	1	0	0	27	0	0	11	0
Lane Group Flow (vph)	26	888	0	27	2188	0	206	83	0	113	78	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	15.0	88.1		12.0	85.1		23.6	44.8		16.8	38.0	
Effective Green, g (s)	15.0	88.1		12.0	85.1		23.6	44.8		16.8	38.0	
Actuated g/C Ratio	0.08	0.49		0.07	0.47		0.13	0.25		0.09	0.21	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	147	2468		118	2396		232	423		165	371	
v/s Ratio Prot	0.01	c0.18		c0.02	c0.43		c0.12	0.05		0.06	c0.04	
v/s Ratio Perm												
v/c Ratio	0.18	0.36		0.23	0.91		0.89	0.20		0.68	0.21	
Uniform Delay, d1	76.8	28.5		79.6	44.0		76.9	53.4		79.0	58.6	
Progression Factor	1.00	1.00		1.15	0.82		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.4		0.8	5.4		30.8	0.2		11.2	0.3	
Delay (s)	77.3	28.9		92.1	41.4		107.7	53.6		90.2	58.9	
Level of Service	E	C		F	D		F	D		F	E	
Approach Delay (s)		30.3			42.1			88.9			76.4	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay			45.1			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.68									
Actuated Cycle Length (s)			180.0			Sum of lost time (s)				18.3		
Intersection Capacity Utilization			75.7%			ICU Level of Service				D		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Mitigated Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰↰	↰
Volume (vph)	4	1018	66	100	1974	54	152	20	94	174	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1144	74	120	2378	65	171	22	106	232	49	21
RTOR Reduction (vph)	0	4	0	0	0	27	0	0	95	0	3	0
Lane Group Flow (vph)	4	1214	0	120	2378	38	0	193	11	0	299	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Effective Green, g (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Actuated g/C Ratio	0.02	0.48		0.11	0.57	0.57		0.10	0.10		0.20	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2427		196	2901	903		184	163		682	
v/s Ratio Prot	0.00	0.24		c0.07	c0.47			c0.11			c0.09	
v/s Ratio Perm					0.02			0.01				
v/c Ratio	0.10	0.50		0.61	0.82	0.04		1.05	0.07		0.44	
Uniform Delay, d1	86.2	31.9		76.3	31.2	17.0		80.7	72.9		62.8	
Progression Factor	1.13	0.68		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.7		5.6	2.7	0.1		79.8	0.2		0.5	
Delay (s)	98.2	22.4		81.9	33.9	17.1		160.5	73.0		63.3	
Level of Service	F	C		F	C	B		F	E		E	
Approach Delay (s)		22.6			35.7			129.5			63.3	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		40.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		92.1%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Mitigated Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰↰	↰
Volume (vph)	95	1305	31	254	2044	223	79	75	800	244	96	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		3433	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		3433	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	110	1517	36	270	2174	237	88	83	889	290	114	95
RTOR Reduction (vph)	0	2	0	0	0	59	0	137	167	0	2	61
Lane Group Flow (vph)	110	1551	0	270	2174	178	88	355	313	290	122	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	5.1	46.3		15.2	56.4	56.4	9.3	34.5	34.5	11.8	37.0	37.0
Effective Green, g (s)	5.1	46.3		15.2	56.4	56.4	9.3	34.5	34.5	11.8	37.0	37.0
Actuated g/C Ratio	0.04	0.36		0.12	0.43	0.43	0.07	0.27	0.27	0.09	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	134	1809		402	2211	688	126	412	400	312	498	429
v/s Ratio Prot	0.03	0.31		c0.08	c0.43		0.05	c0.23		c0.08	0.07	
v/s Ratio Perm					0.11			0.21				0.02
v/c Ratio	0.82	0.86		0.67	0.98	0.26	0.70	0.86	0.78	0.93	0.24	0.06
Uniform Delay, d1	61.8	38.6		54.9	36.2	23.3	58.8	45.3	44.1	58.5	35.6	33.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	31.5	4.3		4.4	15.3	0.2	15.6	16.6	9.6	32.7	0.3	0.1
Delay (s)	93.4	42.9		59.2	51.5	23.5	74.4	61.9	53.7	91.2	35.9	33.7
Level of Service	F	D		E	D	C	E	E	D	F	D	C
Approach Delay (s)		46.2			49.8			59.2			67.7	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		52.0			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.94										
Actuated Cycle Length (s)		129.7			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		89.2%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Mitigated Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑	↑↑
Volume (vph)	0	295	1130	0	161	1390
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	331	1215	0	179	1544
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	331	1215	0	179	1539
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.34		0.10	c0.55
v/s Ratio Perm						
v/c Ratio		0.12	1.04		0.86	1.00
Uniform Delay, d1		2.5	26.8		34.7	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	37.7		29.2	24.0
Delay (s)		2.5	64.5		63.8	42.0
Level of Service		A	E		E	D
Approach Delay (s)		2.5	64.5		44.3	
Approach LOS		A	E		D	
Intersection Summary						
HCM 2000 Control Delay		47.6			HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio		1.09				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		71.4%			ICU Level of Service	C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Mitigated Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑		↑↑	↑		↑↑
Volume (vph)	277	3	762	52	0	1586
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frbp, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1772		3539	1467		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1772		3539	1467		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	351	4	847	58	0	1782
RTOR Reduction (vph)	1	0	0	30	0	0
Lane Group Flow (vph)	354	0	847	28	0	1782
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		55.1	55.1		55.1
Effective Green, g (s)	50.0		55.1	55.1		55.1
Actuated g/C Ratio	0.43		0.48	0.48		0.48
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	770		1695	702		1695
v/s Ratio Prot	c0.20		0.24			c0.50
v/s Ratio Perm				0.02		
v/c Ratio	0.46		0.50	0.04		1.05
Uniform Delay, d1	23.0		20.5	15.9		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.2	0.0		36.8
Delay (s)	23.4		20.7	15.9		66.7
Level of Service	C		C	B		E
Approach Delay (s)	23.4		20.4			66.7
Approach LOS	C		C			E
Intersection Summary						
HCM 2000 Control Delay		47.9			HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio		0.77				
Actuated Cycle Length (s)		115.0			Sum of lost time (s)	9.9
Intersection Capacity Utilization		93.8%			ICU Level of Service	F
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Mitigated Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰		↰	↰	
Volume (vph)	59	983	56	0	362	18	41	5	25	27	22	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	5.2	5.5			5.5	5.6	5.6		5.6	5.6		
Lane Util. Factor	1.00	0.91			0.91	1.00	1.00		1.00	1.00		
Flt	1.00	0.99			0.99	1.00	0.98		1.00	0.93		
Flt Protected	0.95	1.00			1.00	0.95	1.00		0.95	1.00		
Satd. Flow (prot)	1770	5044			5017	1770	1833		1770	1737		
Flt Permitted	0.95	1.00			1.00	0.95	1.00		0.95	1.00		
Satd. Flow (perm)	1770	5044			5017	1770	1833		1770	1737		
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85	
Adj. Flow (vph)	67	1117	64	0	385	38	26	59	7	29	32	26
RTOR Reduction (vph)	0	4	0	0	7	0	0	2	0	0	17	0
Lane Group Flow (vph)	67	1177	0	0	416	0	26	64	0	29	41	0
Turn Type	Prot	NA			NA	Prot	NA		Prot	NA		
Protected Phases	1	6			2		4		3			
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1	35.0	35.0		30.0	30.0		
Effective Green, g (s)	20.0	68.1			73.1	35.0	35.0		30.0	30.0		
Actuated g/C Ratio	0.11	0.38			0.41	0.19	0.19		0.17	0.17		
Clearance Time (s)	5.2	5.5			5.5	5.6	5.6		5.6	5.6		
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0		3.0	3.0		
Lane Grp Cap (vph)	196	1908			2037	344	356		295	289		
v/s Ratio Prot	c0.04	c0.23			c0.08	0.01			0.02			
v/s Ratio Perm							c0.03			c0.02		
v/c Ratio	0.34	0.62			0.20	0.08	0.18		0.10	0.14		
Uniform Delay, d1	73.9	45.4			34.6	59.3	60.5		63.5	64.0		
Progression Factor	1.00	1.00			1.00	1.00	1.00		1.00	1.00		
Incremental Delay, d2	1.0	1.5			0.2	0.1	0.2		0.1	0.2		
Delay (s)	75.0	46.9			34.8	59.4	60.7		63.7	64.3		
Level of Service	E	D			C	E	E		E	E		
Approach Delay (s)		48.4			34.8		60.4			64.1		
Approach LOS		D			C		E			E		
Intersection Summary												
HCM 2000 Control Delay		46.6			HCM 2000 Level of Service		D					
HCM 2000 Volume to Capacity ratio		0.38										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)		22.3					
Intersection Capacity Utilization		67.8%			ICU Level of Service		C					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave







Mitigated Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰			↰	↰		↰↰		↰	↰	
Volume (vph)	6	214	0	0	308	201	0	0	0	746	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00				1.00	1.00	
Flt		1.00			1.00	0.85				1.00	0.85	
Flt Protected		1.00			1.00	1.00				0.95	1.00	
Satd. Flow (prot)		1860			1863	1583				1770	1583	
Flt Permitted		0.99			1.00	1.00				0.76	1.00	
Satd. Flow (perm)		1842			1863	1583				1410	1583	
Peak-hour factor, PHF	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.92	0.66	0.66
Adj. Flow (vph)	7	249	0	0	350	228	0	0	0	811	0	23
RTOR Reduction (vph)	0	0	0	0	0	170	0	0	0	0	8	0
Lane Group Flow (vph)	0	256	0	0	350	58	0	0	0	811	15	0
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)		21.0			21.0	21.0				53.9	53.9	
Effective Green, g (s)		21.0			21.0	21.0				53.9	53.9	
Actuated g/C Ratio		0.25			0.25	0.25				0.65	0.65	
Clearance Time (s)		4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)		466			471	401				916	1029	
v/s Ratio Prot					c0.19						0.01	
v/s Ratio Perm		0.14				0.04				c0.57		
v/c Ratio		0.55			0.74	0.14				0.89	0.01	
Uniform Delay, d1		28.8			28.5	24.0				12.0	5.1	
Progression Factor		1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2		1.3			6.3	0.2				10.2	0.0	
Delay (s)		28.2			34.7	24.2				22.2	5.1	
Level of Service		C			C	C				C	A	
Approach Delay (s)		28.2			30.6			0.0			21.7	
Approach LOS		C			C			A			C	
Intersection Summary												
HCM 2000 Control Delay		25.8			HCM 2000 Level of Service		C					
HCM 2000 Volume to Capacity ratio		0.84										
Actuated Cycle Length (s)		82.9			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		64.2%			ICU Level of Service		C					
Analysis Period (min)		15										
c Critical Lane Group												







NBC Coastal Campus
22: 3rd St & Palm Ave

Mitigated Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	937	13	86	482	25	15	39	69	29	34	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.92			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1770	1859		1770	1849			1711			1784	
Flt Permitted	0.40	1.00		0.09	1.00			0.94			0.58	
Satd. Flow (perm)	754	1859		169	1849			1620			1053	
Peak-hour factor, PHF	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Adj. Flow (vph)	10	1201	17	97	542	28	26	68	121	63	74	30
RTOR Reduction (vph)	0	0	0	0	1	0	0	44	0	0	7	0
Lane Group Flow (vph)	10	1218	0	97	569	0	0	171	0	0	160	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	80.1	80.1		80.1	80.1			18.0			18.0	
Effective Green, g (s)	80.1	80.1		80.1	80.1			18.0			18.0	
Actuated g/C Ratio	0.75	0.75		0.75	0.75			0.17			0.17	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	569	1403		127	1395			274			178	
v/s Ratio Prot		c0.65			0.31							
v/s Ratio Perm	0.01			0.57			0.11				c0.15	
v/c Ratio	0.02	0.87		0.76	0.41		0.62				0.90	
Uniform Delay, d1	3.2	9.2		7.5	4.6		40.9				43.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00				1.00	
Incremental Delay, d2	0.0	5.9		23.4	0.2		4.4				39.1	
Delay (s)	3.2	15.2		31.0	4.8		45.3				82.3	
Level of Service	A	B		C	A		D				F	
Approach Delay (s)		15.1			8.6		45.3				82.3	
Approach LOS		B			A		D				F	
Intersection Summary												
HCM 2000 Control Delay		21.0			HCM 2000 Level of Service		C					
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		106.1			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		74.7%			ICU Level of Service		D					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Mitigated Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	235	904	578	40	0	232
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	242	932	672	47	0	273
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	719				2112	359
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	719				2112	359
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	72				100	57
cM capacity (veh/h)	878				32	637
Direction, Lane #						
Volume Total	242	932	448	271	273	
Volume Left	242	0	0	0	0	
Volume Right	0	0	0	47	273	
cSH	878	1700	1700	1700	637	
Volume to Capacity	0.28	0.55	0.26	0.16	0.43	
Queue Length 95th (ft)	28	0	0	0	54	
Control Delay (s)	10.7	0.0	0.0	0.0	14.8	
Lane LOS	B				B	
Approach Delay (s)	2.2		0.0		14.8	
Approach LOS					B	
Intersection Summary						
Average Delay			3.1			
Intersection Capacity Utilization			50.9%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Mitigated Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	43	1782	130	60	892	135	102	93	65	179	82	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99		1.00	0.98		1.00	0.94		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5034		1770	4985		1770	1748		1770	1794	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5034		1770	4985		1770	1748		1770	1794	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	46	1896	138	61	901	136	112	102	71	201	92	30
RTOR Reduction (vph)	0	4	0	0	10	0	0	14	0	0	6	0
Lane Group Flow (vph)	46	2030	0	61	1027	0	112	159	0	201	116	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	20.0	80.4		20.0	80.4		16.7	38.0		23.3	44.6	
Effective Green, g (s)	20.0	80.4		20.0	80.4		16.7	38.0		23.3	44.6	
Actuated g/C Ratio	0.11	0.45		0.11	0.45		0.09	0.21		0.13	0.25	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	2248		196	2226		164	369		229	444	
v/s Ratio Prot	0.03	c0.40		c0.03	0.21		0.06	c0.09		c0.11	0.06	
v/s Ratio Perm												
v/c Ratio	0.23	0.90		0.31	0.46		0.68	0.43		0.88	0.26	
Uniform Delay, d1	73.0	46.2		73.7	34.7		79.1	61.6		77.0	54.4	
Progression Factor	1.00	1.00		1.16	0.76		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	5.5		0.9	0.7		11.1	0.8		29.2	0.3	
Delay (s)	73.6	51.7		86.5	26.9		90.2	62.4		106.1	54.8	
Level of Service	E	D		F	C		F	E		F	D	
Approach Delay (s)		52.2			30.3			73.3			86.7	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		50.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		100.7%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)























Mitigated Near Term (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	28	1951	206	162	1385	84	134	42	132	159	46	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.85	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5013		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5013		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	30	2076	219	167	1428	87	146	46	143	215	62	28
RTOR Reduction (vph)	0	7	0	0	0	35	0	0	131	0	4	0
Lane Group Flow (vph)	30	2288	0	167	1428	52	0	192	12	0	301	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	16.0	85.7		20.0	90.1	90.1		15.0	15.0		40.0	
Effective Green, g (s)	16.0	85.7		20.0	90.1	90.1		15.0	15.0		40.0	
Actuated g/C Ratio	0.09	0.48		0.11	0.50	0.50		0.08	0.08		0.22	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2386		196	2545	792		149	131		749	
v/s Ratio Prot	0.02	c0.46		c0.09	c0.28			c0.11			c0.09	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.19	0.96		0.85	0.56	0.07		1.29	0.09		0.40	
Uniform Delay, d1	76.0	45.5		78.5	31.2	23.2		82.5	76.2		59.8	
Progression Factor	0.98	0.84		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	9.6		28.2	0.9	0.2		170.9	0.3		1.6	
Delay (s)	74.8	47.6		106.8	32.1	23.4		253.4	76.5		61.4	
Level of Service	E	D		F	C	C		F	E		E	
Approach Delay (s)		48.0			39.1			177.9			61.4	
Approach LOS		D			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		55.0			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		96.8%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Mitigated Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	196	2020	28	340	1701	576	69	184	553	610	248	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	206	2126	29	366	1829	619	73	196	588	663	270	257
RTOR Reduction (vph)	0	1	0	0	0	85	0	26	155	0	2	136
Lane Group Flow (vph)	206	2154	0	366	1829	534	73	382	221	663	294	95
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	10.2	49.7		19.6	59.1	59.1	10.8	38.3	38.3	23.8	51.3	51.3
Effective Green, g (s)	10.2	49.7		19.6	59.1	59.1	10.8	38.3	38.3	23.8	51.3	51.3
Actuated g/C Ratio	0.07	0.32		0.13	0.39	0.39	0.07	0.25	0.25	0.16	0.33	0.33
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	228	1645		438	1960	610	124	407	375	532	584	503
v/s Ratio Prot	0.06	c0.42		c0.11	c0.36		0.04	c0.23		c0.19	0.17	
v/s Ratio Perm						0.34			0.15			0.06
v/c Ratio	0.90	1.31		0.84	0.93	0.87	0.59	0.94	0.59	1.25	0.50	0.19
Uniform Delay, d1	71.1	51.8		65.3	45.2	43.7	69.1	56.4	50.6	64.8	40.8	36.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	34.6	143.8		12.9	8.8	13.2	7.0	29.4	2.5	125.9	0.7	0.2
Delay (s)	105.6	195.6		78.2	54.0	56.9	76.1	85.8	53.1	190.6	41.5	36.4
Level of Service	F	F		E	D	E	E	F	D	F	D	D
Approach Delay (s)		187.8			57.8			70.6			123.6	
Approach LOS		F			E			E			F	
Intersection Summary												
HCM 2000 Control Delay			112.6		HCM 2000 Level of Service					F		
HCM 2000 Volume to Capacity ratio			1.12									
Actuated Cycle Length (s)			153.3		Sum of lost time (s)					21.9		
Intersection Capacity Utilization			106.0%		ICU Level of Service					G		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Mitigated Near Term (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕	↕↕
Volume (vph)	0	527	880	0	456	1743
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	592	936	0	501	1915
RTOR Reduction (vph)	0	0	0	0	0	6
Lane Group Flow (vph)	0	592	936	0	501	1909
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		50.4	24.4		30.0	56.0
Effective Green, g (s)		50.4	24.4		30.0	56.0
Actuated g/C Ratio		0.56	0.27		0.33	0.62
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1981	959		590	1734
v/s Ratio Prot		0.17	c0.26		0.28	c0.68
v/s Ratio Perm						
v/c Ratio		0.30	0.98		0.85	1.10
Uniform Delay, d1		10.5	32.5		27.9	17.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	23.1		11.0	54.7
Delay (s)		10.5	55.6		38.9	71.7
Level of Service		B	E		D	E
Approach Delay (s)		10.5	55.6		64.9	
Approach LOS		B	E		E	
Intersection Summary						
HCM 2000 Control Delay		54.5		HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio		1.13				
Actuated Cycle Length (s)		90.0		Sum of lost time (s)		14.2
Intersection Capacity Utilization		90.2%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near-Term (1 CVN) with Alternative 3 Mitigated

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕		↕
Volume (vph)	44	3	1312	387	0	398
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1753		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1753		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	59	4	1381	407	0	622
RTOR Reduction (vph)	4	0	0	123	0	0
Lane Group Flow (vph)	59	0	1381	284	0	622
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		29.7	29.7		29.7
Effective Green, g (s)	3.0		29.7	29.7		29.7
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	123		2467	1059		2467
v/s Ratio Prot	c0.03		c0.39			0.18
v/s Ratio Perm				0.19		
v/c Ratio	0.48		0.56	0.27		0.25
Uniform Delay, d1	19.1		3.2	2.4		2.4
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	3.0		0.3	0.1		0.1
Delay (s)	22.0		3.5	2.5		2.4
Level of Service	C		A	A		A
Approach Delay (s)	22.0		3.3			2.4
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	3.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	42.6	Sum of lost time (s)	9.9
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near-Term (1 CVN) with Alternative 3 Mitigated

Timing Plan: AM PEAK









Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↔	↔	↔	↕	↕	↕	↕
Volume (vph)	21	40	355	1612	0	172	191
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Frt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.96	0.96	0.92	0.79	0.79
Adj. Flow (vph)	23	43	370	1679	0	218	242
RTOR Reduction (vph)	0	0	0	0	0	0	164
Lane Group Flow (vph)	23	43	370	1679	0	218	78
Turn Type	Perm	Prot	Prot	NA	Prot	NA	Perm
Protected Phases		4	5	2	1	6	
Permitted Phases	4						6
Actuated Green, G (s)	13.2	13.2	23.4	53.3		24.9	24.9
Effective Green, g (s)	13.2	13.2	23.4	53.3		24.9	24.9
Actuated g/C Ratio	0.17	0.17	0.30	0.69		0.32	0.32
Clearance Time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	301	269	535	2437		1138	509
v/s Ratio Prot		c0.03	0.21	c0.47		0.06	
v/s Ratio Perm	0.01						0.05
v/c Ratio	0.08	0.16	0.69	0.69		0.19	0.15
Uniform Delay, d1	27.0	27.4	23.8	7.1		19.0	18.7
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	0.3	3.8	0.8		0.1	0.1
Delay (s)	27.1	27.7	27.7	8.0		19.1	18.9
Level of Service	C	C	C	A		B	B
Approach Delay (s)	27.5			11.5		19.0	
Approach LOS	C			B		B	

Intersection Summary			
HCM 2000 Control Delay	13.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	77.4	Sum of lost time (s)	15.9
Intersection Capacity Utilization	70.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near-Term (1 CVN) with Alternative 3 Mitigated









Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	408	2	40	50	8	21	27	1839	11	4	164	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	0.95	0.95		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.97		1.00	0.89		1.00	1.00		1.00	0.97	
Flt Protected	0.95	0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1655		1770	1661		1770	3536		1770	3423	
Flt Permitted	0.95	0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1655		1770	1661		1770	3536		1770	3423	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	464	2	45	161	26	68	28	1936	12	6	238	67
RTOR Reduction (vph)	0	0	0	0	60	0	0	0	0	0	15	0
Lane Group Flow (vph)	260	251	0	161	34	0	28	1948	0	6	290	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	29.1	29.1		14.7	14.7		3.9	80.2		1.0	77.3	
Effective Green, g (s)	29.1	29.1		14.7	14.7		3.9	80.2		1.0	77.3	
Actuated g/C Ratio	0.20	0.20		0.10	0.10		0.03	0.56		0.01	0.54	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	339	334		180	169		47	1970		12	1838	
v/s Ratio Prot	c0.15	0.15		c0.09	0.02		c0.02	c0.55		0.00	0.08	
v/s Ratio Perm												
v/c Ratio	0.77	0.75		0.89	0.20		0.60	0.99		0.50	0.16	
Uniform Delay, d1	54.2	54.0		63.8	59.2		69.2	31.4		71.2	16.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	10.0	9.2		38.5	0.6		18.6	17.4		29.2	0.0	
Delay (s)	64.2	63.2		102.4	59.8		87.9	48.8		100.4	16.9	
Level of Service	E	E		F	E		F	D		F	B	
Approach Delay (s)		63.7			86.7			49.4			18.5	
Approach LOS		E			F			D			B	
Intersection Summary												
HCM 2000 Control Delay		51.7										
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		143.9										
Intersection Capacity Utilization		78.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)










Near-Term (1 CVN) with Alternative 3 Mitigated

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	695	36	25	1838	45	170	38	53	93	47	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00		1.00	0.91		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5048		1770	5067		1770	1700		1770	1762	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5048		1770	5067		1770	1700		1770	1762	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	26	827	43	27	2020	49	205	46	64	113	57	32
RTOR Reduction (vph)	0	3	0	0	1	0	0	28	0	0	11	0
Lane Group Flow (vph)	26	867	0	27	2068	0	205	82	0	113	78	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	15.0	86.7		12.0	83.7		25.0	38.0		25.0	38.0	
Effective Green, g (s)	15.0	86.7		12.0	83.7		25.0	38.0		25.0	38.0	
Actuated g/C Ratio	0.08	0.48		0.07	0.47		0.14	0.21		0.14	0.21	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	147	2431		118	2356		245	358		245	371	
v/s Ratio Prot	0.01	c0.17		c0.02	c0.41		c0.12	c0.05		0.06	0.04	
v/s Ratio Perm												
v/c Ratio	0.18	0.36		0.23	0.88		0.84	0.23		0.46	0.21	
Uniform Delay, d1	76.8	29.2		79.6	43.5		75.5	58.8		71.3	58.6	
Progression Factor	1.00	1.00		1.17	0.75		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.4		0.8	4.1		21.3	0.3		1.4	0.3	
Delay (s)	77.3	29.6		94.2	36.9		96.8	59.2		72.7	58.9	
Level of Service	E	C		F	D		F	E		E	E	
Approach Delay (s)		31.0			37.7			83.6			66.6	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		41.8										
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		73.6%										
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 3 Mitigated
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	1005	66	100	1865	54	151	20	94	174	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5038		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5038		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1129	74	120	2247	65	170	22	106	232	49	21
RTOR Reduction (vph)	0	4	0	0	0	27	0	0	95	0	3	0
Lane Group Flow (vph)	4	1199	0	120	2247	38	0	192	11	0	299	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Effective Green, g (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Actuated g/C Ratio	0.02	0.48		0.11	0.57	0.57		0.10	0.10		0.20	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2426		196	2901	903		184	163		682	
v/s Ratio Prot	0.00	0.24		c0.07	c0.44			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.10	0.49		0.61	0.77	0.04		1.04	0.07		0.44	
Uniform Delay, d1	86.2	31.7		76.3	29.7	17.0		80.7	72.9		62.8	
Progression Factor	1.15	0.66		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.7		5.6	2.1	0.1		78.3	0.2		0.5	
Delay (s)	99.9	21.6		81.9	31.8	17.1		159.0	73.0		63.3	
Level of Service	F	C		F	C	B		F	E		E	
Approach Delay (s)		21.8			33.9			128.4			63.3	
Approach LOS		C			C			F			E	
Intersection Summary												
HCM 2000 Control Delay		39.2			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		90.0%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 3 Mitigated
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	1294	31	254	1935	223	78	75	800	244	96	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		3433	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		3433	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	110	1505	36	270	2059	237	87	83	889	290	114	95
RTOR Reduction (vph)	0	2	0	0	0	59	0	137	167	0	2	61
Lane Group Flow (vph)	110	1539	0	270	2059	178	87	355	313	290	122	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	5.1	46.3		15.2	56.4	56.4	9.2	34.5	34.5	11.8	37.1	37.1
Effective Green, g (s)	5.1	46.3		15.2	56.4	56.4	9.2	34.5	34.5	11.8	37.1	37.1
Actuated g/C Ratio	0.04	0.36		0.12	0.43	0.43	0.07	0.27	0.27	0.09	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	134	1808		402	2211	688	125	412	400	312	500	430
v/s Ratio Prot	0.03	0.30		c0.08	c0.40		0.05	c0.23		c0.08	c0.07	
v/s Ratio Perm						0.11			0.21			0.02
v/c Ratio	0.82	0.85		0.67	0.93	0.26	0.70	0.86	0.78	0.93	0.24	0.06
Uniform Delay, d1	61.8	38.5		54.9	34.8	23.3	58.9	45.3	44.1	58.5	35.5	33.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	31.5	4.1		4.4	7.8	0.2	15.5	16.6	9.6	32.7	0.3	0.1
Delay (s)	93.4	42.6		59.2	42.6	23.5	74.4	61.9	53.7	91.2	35.8	33.7
Level of Service	F	D		E	D	C	E	E	D	F	D	C
Approach Delay (s)		46.0			42.6			59.2			67.6	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		48.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.91										
Actuated Cycle Length (s)		129.7			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		87.1%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near-Term (1 CVN) with Alternative 3 Mitigated

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	296	4	806	53	0	1594
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flt Protected	1.00		1.00	0.85		1.00
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1771		3539	1467		3539
Satd. Flow (perm)	1771		3539	1467		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	375	5	896	59	0	1791
RTOR Reduction (vph)	1	0	0	31	0	0
Lane Group Flow (vph)	379	0	896	28	0	1791
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		55.1	55.1		55.1
Effective Green, g (s)	50.0		55.1	55.1		55.1
Actuated g/C Ratio	0.43		0.48	0.48		0.48
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	770		1695	702		1695
v/s Ratio Prot	c0.21		0.25			c0.51
v/s Ratio Perm				0.02		
v/c Ratio	0.49		0.53	0.04		1.06
Uniform Delay, d1	23.4		20.9	15.9		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.5		0.3	0.0		38.6
Delay (s)	23.9		21.2	15.9		68.5
Level of Service	C		C	B		E
Approach Delay (s)	23.9		20.9			68.5
Approach LOS	C		C			E

Intersection Summary			
HCM 2000 Control Delay	48.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	9.9
Intersection Capacity Utilization	94.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near-Term (1 CVN) with Alternative 3 Mitigated









Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↖	↖	↖	↗	↖	↗	↗
Volume (vph)	189	351	88	458	0	1508	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt Protected	1.00	0.85	1.00	1.00		1.00	0.85
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.92	0.90	0.90
Adj. Flow (vph)	205	382	100	520	0	1676	52
RTOR Reduction (vph)	0	0	0	0	0	0	26
Lane Group Flow (vph)	205	382	100	520	0	1676	26
Turn Type	Perm	Prot	Prot	NA	Prot	NA	Perm
Protected Phases		4	5	2	1	6	
Permitted Phases	4						6
Actuated Green, G (s)	30.1	30.1	7.0	66.8		54.8	54.8
Effective Green, g (s)	30.1	30.1	7.0	66.8		54.8	54.8
Actuated g/C Ratio	0.28	0.28	0.06	0.62		0.51	0.51
Clearance Time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	494	442	114	2192		1799	804
v/s Ratio Prot		c0.24	c0.06	0.15		c0.47	
v/s Ratio Perm	0.12						0.02
v/c Ratio	0.41	0.86	0.88	0.24		0.93	0.03
Uniform Delay, d1	31.7	36.9	50.0	9.1		24.8	13.3
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.6	16.0	47.9	0.1		9.3	0.0
Delay (s)	32.2	52.9	97.8	9.2		34.0	13.3
Level of Service	C	D	F	A		C	B
Approach Delay (s)	45.7			23.5		33.4	
Approach LOS	D			C		C	

Intersection Summary			
HCM 2000 Control Delay	33.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	107.8	Sum of lost time (s)	15.9
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			









NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near-Term (1 CVN) with Alternative 3 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	7	70	19	4	7	76	396	58	19	1399	201
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	0.95	0.95		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.88		1.00	0.90		1.00	0.98		1.00	0.98	
Flt Protected	0.95	0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1545		1770	1685		1770	3471		1770	3473	
Flt Permitted	0.95	0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1545		1770	1685		1770	3471		1770	3473	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	120	9	93	38	8	14	84	435	64	21	1554	223
RTOR Reduction (vph)	0	0	0	0	14	0	0	6	0	0	7	0
Lane Group Flow (vph)	108	114	0	38	8	0	84	493	0	21	1770	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	19.8	19.8		4.0	4.0		7.7	76.6		2.1	71.0	
Effective Green, g (s)	19.8	19.8		4.0	4.0		7.7	76.6		2.1	71.0	
Actuated g/C Ratio	0.16	0.16		0.03	0.03		0.06	0.63		0.02	0.58	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	274	251		58	55		112	2190		30	2031	
v/s Ratio Prot	0.06	c0.07		c0.02	0.01		c0.05	0.14		0.01	c0.51	
v/s Ratio Perm												
v/c Ratio	0.39	0.45		0.66	0.15		0.75	0.22		0.70	0.87	
Uniform Delay, d1	45.4	45.9		58.0	57.1		55.9	9.6		59.3	21.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.9	1.3		23.6	1.3		24.2	0.1		52.7	4.4	
Delay (s)	46.4	47.2		81.6	58.4		80.1	9.7		112.1	25.8	
Level of Service	D	D		F	E		F	A		F	C	
Approach Delay (s)		46.8			73.1			19.8			26.8	
Approach LOS		D			E			B			C	
Intersection Summary												
HCM 2000 Control Delay		28.0										
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		121.4			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		72.7%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 3 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	43	1675	130	60	865	135	101	93	65	179	82	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99		1.00	0.98		1.00	0.94		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5030		1770	4983		1770	1748		1770	1794	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5030		1770	4983		1770	1748		1770	1794	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	46	1782	138	61	874	136	111	102	71	201	92	30
RTOR Reduction (vph)	0	5	0	0	11	0	0	14	0	0	6	0
Lane Group Flow (vph)	46	1915	0	61	999	0	111	159	0	201	116	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	20.0	78.7		20.0	78.7		25.0	38.0		25.0	38.0	
Effective Green, g (s)	20.0	78.7		20.0	78.7		25.0	38.0		25.0	38.0	
Actuated g/C Ratio	0.11	0.44		0.11	0.44		0.14	0.21		0.14	0.21	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	2199		196	2178		245	369		245	378	
v/s Ratio Prot	0.03	c0.38		c0.03	0.20		0.06	c0.09		c0.11	0.06	
v/s Ratio Perm												
v/c Ratio	0.23	0.87		0.31	0.46		0.45	0.43		0.82	0.31	
Uniform Delay, d1	73.0	46.0		73.7	35.7		71.2	61.6		75.3	59.9	
Progression Factor	1.00	1.00		1.17	0.73		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	4.1		0.9	0.7		1.3	0.8		19.3	0.5	
Delay (s)	73.6	50.1		87.4	26.7		72.5	62.4		94.6	60.3	
Level of Service	E	D		F	C		E	E		F	E	
Approach Delay (s)		50.7			30.2			66.4			81.7	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		48.6										
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		111.6%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 3 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰↰	↰
Volume (vph)	28	1844	206	162	1358	84	133	42	132	159	46	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5009		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5009		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	30	1962	219	167	1400	87	145	46	143	215	62	28
RTOR Reduction (vph)	0	7	0	0	0	36	0	0	131	0	4	0
Lane Group Flow (vph)	30	2174	0	167	1400	51	0	191	12	0	301	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	85.7		20.0	90.1	90.1		15.0	15.0		40.0	
Effective Green, g (s)	16.0	85.7		20.0	90.1	90.1		15.0	15.0		40.0	
Actuated g/C Ratio	0.09	0.48		0.11	0.50	0.50		0.08	0.08		0.22	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2384		196	2545	792		149	131		749	
v/s Ratio Prot	0.02	c0.43		c0.09	c0.28			c0.11			c0.09	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.19	0.91		0.85	0.55	0.06		1.28	0.09		0.40	
Uniform Delay, d1	76.0	43.7		78.5	31.0	23.2		82.5	76.2		59.8	
Progression Factor	0.99	0.83		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	5.8		28.2	0.9	0.2		168.3	1.4		1.6	
Delay (s)	75.4	41.9		106.8	31.8	23.4		250.8	77.6		61.4	
Level of Service	E	D		F	C	C		F	E		E	
Approach Delay (s)		42.3			39.0			176.6			61.4	
Approach LOS		D			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		52.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		94.7%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near-Term (1 CVN) with Alternative 3 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰↰	↰
Volume (vph)	196	1912	28	340	1675	576	68	184	553	610	248	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5074		3433	5085	1583	1770	1632	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5074		3433	5085	1583	1770	1632	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	206	2013	29	366	1801	619	72	196	588	663	270	257
RTOR Reduction (vph)	0	1	0	0	0	87	0	25	154	0	2	136
Lane Group Flow (vph)	206	2041	0	366	1801	532	72	383	222	663	294	95
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	10.2	49.7		19.6	59.1	59.1	10.8	38.4	38.4	23.8	51.4	51.4
Effective Green, g (s)	10.2	49.7		19.6	59.1	59.1	10.8	38.4	38.4	23.8	51.4	51.4
Actuated g/C Ratio	0.07	0.32		0.13	0.39	0.39	0.07	0.25	0.25	0.16	0.34	0.34
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	228	1643		438	1959	609	124	408	376	532	585	503
v/s Ratio Prot	0.06	c0.40		c0.11	c0.35		0.04	c0.23		c0.19	0.17	
v/s Ratio Perm						0.34			0.15			0.06
v/c Ratio	0.90	1.24		0.84	0.92	0.87	0.58	0.94	0.59	1.25	0.50	0.19
Uniform Delay, d1	71.1	51.9		65.3	44.9	43.7	69.1	56.3	50.6	64.8	40.8	36.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	34.6	114.4		12.9	7.4	13.2	6.8	29.0	2.4	125.9	0.7	0.2
Delay (s)	105.7	166.3		78.3	52.3	56.9	75.9	85.3	52.9	190.7	41.5	36.4
Level of Service	F	F		E	D	E	E	F	D	F	D	D
Approach Delay (s)		160.7			56.7			70.3			123.6	
Approach LOS		F			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		102.6			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.10										
Actuated Cycle Length (s)		153.4			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		103.9%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

Timing Plan: AM PEAK

HCM Signalized Intersection Capacity Analysis

Timing Plan: AM PEAK

HCM Signalized Intersection Capacity Analysis

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

Mitigated Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	15	234	0	0	129	646	0	0	0	108	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00				1.00	1.00	
Frt		1.00			1.00	0.85				1.00	0.85	
Flt Protected		1.00			1.00	1.00				0.95	1.00	
Satd. Flow (prot)		1857			1863	1583				1770	1583	
Flt Permitted		0.98			1.00	1.00				0.76	1.00	
Satd. Flow (perm)		1828			1863	1583				1410	1583	
Peak-hour factor, PHF	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Adj. Flow (vph)	18	279	0	0	139	695	0	0	0	119	0	7
RTOR Reduction (vph)	0	0	0	0	0	401	0	0	0	0	5	0
Lane Group Flow (vph)	0	297	0	0	139	294	0	0	0	119	2	0
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		4			8		2				6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)		12.9			12.9	12.9				9.6	9.6	
Effective Green, g (s)		12.9			12.9	12.9				9.6	9.6	
Actuated g/C Ratio		0.42			0.42	0.42				0.31	0.31	
Clearance Time (s)		4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)		773			787	669				443	498	
v/s Ratio Prot					0.07						0.00	
v/s Ratio Perm		0.16				c0.19				c0.08		
v/c Ratio		0.38			0.18	0.44				0.27	0.00	
Uniform Delay, d1		6.1			5.5	6.2				7.8	7.2	
Progression Factor		1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2		0.3			0.1	0.5				0.3	0.0	
Delay (s)		6.4			5.6	6.7				8.2	7.2	
Level of Service		A			A	A				A	A	
Approach Delay (s)		6.4			6.5		0.0				8.1	
Approach LOS		A			A		A				A	
Intersection Summary												
HCM 2000 Control Delay		6.6			HCM 2000 Level of Service				A			
HCM 2000 Volume to Capacity ratio		0.37										
Actuated Cycle Length (s)		30.5			Sum of lost time (s)				8.0			
Intersection Capacity Utilization		59.8%			ICU Level of Service				B			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
22: 3rd St & Palm Ave

Mitigated Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	333	5	27	751		25	12	15	127	12	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0					4.0		4.0
Lane Util. Factor	1.00	1.00		1.00	1.00					1.00		1.00
Frt	1.00	1.00		1.00	1.00					0.89		0.95
Flt Protected	0.95	1.00		0.95	1.00					1.00		0.98
Satd. Flow (prot)	1770	1858		1770	1854					1650		1736
Flt Permitted	0.21	1.00		0.52	1.00					0.98		0.91
Satd. Flow (perm)	384	1858		960	1854					1616		1596
Peak-hour factor, PHF	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.81	0.80	0.80
Adj. Flow (vph)	9	387	6	29	808		27	15	19	157	15	14
RTOR Reduction (vph)	0	1	0	0	2		0	0	124	0	0	15
Lane Group Flow (vph)	9	392	0	29	833		0	0	67	0	0	33
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8					2		6
Permitted Phases	4			8			2				6	
Actuated Green, G (s)	25.5	25.5		25.5	25.5					8.8		8.8
Effective Green, g (s)	25.5	25.5		25.5	25.5					8.8		8.8
Actuated g/C Ratio	0.60	0.60		0.60	0.60					0.21		0.21
Clearance Time (s)	4.0	4.0		4.0	4.0					4.0		4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)	231	1120		578	1117					336		332
v/s Ratio Prot		0.21			c0.45							
v/s Ratio Perm	0.02			0.03						c0.04		0.02
v/c Ratio	0.04	0.35		0.05	0.75					0.20		0.10
Uniform Delay, d1	3.4	4.2		3.4	6.1					13.8		13.5
Progression Factor	1.00	1.00		1.00	1.00					1.00		1.00
Incremental Delay, d2	0.1	0.2		0.0	2.8					0.3		0.1
Delay (s)	3.5	4.4		3.5	8.8					14.1		13.7
Level of Service	A	A		A	A					B		B
Approach Delay (s)		4.4			8.6					14.1		13.7
Approach LOS		A			A					B		B
Intersection Summary												
HCM 2000 Control Delay		8.4			HCM 2000 Level of Service				A			
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		42.3			Sum of lost time (s)				8.0			
Intersection Capacity Utilization		57.4%			ICU Level of Service				B			
Analysis Period (min)		15										
c Critical Lane Group												

























NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Mitigated Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱	↕			↱
Volume (veh/h)	238	473	739	154	0	224
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	301	599	901	188	0	315
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked	0.84				0.84	0.84
vC, conflicting volume	1089				2196	545
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	716				2039	65
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	59				100	62
cM capacity (veh/h)	737				24	825
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	301	599	601	488	315	
Volume Left	301	0	0	0	0	
Volume Right	0	0	0	188	315	
cSH	737	1700	1700	1700	825	
Volume to Capacity	0.41	0.35	0.35	0.29	0.38	
Queue Length 95th (ft)	50	0	0	0	45	
Control Delay (s)	13.2	0.0	0.0	0.0	12.0	
Lane LOS	B				B	
Approach Delay (s)	4.4		0.0		12.0	
Approach LOS					B	
Intersection Summary						
Average Delay			3.4			
Intersection Capacity Utilization			45.9%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)










Mitigated Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Volume (vph)	22	701	40	25	1892	45	170	38	53	93	47	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.91		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5044		1770	5068		1770	1700		1770	1762	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5044		1770	5068		1770	1700		1770	1762	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	26	835	48	27	2079	49	205	46	64	113	57	32
RTOR Reduction (vph)	0	3	0	0	1	0	0	27	0	0	11	0
Lane Group Flow (vph)	26	880	0	27	2127	0	205	83	0	113	78	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	15.0	88.1		12.0	85.1		23.6	44.8		16.8	38.0	
Effective Green, g (s)	15.0	88.1		12.0	85.1		23.6	44.8		16.8	38.0	
Actuated g/C Ratio	0.08	0.49		0.07	0.47		0.13	0.25		0.09	0.21	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	147	2468		118	2396		232	423		165	371	
v/s Ratio Prot	0.01	c0.17		c0.02	c0.42		c0.12	0.05		0.06	c0.04	
v/s Ratio Perm												
v/c Ratio	0.18	0.36		0.23	0.89		0.88	0.20		0.68	0.21	
Uniform Delay, d1	76.8	28.4		79.6	43.1		76.9	53.4		79.0	58.6	
Progression Factor	1.00	1.00		1.16	0.79		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.4		0.8	4.3		30.2	0.2		11.2	0.3	
Delay (s)	77.3	28.8		93.1	38.4		107.0	53.6		90.2	58.9	
Level of Service	E	C		F	D		F	D		F	E	
Approach Delay (s)		30.2			39.0			88.4			76.4	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay			43.2		HCM 2000 Level of Service					D		
HCM 2000 Volume to Capacity ratio			0.66									
Actuated Cycle Length (s)			180.0		Sum of lost time (s)					18.3		
Intersection Capacity Utilization			74.6%		ICU Level of Service					D		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Mitigated Near Term (1 CVN) with Alternative 3 No Hooper










Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	1011	66	100	1920	54	151	20	94	174	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1136	74	120	2313	65	170	22	106	232	49	21
RTOR Reduction (vph)	0	4	0	0	0	27	0	0	95	0	3	0
Lane Group Flow (vph)	4	1206	0	120	2313	38	0	192	11	0	299	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Effective Green, g (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Actuated g/C Ratio	0.02	0.48		0.11	0.57	0.57		0.10	0.10		0.20	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2427		196	2901	903		184	163		682	
v/s Ratio Prot	0.00	0.24		c0.07	c0.45			c0.11			c0.09	
v/s Ratio Perm					0.02			0.01				
v/c Ratio	0.10	0.50		0.61	0.80	0.04		1.04	0.07		0.44	
Uniform Delay, d1	86.2	31.8		76.3	30.5	17.0		80.7	72.9		62.8	
Progression Factor	1.12	0.68		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.7		5.6	2.4	0.1		78.3	0.2		0.5	
Delay (s)	97.9	22.4		81.9	32.8	17.1		159.0	73.0		63.3	
Level of Service	F	C		F	C	B		F	E		E	
Approach Delay (s)		22.6			34.8			128.4			63.3	
Approach LOS		C			C			F			E	
Intersection Summary												
HCM 2000 Control Delay		39.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		91.0%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Mitigated Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	1300	31	254	1989	223	78	75	800	244	96	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		3433	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		3433	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	110	1512	36	270	2116	237	87	83	889	290	114	95
RTOR Reduction (vph)	0	2	0	0	0	59	0	137	167	0	2	61
Lane Group Flow (vph)	110	1546	0	270	2116	178	87	355	313	290	122	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	5.1	46.3		15.2	56.4	56.4	9.3	34.5	34.5	11.8	37.0	37.0
Effective Green, g (s)	5.1	46.3		15.2	56.4	56.4	9.3	34.5	34.5	11.8	37.0	37.0
Actuated g/C Ratio	0.04	0.36		0.12	0.43	0.43	0.07	0.27	0.27	0.09	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	134	1809		402	2211	688	126	412	400	312	498	429
v/s Ratio Prot	0.03	0.31		c0.08	c0.42		0.05	c0.23		c0.08	0.07	
v/s Ratio Perm					0.11			0.21				0.02
v/c Ratio	0.82	0.85		0.67	0.96	0.26	0.69	0.86	0.78	0.93	0.24	0.06
Uniform Delay, d1	61.8	38.6		54.9	35.5	23.3	58.8	45.3	44.1	58.5	35.6	33.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	31.5	4.2		4.4	10.7	0.2	15.1	16.6	9.6	32.7	0.3	0.1
Delay (s)	93.4	42.8		59.2	46.2	23.5	73.9	61.9	53.7	91.2	35.9	33.7
Level of Service	F	D		E	D	C	E	E	D	F	D	C
Approach Delay (s)		46.1			45.5			59.2			67.7	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		50.0			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		129.7			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		88.2%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus Mitigated Near Term (1 CVN) with Alternative 3 No Hooper
10: SR-75 (Silver Strand Blvd) & Tulagi Rd Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	296	4	741	53	0	1580
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1771		3539	1467		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1771		3539	1467		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	375	5	823	59	0	1775
RTOR Reduction (vph)	1	0	0	31	0	0
Lane Group Flow (vph)	379	0	823	28	0	1775
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		55.1	55.1		55.1
Effective Green, g (s)	50.0		55.1	55.1		55.1
Actuated g/C Ratio	0.43		0.48	0.48		0.48
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	770		1695	702		1695
v/s Ratio Prot	c0.21		0.23			c0.50
v/s Ratio Perm				0.02		
v/c Ratio	0.49		0.49	0.04		1.05
Uniform Delay, d1	23.4		20.3	15.9		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.5		0.2	0.0		35.4
Delay (s)	23.9		20.5	15.9		65.3
Level of Service	C		C	B		E
Approach Delay (s)	23.9		20.2			65.3
Approach LOS	C		C			E
Intersection Summary						
HCM 2000 Control Delay			47.0		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.78			
Actuated Cycle Length (s)			115.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			93.6%		ICU Level of Service	F
Analysis Period (min)			15			
c Critical Lane Group						



















NBC Coastal Campus Mitigated Near Term (1 CVN) with Alternative 3 No Hooper
19: 7th St & SR-75 (Silver Strand Blvd) Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↗	↖	↗	↗	↖	↖	↖	↖	↖	↖
Volume (vph)	59	1008	57	0	368	36	18	41	5	25	27	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99			0.99		1.00	0.98		1.00	0.93	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5044			5018		1770	1833		1770	1737	
Flt Permitted	0.95	1.00			1.00		0.72	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5044			5018		1340	1833		248	1737	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	67	1145	65	0	391	38	26	59	7	29	32	26
RTOR Reduction (vph)	0	4	0	0	7	0	0	2	0	0	17	0
Lane Group Flow (vph)	67	1206	0	0	422	0	26	64	0	29	41	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1908			2037		260	356		41	289	
v/s Ratio Prot	c0.04	c0.24			c0.08			c0.03			0.02	
v/s Ratio Perm							0.02			c0.12		
v/c Ratio	0.34	0.63			0.21		0.10	0.18		0.71	0.14	
Uniform Delay, d1	73.9	45.7			34.7		59.6	60.5		70.9	64.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.0	1.6			0.2		0.2	0.2		43.2	0.2	
Delay (s)	75.0	47.3			34.9		59.7	60.7		114.0	64.3	
Level of Service	E	D			C		E	E		F	E	
Approach Delay (s)		48.8			34.9			60.5			80.8	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		47.7			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.49										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			22.3				
Intersection Capacity Utilization		67.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

Mitigated Near Term (1 CVN) with Alternative 3 No Hooper



















Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	214	0	0	308	175	0	0	0	640	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00				1.00	1.00	
Frt		1.00			1.00	0.85				1.00	0.85	
Flt Protected		1.00			1.00	1.00				0.95	1.00	
Satd. Flow (prot)		1861			1863	1583				1770	1583	
Flt Permitted		0.99			1.00	1.00				0.76	1.00	
Satd. Flow (perm)		1845			1863	1583				1410	1583	
Peak-hour factor, PHF	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.92	0.66	0.66
Adj. Flow (vph)	6	249	0	0	350	199	0	0	0	696	0	21
RTOR Reduction (vph)	0	0	0	0	0	144	0	0	0	0	8	0
Lane Group Flow (vph)	0	255	0	0	350	55	0	0	0	696	13	0
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		4			8		2				6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)		17.7			17.7	17.7				38.9	38.9	
Effective Green, g (s)		17.7			17.7	17.7				38.9	38.9	
Actuated g/C Ratio		0.27			0.27	0.27				0.60	0.60	
Clearance Time (s)		4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)		505			510	433				849	953	
v/s Ratio Prot					c0.19						0.01	
v/s Ratio Perm		0.14				0.03				c0.49		
v/c Ratio		0.50			0.69	0.13				0.82	0.01	
Uniform Delay, d1		19.8			21.0	17.6				10.1	5.2	
Progression Factor		1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2		0.8			3.8	0.1				6.2	0.0	
Delay (s)		20.6			24.8	17.8				16.3	5.2	
Level of Service		C			C	B				B	A	
Approach Delay (s)		20.6			22.2		0.0				16.0	
Approach LOS		C			C		A				B	
Intersection Summary												
HCM 2000 Control Delay			19.0		HCM 2000 Level of Service					B		
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		64.6			Sum of lost time (s)					8.0		
Intersection Capacity Utilization		58.3%			ICU Level of Service					B		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
22: 3rd St & Palm Ave

Mitigated Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	831	13	86	456	25	15	39	69	29	34	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.92			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1770	1858		1770	1848			1711			1784	
Flt Permitted	0.41	1.00		0.12	1.00			0.96			0.69	
Satd. Flow (perm)	769	1858		225	1848			1649			1262	
Peak-hour factor, PHF	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Adj. Flow (vph)	10	1065	17	97	512	28	26	68	121	63	74	30
RTOR Reduction (vph)	0	1	0	0	2	0	0	55	0	0	10	0
Lane Group Flow (vph)	10	1081	0	97	538	0	0	160	0	0	157	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	54.1	54.1		54.1	54.1			15.0			15.0	
Effective Green, g (s)	54.1	54.1		54.1	54.1			15.0			15.0	
Actuated g/C Ratio	0.70	0.70		0.70	0.70			0.19			0.19	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	539	1303		157	1296			320			245	
v/s Ratio Prot		c0.58			0.29							
v/s Ratio Perm	0.01			0.43				0.10			c0.12	
v/c Ratio	0.02	0.83		0.62	0.42			0.50			0.64	
Uniform Delay, d1	3.5	8.2		6.1	4.8			27.7			28.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	4.5		7.1	0.2			1.2			5.7	
Delay (s)	3.5	12.7		13.1	5.1			28.9			34.2	
Level of Service	A	B		B	A			C			C	
Approach Delay (s)		12.7			6.3			28.9			34.2	
Approach LOS		B			A			C			C	
Intersection Summary												
HCM 2000 Control Delay			14.1		HCM 2000 Level of Service					B		
HCM 2000 Volume to Capacity ratio			0.79									
Actuated Cycle Length (s)			77.1		Sum of lost time (s)					8.0		
Intersection Capacity Utilization			69.2%		ICU Level of Service					C		
Analysis Period (min)			15									
c Critical Lane Group												

Mitigated Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

HCM Unsignalized Intersection Capacity Analysis
KHA
Synchro 8 Report
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





Mitigated Near Term (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

HCM Signalized Intersection Capacity Analysis
KHA
Synchro 8 Report
Page 6

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Mitigated Near Term (1 CVN) with Alternative 3 No Hooper










Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	1898	206	162	1372	84	133	42	132	159	46	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5011		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5011		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	30	2019	219	167	1414	87	145	46	143	215	62	28
RTOR Reduction (vph)	0	7	0	0	0	35	0	0	131	0	4	0
Lane Group Flow (vph)	30	2231	0	167	1414	52	0	191	12	0	301	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	85.7		20.0	90.1	90.1		15.0	15.0		40.0	
Effective Green, g (s)	16.0	85.7		20.0	90.1	90.1		15.0	15.0		40.0	
Actuated g/C Ratio	0.09	0.48		0.11	0.50	0.50		0.08	0.08		0.22	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2385		196	2545	792		149	131		749	
v/s Ratio Prot	0.02	c0.45		c0.09	c0.28			c0.11			c0.09	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.19	0.94		0.85	0.56	0.07		1.28	0.09		0.40	
Uniform Delay, d1	76.0	44.5		78.5	31.1	23.2		82.5	76.2		59.8	
Progression Factor	0.98	0.82		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	7.3		28.2	0.9	0.2		168.3	1.4		1.6	
Delay (s)	75.0	44.0		106.8	32.0	23.4		250.8	77.6		61.4	
Level of Service	E	D		F	C	C		F	E		E	
Approach Delay (s)		44.4			39.0			176.6			61.4	
Approach LOS		D			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		53.2			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		95.8%			ICU Level of Service				F			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)















Mitigated Near Term (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	196	1966	28	340	1689	576	68	184	553	610	248	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	206	2069	29	366	1816	619	72	196	588	663	270	257
RTOR Reduction (vph)	0	1	0	0	0	86	0	26	155	0	2	136
Lane Group Flow (vph)	206	2097	0	366	1816	533	72	382	221	663	294	95
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	10.2	49.7		19.6	59.1	59.1	10.8	38.3	38.3	23.8	51.3	51.3
Effective Green, g (s)	10.2	49.7		19.6	59.1	59.1	10.8	38.3	38.3	23.8	51.3	51.3
Actuated g/C Ratio	0.07	0.32		0.13	0.39	0.39	0.07	0.25	0.25	0.16	0.33	0.33
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	228	1645		438	1960	610	124	407	375	532	584	503
v/s Ratio Prot	0.06	c0.41		c0.11	c0.36		0.04	c0.23		c0.19	0.17	
v/s Ratio Perm						0.34			0.15			0.06
v/c Ratio	0.90	1.27		0.84	0.93	0.87	0.58	0.94	0.59	1.25	0.50	0.19
Uniform Delay, d1	71.1	51.8		65.3	45.0	43.6	69.1	56.4	50.6	64.8	40.8	36.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	34.6	128.6		12.9	8.1	13.1	6.8	29.4	2.5	125.9	0.7	0.2
Delay (s)	105.6	180.4		78.2	53.1	56.8	75.8	85.8	53.1	190.6	41.5	36.4
Level of Service	F	F		E	D	E	E	F	D	F	D	D
Approach Delay (s)		173.7			57.2			70.6			123.6	
Approach LOS		F			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		107.4			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.11										
Actuated Cycle Length (s)		153.3			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		104.9%			ICU Level of Service				G			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
1: Glorietta Blvd & Fourth St







Near-Term (2 CVN)
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1419	35	0	3804	554	0	0	478	0	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1710	42	0	4135	602	0	0	598	0	0	13
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4757			1772			3162	6508	631	5046	6228	1719
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4757			1772			3162	6508	631	5046	6228	1719
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	82
cM capacity (veh/h)	21			342			3	0	1359	0	0	76
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	684	684	384	1654	1654	1429	598	13				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	42	0	0	602	598	13				
cSH	1700	1700	1700	1700	1700	1700	1359	76				
Volume to Capacity	0.40	0.40	0.23	0.97	0.97	0.84	0.44	0.18				
Queue Length 95th (ft)	0	0	0	0	0	0	57	15				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	62.2				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	62.2				
Approach LOS							A	F				
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			101.0%	ICU Level of Service					G			
Analysis Period (min)			15									

* User Entered Value



















NBC Coastal Campus
2: Pomona Ave & Fourth St

Near-Term (2 CVN)
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑↑			↑↑↑↑		↑	
Volume (veh/h)	1280	203	0	3703	0	233	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1455	231	0	4114	0	253	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1705		2981	640	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1705		2981	640	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	37	
cM capacity (veh/h)			363		11	404	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	582	582	522	1371	1371	1371	253
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	231	0	0	0	253
cSH	1700	1700	1700	1700	1700	1700	404
Volume to Capacity	0.34	0.34	0.31	0.81	0.81	0.81	0.63
Queue Length 95th (ft)	0	0	0	0	0	0	103
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.7
Lane LOS							D
Approach Delay (s)	0.0			0.0			27.7
Approach LOS							D
Intersection Summary							
Average Delay			1.2				
Intersection Capacity Utilization			86.4%		ICU Level of Service		E
Analysis Period (min)			15				













NBC Coastal Campus
3: Orange Ave & Third St

Near-Term (2 CVN)
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1591	1948	344	106	103	0	0	279	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4639		1770	3539			3505	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4639		1770	3539			3505	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1711	2095	370	143	139	0	0	321	15
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1027	3141	0	143	139	0	0	334	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3211		186	872			397	
v/s Ratio Prot				0.67	c0.68		c0.08	0.04			c0.10	
v/s Ratio Perm												
v/c Ratio				0.98	0.98		0.77	0.16			0.84	
Uniform Delay, d1				27.6	27.8		82.5	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				21.7	11.2		17.2	0.1			14.9	
Delay (s)				49.4	39.0		99.7	56.1			97.2	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			41.5			78.2			97.2	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay			47.6	HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio			0.94									
Actuated Cycle Length (s)			189.5	Sum of lost time (s)				16.8				
Intersection Capacity Utilization			201.0%	ICU Level of Service				H				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Near-Term (2 CVN)
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑		↑↑	↑↑	↑↑
Volume (vph)	1	585	65	0	0	0	0	198	221	453	1474	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3240	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3240	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	636	71	0	0	0	0	230	240	492	1535	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	24	48	0	0	0
Lane Group Flow (vph)	0	637	42	0	0	0	0	302	96	492	1535	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1170	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.43	
v/s Ratio Perm		0.13	0.03						0.07			
v/c Ratio		0.36	0.08					0.26	0.18	0.70	0.74	
Uniform Delay, d1		41.5	37.3					38.6	37.5	63.3	26.4	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.5	
Delay (s)		41.6	37.3					38.7	37.7	66.3	27.9	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.4			37.2	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.3		HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		201.0%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Near-Term (2 CVN)

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗		↖	↗
Volume (vph)	225	7	1187	626	0	1151
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3314			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3314			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	262	8	1276	673	0	1212
RTOR Reduction (vph)	2	0	54	0	0	0
Lane Group Flow (vph)	269	0	1895	0	0	1212
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	17.3		42.8			42.8
Effective Green, g (s)	17.3		42.8			42.8
Actuated g/C Ratio	0.25		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	397		2049			2079
v/s Ratio Prot	c0.17		c0.57			0.36
v/s Ratio Perm						
v/c Ratio	0.68		0.92			0.58
Uniform Delay, d1	23.4		11.8			7.9
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	4.5		7.7			0.4
Delay (s)	27.9		19.4			8.3
Level of Service	C		B			A
Approach Delay (s)	27.9		19.4			8.3
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			16.2		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.90			
Actuated Cycle Length (s)			69.2		Sum of lost time (s)	12.1
Intersection Capacity Utilization			79.5%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Near-Term (2 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↗	↖	↗	↖	↖	↗	↖
Volume (vph)	49	3	11	8	0	6	21	1410	27	41	1298	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1693	1583		1706		1770	3529		1770	3524	
Frt Permitted	0.74	0.78	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1308	1380	1583		1517		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	57	3	13	16	0	12	25	1679	32	45	1411	41
RTOR Reduction (vph)	0	0	11	0	24	0	0	1	0	0	1	0
Lane Group Flow (vph)	30	30	2	0	4	0	25	1710	0	45	1451	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.5	15.5	15.5		15.5		2.8	65.3		4.0	66.5	
Effective Green, g (s)	15.5	15.5	15.5		15.5		2.8	65.3		4.0	66.5	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	204	216	248		237		50	2330		71	2369	
v/s Ratio Prot							0.01	c0.48		c0.03	0.41	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.15	0.14	0.01		0.02		0.50	0.73		0.63	0.61	
Uniform Delay, d1	36.0	35.9	35.2		35.3		47.4	11.1		46.7	9.0	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		7.7	1.2		17.0	0.5	
Delay (s)	36.3	36.2	35.2		35.3		55.0	12.3		63.8	9.5	
Level of Service	D	D	D		D		E	B		E	A	
Approach Delay (s)		36.1			35.3			12.9			11.1	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.8		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.62									
Actuated Cycle Length (s)			98.9		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			57.5%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Near-Term (2 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	24	0	1352	8	444	846	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	36	0	1486	9	453	863	0
RTOR Reduction (vph)	0	0	0	0	33	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1486	4	453	863	0
Turn Type					NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.42		c0.26	0.24	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.89	0.01	0.74	0.29	
Uniform Delay, d1					60.6			35.2	20.4	41.8	2.4	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			5.0	0.0	4.9	0.2	
Delay (s)					60.6			17.8	20.5	46.7	2.6	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			17.8			17.8	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		18.4			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		80.8%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Near-Term (2 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	53	15	2	68	134	143	1184	6	303	261	324
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.98	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1860	1510	1770	3539	1347	1770	3192	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1860	1510	1770	3539	1347	1770	3192	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	49	82	23	2	77	152	159	1316	7	348	300	372
RTOR Reduction (vph)	0	0	21	0	0	128	0	0	4	0	154	0
Lane Group Flow (vph)	49	82	2	0	79	24	159	1316	3	348	518	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1047	
v/s Ratio Prot	0.03	c0.04			c0.04		0.09	c0.37		c0.20	0.16	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.40	0.64	0.02		0.27	0.10	0.29	0.84	0.01	1.02	0.49	
Uniform Delay, d1	64.6	65.7	62.9		53.6	52.2	37.9	35.5	22.3	58.5	39.1	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.91	
Incremental Delay, d2	2.2	10.5	0.1		0.5	0.2	0.3	5.4	0.0	53.7	1.6	
Delay (s)	66.8	76.2	63.0		54.1	52.3	38.2	40.9	22.4	109.9	37.0	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		71.2			52.9			40.5			61.9	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		50.7			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		85.2%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Near-Term (2 CVN)
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖			↖
Volume (veh/h)	24	207	5	91	339	9
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	28	244	6	114	368	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked	0.99					
vC, conflicting volume	810	63			120	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	801	63			120	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	76			75	
cM capacity (veh/h)	262	1001			1468	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	272	120	378			
Volume Left	28	0	368			
Volume Right	244	114	0			
cSH	1118	1700	1468			
Volume to Capacity	0.24	0.07	0.25			
Queue Length 95th (ft)	24	0	25			
Control Delay (s)	10.9	0.0	8.1			
Lane LOS	B		A			
Approach Delay (s)	10.9	0.0	8.1			
Approach LOS	B					
Intersection Summary						
Average Delay		7.8				
Intersection Capacity Utilization		35.9%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near-Term (2 CVN)
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖	↖		↖
Volume (vph)	27	4	1344	425	0	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.98		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.98		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1724		3539	1519		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1724		3539	1519		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	36	5	1415	447	0	369
RTOR Reduction (vph)	5	0	0	121	0	0
Lane Group Flow (vph)	36	0	1415	326	0	369
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	1.9		31.9	31.9		31.9
Effective Green, g (s)	1.9		31.9	31.9		31.9
Actuated g/C Ratio	0.04		0.73	0.73		0.73
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	74		2583	1108		2583
v/s Ratio Prot	c0.02		c0.40			0.10
v/s Ratio Perm				0.21		
v/c Ratio	0.49		0.55	0.29		0.14
Uniform Delay, d1	20.4		2.7	2.0		1.8
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	5.0		0.2	0.1		0.0
Delay (s)	25.4		2.9	2.2		1.8
Level of Service	C		A	A		A
Approach Delay (s)	25.4		2.7			1.8
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.0		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.54				
Actuated Cycle Length (s)		43.7		Sum of lost time (s)	9.9	
Intersection Capacity Utilization		49.6%		ICU Level of Service	A	
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Near-Term (2 CVN)

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖↗		↖	↖↗
Volume (veh/h)	0	16	2197	6	6	264
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	28	2362	6	9	388
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2577	1184			2369	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2577	1184			2369	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	85			96	
cM capacity (veh/h)	20	182			202	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	28	1575	794	9	194	194
Volume Left	0	0	0	9	0	0
Volume Right	28	0	6	0	0	0
cSH	182	1700	1700	202	1700	1700
Volume to Capacity	0.15	0.93	0.47	0.04	0.11	0.11
Queue Length 95th (ft)	13	0	0	3	0	0
Control Delay (s)	28.3	0.0	0.0	23.6	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	28.3	0.0		0.5		
Approach LOS	D					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		70.9%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

Near-Term (2 CVN)

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖↗	↖	↖	↖↗
Volume (vph)	18	90	2108	13	39	225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	22	111	2267	14	57	326
RTOR Reduction (vph)	0	3	0	1	0	0
Lane Group Flow (vph)	22	108	2267	13	57	326
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.9	26.0	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.9	20.9	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	262	308	2251	1007	82	2707
v/s Ratio Prot	0.01	c0.07	c0.64		c0.03	0.09
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.35	1.01	0.01	0.70	0.12
Uniform Delay, d1	39.4	37.3	19.5	7.2	50.3	3.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	20.7	0.0	22.5	0.0
Delay (s)	39.5	38.0	40.2	7.2	72.9	3.3
Level of Service	D	D	D	A	E	A
Approach Delay (s)	38.2		40.0			13.6
Approach LOS	D		D			B
Intersection Summary						
HCM 2000 Control Delay		36.3		HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio		0.87				
Actuated Cycle Length (s)		107.2		Sum of lost time (s)		18.1
Intersection Capacity Utilization		74.7%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Near-Term (2 CVN)
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↖		↖	↖
Volume (veh/h)	0	34	2085	27	0	241
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	55	2195	28	0	326
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2372	1112			2223	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2372	1112			2223	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	73			100	
cM capacity (veh/h)	29	203			231	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	55	1463	760	163	163	
Volume Left	0	0	0	0	0	
Volume Right	55	0	28	0	0	
cSH	203	1700	1700	1700	1700	
Volume to Capacity	0.27	0.86	0.45	0.10	0.10	
Queue Length 95th (ft)	26	0	0	0	0	
Control Delay (s)	29.1	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	29.1	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.6				
Intersection Capacity Utilization		68.5%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Near-Term (2 CVN)
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖	↖	↖	↖
Volume (vph)	11	7	2111	34	16	217
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	18	11	2199	35	20	268
RTOR Reduction (vph)	0	4	0	8	0	0
Lane Group Flow (vph)	18	7	2199	27	20	268
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.5	59.2	59.2	2.1	68.8
Effective Green, g (s)	1.4	3.5	59.2	59.2	2.1	68.8
Actuated g/C Ratio	0.02	0.05	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	72	2727	1220	48	3170
v/s Ratio Prot	c0.01	0.00	c0.62		c0.01	0.08
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.56	0.10	0.81	0.02	0.42	0.08
Uniform Delay, d1	37.4	35.1	5.3	2.1	36.7	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	20.7	0.6	1.8	0.0	5.8	0.0
Delay (s)	58.1	35.7	7.2	2.1	42.5	0.5
Level of Service	E	D	A	A	D	A
Approach Delay (s)	49.6		7.1			3.4
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		7.1		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.79				
Actuated Cycle Length (s)		76.8		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		71.2%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (2 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control	Stop			Yield			Stop		Stop	
Volume (vph)	0	3	0	47	2	0	46	3	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	12	0	87	4	0	73	5	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	12	0	91	73	5					
Volume Left (vph)	0	0	87	0	0					
Volume Right (vph)	0	0	0	0	5					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.2	3.2					
Degree Utilization, x	0.01	0.00	0.11	0.08	0.00					
Capacity (veh/h)	829	1121	814	835	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.4%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (2 CVN)

Timing Plan: AM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑			↑	↑	↑	↑	↑			
Volume (vph)	3	38	0	0	34	233	4	1909	53	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1353	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	4	51	0	0	47	324	4	2031	56	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	23	0	0	0	0
Lane Group Flow (vph)	4	51	0	0	47	268	4	2031	33	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.9	16.9			16.9	16.9	47.7	43.6	43.6			
Effective Green, g (s)	16.9	16.9			16.9	16.9	47.7	43.6	43.6			
Actuated g/C Ratio	0.23	0.23			0.23	0.23	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	309	426			426	362	1142	2087	933			
v/s Ratio Prot		0.03			0.03		0.00	c0.57				
v/s Ratio Perm	0.00					c0.17			0.02			
v/c Ratio	0.01	0.12			0.11	0.74	0.00	0.97	0.04			
Uniform Delay, d1	22.0	22.6			22.6	26.5	4.7	14.6	6.3			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	8.0	0.0	13.9	0.0			
Delay (s)	22.1	22.7			22.7	34.4	4.7	28.4	6.4			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.7				32.9		27.8			0.0	
Approach LOS		C				C		C			A	
Intersection Summary												
HCM 2000 Control Delay		28.5				HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio		0.91										
Actuated Cycle Length (s)		73.9				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		86.8%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near-Term (2 CVN)

Timing Plan: AM PEAK





















							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	0	1703	0	185	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	0	1774	0	234	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1121	117	234		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1121	117	234		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	200	913	1330		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	887	887	156	78	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.52	0.52	0.09	0.05	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay		0.0					
Intersection Capacity Utilization		50.4%		ICU Level of Service		A	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near-Term (2 CVN)

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	406	2	40	50	8	21	27	1579	11	4	138	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	1.00		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1595		1770	1661		1770	3535		1770	3406	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1595		1770	1661		1770	3535		1770	3406	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	461	2	45	161	26	68	28	1662	12	6	200	67
RTOR Reduction (vph)	0	31	0	0	64	0	0	1	0	0	29	0
Lane Group Flow (vph)	461	16	0	161	30	0	28	1673	0	6	238	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	28.1	28.1		5.1	5.1		2.0	40.1		0.9	39.0	
Effective Green, g (s)	28.1	28.1		5.1	5.1		2.0	40.1		0.9	39.0	
Actuated g/C Ratio	0.30	0.30		0.05	0.05		0.02	0.43		0.01	0.42	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	534	481		96	90		38	1522		17	1426	
v/s Ratio Prot	c0.26	0.01		c0.09	0.02		c0.02	c0.47		0.00	0.07	
v/s Ratio Perm												
v/c Ratio	0.86	0.03		1.68	0.33		0.74	1.10		0.35	0.17	
Uniform Delay, d1	30.7	22.9		44.0	42.4		45.3	26.5		45.8	16.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	13.5	0.0		345.6	2.2		53.2	55.3		12.2	0.1	
Delay (s)	44.2	22.9		389.6	44.5		98.5	81.8		58.0	17.0	
Level of Service	D	C		F	D		F	F		E	B	
Approach Delay (s)		42.3			262.4			82.1			17.9	
Approach LOS		D			F			F			B	
Intersection Summary												
HCM 2000 Control Delay		85.1						HCM 2000 Level of Service		F		
HCM 2000 Volume to Capacity ratio		1.05										
Actuated Cycle Length (s)		93.1						Sum of lost time (s)		18.9		
Intersection Capacity Utilization		81.6%						ICU Level of Service		D		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Near-Term (2 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	8	222	20	0	1433	18	39	24	2	21	43	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5023			5076		1770	1845			1732	
Flt Permitted	0.95	1.00			1.00		0.66	1.00			0.17	
Satd. Flow (perm)	1770	5023			5076		1229	1845			292	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	0.77
Adj. Flow (vph)	9	249	22	0	1575	20	46	29	2	27	56	70
RTOR Reduction (vph)	0	6	0	0	1	0	0	2	0	0	17	0
Lane Group Flow (vph)	9	265	0	0	1594	0	46	29	0	0	136	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1900			2061		238	358			48	
v/s Ratio Prot	c0.01	0.05			c0.31			0.02				
v/s Ratio Perm							c0.04				c0.47	
v/c Ratio	0.05	0.14			0.77		0.19	0.08			2.84	
Uniform Delay, d1	71.5	36.7			46.3		60.7	59.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.2			2.7		0.4	0.1			882.4	
Delay (s)	71.6	36.9			49.0		61.1	59.4			957.4	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		38.0			49.0			60.4			957.4	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		114.0			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.94										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		66.5%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Near-Term (2 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	239	0	407	1442	9	0	0	0	0	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	291	0	433	1534	10	0	0	0	0	0	19
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	291	0	433	1544	0	0	0	0	0	0	7
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.06		0.13	c0.44							
v/s Ratio Perm												0.00
v/c Ratio		0.15		0.25	0.48							0.01
Uniform Delay, d1		36.9		25.7	1.3							34.9
Progression Factor		0.40		1.00	1.00							1.00
Incremental Delay, d2		0.2		0.1	0.1							0.0
Delay (s)		14.9		25.8	1.4							35.0
Level of Service		B		C	A							C
Approach Delay (s)		14.9			6.8		0.0				35.0	
Approach LOS		B		A			A				C	
Intersection Summary												
HCM 2000 Control Delay		8.0			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.50										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		61.8%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

Near-Term (2 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	10	234	0	0	129	105	0	0	0	48	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	12	279	0	0	139	113	0	0	0	53	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	252			279			503	554	279	498	498	195
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	252			279			503	554	279	498	498	195
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1314			1284			473	436	760	480	470	846
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	290	252	0	58								
Volume Left	12	0	0	53								
Volume Right	0	113	0	5								
cSH	1314	1284	1700	500								
Volume to Capacity	0.01	0.00	0.00	0.12								
Queue Length 95th (ft)	1	0	0	10								
Control Delay (s)	0.4	0.0	0.0	13.1								
Lane LOS	A			A	B							
Approach Delay (s)	0.4	0.0	0.0	13.1								
Approach LOS				A	B							
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				30.4%								A
Analysis Period (min)				15								

NBC Coastal Campus

22: 3rd St & Palm Ave













Near-Term (2 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	273	5	27	210	25	12	15	127	12	11	15
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	9	317	6	29	226	27	15	19	157	15	14	19
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	323	29	253	190	48						
Volume Left (vph)	9	0	29	0	15	15						
Volume Right (vph)	0	6	0	27	157	19						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.1	5.5	5.1	5.7						
Degree Utilization, x	0.02	0.50	0.05	0.39	0.27	0.08						
Capacity (veh/h)	575	631	562	625	632	544						
Control Delay (s)	7.9	12.6	8.2	10.7	10.0	9.2						
Approach Delay (s)	12.5		10.5		10.0	9.2						
Approach LOS	B		B		A	A						
Intersection Summary												
Delay				11.1								
Level of Service				B								
Intersection Capacity Utilization				37.7%								A
Analysis Period (min)				15								

























NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Near-Term (2 CVN)
Timing Plan: AM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	226	428	335	154	18	70
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	286	542	409	188	25	99
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	596				1616	298
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	596				1616	298
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	71				62	86
cM capacity (veh/h)	976				67	698
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	286	542	272	324	124	
Volume Left	286	0	0	0	25	
Volume Right	0	0	0	188	99	
cSH	976	1700	1700	1700	238	
Volume to Capacity	0.29	0.32	0.16	0.19	0.52	
Queue Length 95th (ft)	31	0	0	0	68	
Control Delay (s)	10.2	0.0	0.0	0.0	35.5	
Lane LOS	B				E	
Approach Delay (s)	3.5		0.0		35.5	
Approach LOS					E	
Intersection Summary						
Average Delay			4.7			
Intersection Capacity Utilization			42.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Near-Term (2 CVN)
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	421	16	27	336		66	37		82	2	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3520		1770	3539			1721			1857	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.87			0.98	1.00
Satd. Flow (perm)	929	3520		817	3539			1527			1824	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	22	547	21	35	436		100	56	124	3	48	48
RTOR Reduction (vph)	0	4	0	0	0	0	0	33	0	0	0	30
Lane Group Flow (vph)	22	564	0	35	436	0	0	247	0	0	51	18
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.5	13.5		13.5	13.5			13.3			13.3	13.3
Effective Green, g (s)	13.5	13.5		13.5	13.5			13.3			13.3	13.3
Actuated g/C Ratio	0.38	0.38		0.38	0.38			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	348	1320		306	1327			564			673	584
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.16			0.03	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.44			0.08	0.03
Uniform Delay, d1	7.2	8.4		7.3	8.0			8.5			7.4	7.2
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.1			0.5			0.0	0.0
Delay (s)	7.3	8.6		7.5	8.2			9.1			7.4	7.3
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.5			8.1			9.1			7.3	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.4		HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio			0.43									
Actuated Cycle Length (s)			36.0		Sum of lost time (s)			9.2				
Intersection Capacity Utilization			47.4%		ICU Level of Service			A				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Near-Term (2 CVN)
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗			↙	
Volume (veh/h)	506	5	0	0	3	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	550	5	0	0	3	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			555		550	550
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			555		550	550
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1015		496	535
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	550	5	10			
Volume Left	0	0	3			
Volume Right	0	5	7			
cSH	1700	1700	521			
Volume to Capacity	0.32	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.0			
Lane LOS			B			
Approach Delay (s)	0.0		12.0			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near-Term (2 CVN)
Timing Plan: AM PEAK

























	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑↑	↘	↙	↑↑↑			↗		↗	↑↑	↘
Volume (vph)	22	670	40	25	1584	45	168	38	1900	93	47	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5042		1770	5064			3323			3361	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5042		1770	5064			3323			3361	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	26	798	48	27	1741	49	202	46	64	113	57	32
RTOR Reduction (vph)	0	3	0	0	2	0	0	13	0	0	9	0
Lane Group Flow (vph)	26	843	0	27	1788	0	0	299	0	0	193	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2232		118	2157			646			653	
v/s Ratio Prot	0.01	c0.17		c0.02	c0.35			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.18	0.38		0.23	0.83			0.46			0.30	
Uniform Delay, d1	76.8	33.6		79.6	45.8			64.2			62.0	
Progression Factor	1.00	1.00		1.30	0.69			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.9	3.4			0.5			0.3	
Delay (s)	77.3	34.0		104.4	35.0			64.7			62.2	
Level of Service	E	C		F	C			E			E	
Approach Delay (s)		35.3			36.0			64.7			62.2	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		40.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		68.7%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

27: Florida St & SR-75 (Palm Ave)

Near-Term (2 CVN)

Timing Plan: AM PEAK

























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	908	36	21	1763	13	19	5	32	57	11	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5080			1691		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.65	1.00	
Satd. Flow (perm)	1770	5057		1770	5080			1545		1208	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	3	1020	40	24	2003	15	26	7	44	81	16	23
RTOR Reduction (vph)	0	2	0	0	0	0	0	27	0	0	19	0
Lane Group Flow (vph)	3	1058	0	24	2018	0	0	50	0	81	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3716			257		201	283	
v/s Ratio Prot	0.00	0.21		c0.01	c0.40						0.01	
v/s Ratio Perm								0.03		c0.07		
v/c Ratio	0.08	0.30		0.20	0.54			0.20		0.40	0.07	
Uniform Delay, d1	86.2	11.1		79.5	10.8			64.6		67.0	63.2	
Progression Factor	1.62	0.28		1.39	0.31			1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.2		0.6	0.4			0.4		1.3	0.1	
Delay (s)	140.0	3.3		111.0	3.7			65.0		68.3	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.7			5.0			65.0			66.7	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.51										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		67.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

28: 13th St & SR-75 (Palm Ave)

Near-Term (2 CVN)

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	981	66	100	1614	54	149	20	94	174	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5037		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5037		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1102	74	120	1945	65	167	22	106	232	49	21
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	88	0	3	0
Lane Group Flow (vph)	4	1172	0	120	1945	35	0	189	18	0	299	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.23		c0.07	c0.38			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.10	0.53		0.61	0.72	0.04		0.62	0.07		0.51	
Uniform Delay, d1	86.2	36.4		76.3	32.0	20.2		69.0	62.4		67.7	
Progression Factor	1.20	0.63		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.9		5.6	1.7	0.1		3.6	0.1		0.8	
Delay (s)	104.6	23.6		81.9	33.7	20.3		72.6	62.5		68.4	
Level of Service	F	C		F	C	C		E	E		E	
Approach Delay (s)		23.9			36.0			69.0			68.4	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		37.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		85.1%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Near-Term (2 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	295	1118	0	161	1047
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	331	1202	0	179	1163
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	331	1202	0	179	1158
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	18
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.34		0.10	c0.42
v/s Ratio Perm						
v/c Ratio		0.12	1.03		0.86	0.76
Uniform Delay, d1		2.5	26.8		34.7	13.9
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	34.3		29.2	2.2
Delay (s)		2.5	61.1		63.8	16.0
Level of Service		A	E		E	B
Approach Delay (s)		2.5	61.1		22.4	
Approach LOS		A	E		C	
Intersection Summary						
HCM 2000 Control Delay			36.3		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.92			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			59.4%		ICU Level of Service	B
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Near-Term (2 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↖		↖	↗				
Volume (vph)	0	456	0	0	437	543	787	2	149	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3245		1681	1629				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3245		1681	1629				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	524	0	0	475	590	855	2	162	0	0	0
RTOR Reduction (vph)	0	0	0	0	367	0	0	32	0	0	0	0
Lane Group Flow (vph)	0	524	0	0	698	0	522	465	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		17.3			17.3		20.4	20.4				
Effective Green, g (s)		17.3			17.3		20.4	20.4				
Actuated g/C Ratio		0.38			0.38		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1339			1228		750	727				
v/s Ratio Prot		0.15			c0.22							
v/s Ratio Perm							c0.31	0.29				
v/c Ratio		0.39			0.57		0.70	0.64				
Uniform Delay, d1		10.4			11.2		10.2	9.8				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.6		2.8	1.9				
Delay (s)		10.5			11.9		13.0	11.7				
Level of Service		B			B		B	B				
Approach Delay (s)		10.5			11.9		12.3				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					11.8					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.64							
Actuated Cycle Length (s)					45.7					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					69.3%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												





















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Near-Term (2 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔			↔	↔	
Volume (veh/h)	0	4	5	66	14	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	16	7	92	34	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	140	34	34			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	140	34	34			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	850	1039	1577			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	16	99	34			
Volume Left	0	7	0			
Volume Right	16	0	0			
cSH	1039	1577	1700			
Volume to Capacity	0.02	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.5	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		1.3				
Intersection Capacity Utilization		17.6%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Near-Term (2 CVN)
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Volume (veh/h)	0	4068	18	0	1804	245	0	0	910	0	0	56
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4238	19	0	1860	253	0	0	1011	0	0	85
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2132			4276			4992	6399	1462	3439	6282	786
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2132			4276			4992	6399	1462	3439	6282	786
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	247			33			0	0	1833	1	0	324
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1695	1695	866	744	744	625	1011	85				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	19	0	0	253	1011	85				
cSH	1700	1700	1700	1700	1700	1700	1833	324				
Volume to Capacity	1.00	1.00	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	89	26				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3	20.0				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.3	20.0				
Approach LOS							A	C				
Intersection Summary												
Average Delay			1.5									
Intersection Capacity Utilization			144.0%		ICU Level of Service				H			
Analysis Period (min)			15									

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Near-Term (2 CVN)
Timing Plan: PM PEAK

	→	↘	↙	←	↖	↗	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3834	131	0	1841	0	201	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3953	135	0	1918	0	245	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4108		4699	1425	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4108		4699	1425	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			39		1	121	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1581	1581	926	639	639	639	245
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	135	0	0	0	245
cSH	1700	1700	1700	1700	1700	1700	121
Volume to Capacity	0.93	0.93	0.54	0.38	0.38	0.38	2.03
Queue Length 95th (ft)	0	0	0	0	0	0	503
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	550.7
Lane LOS							F
Approach Delay (s)	0.0			0.0			550.7
Approach LOS							F
Intersection Summary							
Average Delay			21.6				
Intersection Capacity Utilization			98.1%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Near-Term (2 CVN)
Timing Plan: PM PEAK

	↗	→	↘	↙	←	↖	↗	↑	↘	↙	↓	↗
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	↗
Volume (vph)	0	0	0	994	636	110	87	253			863	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4635		1770	3539			3526	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4635		1770	3539			3526	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1046	669	116	90	261	0	0	890	18
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	523	1296	0	90	261	0	0	906	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1431		98	1989			1567	
v/s Ratio Prot				c0.34	0.28		c0.05	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.11	0.99d1		0.92	0.13			0.58	
Uniform Delay, d1				31.1	29.8		42.3	9.3			18.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				76.0	8.5		64.3	0.0			0.5	
Delay (s)				107.1	38.3		106.6	9.3			19.2	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			58.0			34.3			19.2	
Approach LOS		A			E			C			B	
Intersection Summary												
HCM 2000 Control Delay			43.9			HCM 2000 Level of Service		D				
HCM 2000 Volume to Capacity ratio			0.81									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)		17.2				
Intersection Capacity Utilization		136.0%				ICU Level of Service		H				
Analysis Period (min)			15									
d1 Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Near-Term (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	7	2114	107	0	0	0	0	339	461	762	1117	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3116	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3116	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2323	118	0	0	0	0	394	536	794	1164	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2331	89	0	0	0	0	635	260	794	1164	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm				NA	Perm	Prot	NA		
Protected Phases	4	4					2		1	6		
Permitted Phases			4					2				
Actuated Green, G (s)		63.4	63.4				53.1	53.1	44.1	100.0		
Effective Green, g (s)		63.4	63.4				53.1	53.1	44.1	100.0		
Actuated g/C Ratio		0.36	0.36				0.30	0.30	0.25	0.57		
Clearance Time (s)		5.6	5.6				4.6	4.6	4.2	6.0		
Vehicle Extension (s)		3.0	3.0				3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)		1841	573				945	409	865	2022		
v/s Ratio Prot		c0.46					c0.20		c0.23	0.33		
v/s Ratio Perm			0.06					0.19				
v/c Ratio		1.27	0.16				0.67	0.64	0.92	0.58		
Uniform Delay, d1		55.8	37.7				53.3	52.6	63.7	23.9		
Progression Factor		1.00	1.00				1.00	1.00	1.00	1.00		
Incremental Delay, d2		124.3	0.1				1.9	3.2	14.3	0.4		
Delay (s)		180.1	37.8				55.2	55.8	78.0	24.3		
Level of Service		F	D				E	E	E	C		
Approach Delay (s)		173.2			0.0		55.4			46.1		
Approach LOS		F			A		E			D		
Intersection Summary												
HCM 2000 Control Delay		106.1								F		
HCM 2000 Volume to Capacity ratio		0.97										
Actuated Cycle Length (s)		175.0							14.4			
Intersection Capacity Utilization		136.0%							H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Near-Term (2 CVN)
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑↑
Volume (vph)	181	13	905	715	0	1261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1582		3257			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1582		3257			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	232	17	1017	803	0	1356
RTOR Reduction (vph)	2	0	68	0	0	0
Lane Group Flow (vph)	247	0	1752	0	0	1356
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	296		2461			2540
v/s Ratio Prot	c0.16		c0.54			0.40
v/s Ratio Perm						
v/c Ratio	0.84		0.71			0.53
Uniform Delay, d1	62.6		10.3			8.0
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	18.1		1.8			0.8
Delay (s)	80.7		12.1			8.8
Level of Service	F		B			A
Approach Delay (s)	80.7		12.1			8.8
Approach LOS	F		B			A
Intersection Summary						
HCM 2000 Control Delay		15.8				B
HCM 2000 Volume to Capacity ratio		0.75				
Actuated Cycle Length (s)		160.0				12.1
Intersection Capacity Utilization		81.4%				D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Near-Term (2 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	304	53	124	7	72	439	29	603	3	145	1454	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1515		1854	1509	1770	3539	1344	1770	3511	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1515		1854	1509	1770	3539	1344	1770	3511	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	400	70	163	8	78	477	32	663	3	154	1547	73
RTOR Reduction (vph)	0	0	132	0	0	213	0	0	2	0	2	0
Lane Group Flow (vph)	400	70	31	0	86	264	32	663	1	154	1618	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.6	27.6	27.6		26.8	26.8	4.0	55.9	55.9	17.7	69.6	
Effective Green, g (s)	27.6	27.6	27.6		26.8	26.8	4.0	55.9	55.9	17.7	69.6	
Actuated g/C Ratio	0.19	0.19	0.19		0.18	0.18	0.03	0.38	0.38	0.12	0.47	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	331	348	283		337	274	48	1342	509	212	1657	
v/s Ratio Prot	c0.23	0.04			0.05		0.02	0.19		c0.09	c0.46	
v/s Ratio Perm			0.02			c0.18			0.00			
v/c Ratio	1.21	0.20	0.11		0.26	0.96	0.67	0.49	0.00	0.73	0.98	
Uniform Delay, d1	59.9	50.6	49.7		51.7	59.8	71.0	34.9	28.4	62.5	38.1	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	118.7	0.3	0.2		0.4	44.3	29.8	1.3	0.0	11.7	17.2	
Delay (s)	178.6	50.9	49.9		52.1	104.1	100.8	36.2	28.4	74.2	55.3	
Level of Service	F	D	D		D	F	F	D	C	E	E	
Approach Delay (s)		131.3			96.2			39.2			56.9	
Approach LOS		F			F			D			E	
Intersection Summary												
HCM 2000 Control Delay			72.4			HCM 2000 Level of Service				E		
HCM 2000 Volume to Capacity ratio			1.02									
Actuated Cycle Length (s)			147.4			Sum of lost time (s)				19.4		
Intersection Capacity Utilization			82.5%			ICU Level of Service				E		
Analysis Period (min)			15									

c Critical Lane Group

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

Near-Term (2 CVN)

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	327	514	4	38	187	4
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	363	571	6	54	212	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked	0.99					
vC, conflicting volume	462	32			59	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	457	32			59	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	25	45			86	
cM capacity (veh/h)	482	1041			1545	
Direction, Lane #						
Volume Total	934	59	217			
Volume Left	363	0	212			
Volume Right	571	54	0			
cSH	979	1700	1545			
Volume to Capacity	0.95	0.03	0.14			
Queue Length 95th (ft)	404	0	12			
Control Delay (s)	39.5	0.0	7.6			
Lane LOS	E		A			
Approach Delay (s)	39.5	0.0	7.6			
Approach LOS	E					
Intersection Summary						
Average Delay			31.9			
Intersection Capacity Utilization			42.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near-Term (2 CVN)

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	330	7	641	41	0	1586
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	418	9	712	46	0	1782
RTOR Reduction (vph)	1	0	0	26	0	0
Lane Group Flow (vph)	426	0	712	20	0	1782
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.24		0.20			c0.50
v/s Ratio Perm				0.01		
v/c Ratio	0.51		0.47	0.03		1.17
Uniform Delay, d1	19.0		21.4	17.3		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.5		0.2	0.0		84.9
Delay (s)	19.5		21.6	17.3		114.9
Level of Service	B		C	B		F
Approach Delay (s)	19.5		21.4			114.9
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay		77.3		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		0.82				
Actuated Cycle Length (s)		105.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		93.8%		ICU Level of Service		F
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Near-Term (2 CVN)

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗	↖	↗
Volume (veh/h)	5	7	486	4	16	1519
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	10	14	565	5	18	1669
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1437	285			570	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1437	285			570	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	98			98	
cM capacity (veh/h)	122	712			999	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	24	377	193	18	835	835
Volume Left	10	0	0	18	0	0
Volume Right	14	0	5	0	0	0
cSH	236	1700	1700	999	1700	1700
Volume to Capacity	0.10	0.22	0.11	0.02	0.49	0.49
Queue Length 95th (ft)	8	0	0	1	0	0
Control Delay (s)	22.0	0.0	0.0	8.7	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	22.0	0.0		0.1		
Approach LOS	C					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			52.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Near-Term (2 CVN)
Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	31	59	430	13	107	1417
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	34	64	489	15	118	1557
RTOR Reduction (vph)	0	46	0	8	0	0
Lane Group Flow (vph)	34	18	489	7	118	1557
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	11.3	23.2	27.7	27.7	6.8	43.3
Effective Green, g (s)	11.3	18.1	27.7	27.7	6.8	43.3
Actuated g/C Ratio	0.18	0.28	0.43	0.43	0.11	0.68
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	313	448	1534	686	188	2398
v/s Ratio Prot	c0.02	0.01	0.14		0.07	c0.44
v/s Ratio Perm			0.00			
v/c Ratio	0.11	0.04	0.32	0.01	0.63	0.65
Uniform Delay, d1	22.1	16.6	11.9	10.3	27.3	5.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.0	6.4	0.6
Delay (s)	22.2	16.6	12.0	10.3	33.7	6.5
Level of Service	C	B	B	B	C	A
Approach Delay (s)	18.6		12.0			8.5
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay		9.7		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.64				
Actuated Cycle Length (s)		63.9		Sum of lost time (s)		18.1
Intersection Capacity Utilization		51.1%		ICU Level of Service		A
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Near-Term (2 CVN)
Timing Plan: PM PEAK







	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↩	↕			↕
Volume (veh/h)	0	24	420	20	0	1448
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	32	483	23	0	1574
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1281	253			506	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1281	253			506	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	157	747			1055	
Direction, Lane #						
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	32	322	184	787	787	
Volume Left	0	0	0	0	0	
Volume Right	32	0	23	0	0	
cSH	747	1700	1700	1700	1700	
Volume to Capacity	0.04	0.19	0.11	0.46	0.46	
Queue Length 95th (ft)	3	0	0	0	0	
Control Delay (s)	10.0	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.0	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay		0.2				
Intersection Capacity Utilization		43.4%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Near-Term (2 CVN)

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	31	27	413	20	24	1423
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	43	38	439	21	26	1564
RTOR Reduction (vph)	0	34	0	8	0	0
Lane Group Flow (vph)	43	4	439	13	26	1564
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	27.8	27.8	1.7	37.0
Effective Green, g (s)	2.6	4.3	27.8	27.8	1.7	37.0
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	99	147	2129	952	65	2834
v/s Ratio Prot	c0.02	0.00	0.12		0.01	c0.44
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.43	0.02	0.21	0.01	0.40	0.55
Uniform Delay, d1	21.1	19.0	4.2	3.7	21.8	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.1	0.0	0.0	4.0	0.2
Delay (s)	24.1	19.1	4.2	3.7	25.8	1.9
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.8		4.2			2.3
Approach LOS	C		A			A

Intersection Summary





HCM 2000 Control Delay	3.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	46.2	Sum of lost time (s)	14.1
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (2 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	12	15	88	8	0	185	14	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	12	16	114	10	0	208	16	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	13	16	125	224						
Volume Left (vph)	0	0	114	0						
Volume Right (vph)	0	16	0	16						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.1	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.20						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						

Intersection Summary

Delay	7.2		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

NBC Coastal Campus

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (2 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱	↰	↱	↰			
Volume (vph)	11	191	0	0	85	143	13	332	71	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.69	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1292	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	12	217	0	0	98	164	14	365	78	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	129	0	43	0	0	0	0
Lane Group Flow (vph)	12	217	0	0	98	35	14	365	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.0	18.0	18.0			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.0	18.0	18.0			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.45	0.45	0.45			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	272	393			393	334	800	1600	715			
v/s Ratio Prot		c0.12			0.05		0.01	c0.10				
v/s Ratio Perm	0.01					0.02		0.02				
v/c Ratio	0.04	0.55			0.25	0.10	0.02	0.23	0.05			
Uniform Delay, d1	12.5	14.0			13.1	12.7	6.0	6.7	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.7			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.6	15.7			13.4	12.8	6.0	6.7	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.5			13.0		6.6			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.5			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.33										
Actuated Cycle Length (s)		39.8			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		40.9%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near-Term (2 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱	↰
Volume (veh/h)	0	0	0	481	0	1596	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	0	0	547	0	1773	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2047	887	1773		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2047	887	1773		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	48	287	347		0		
Direction, Lane #							
Volume Total	0	0	273	273	1182	591	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.16	0.16	0.70	0.35	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			47.5%		ICU Level of Service		
Analysis Period (min)			15				A

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near-Term (2 CVN)

Timing Plan: PM PEAK

	↖	→	↗	↖	←	↖	↖	↑	↗	↗	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖		↖	↖		↖	↖		↖	↖	
Volume (vph)	90	7	70	19	4	7	76	332	58	19	1139	199
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.86		1.00	0.90		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1608		1770	1685		1770	3460		1770	3460	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1608		1770	1685		1770	3460		1770	3460	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	120	9	93	38	8	14	84	365	64	21	1266	221
RTOR Reduction (vph)	0	75	0	0	14	0	0	10	0	0	11	0
Lane Group Flow (vph)	120	27	0	38	8	0	84	419	0	21	1476	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	18.1	18.1		2.7	2.7		5.8	49.7		1.6	45.5	
Effective Green, g (s)	18.1	18.1		2.7	2.7		5.8	49.7		1.6	45.5	
Actuated g/C Ratio	0.20	0.20		0.03	0.03		0.06	0.55		0.02	0.50	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	352	319		52	49		112	1889		31	1730	
v/s Ratio Prot	c0.07	0.02		c0.02	0.00		c0.05	c0.12		0.01	c0.43	
v/s Ratio Perm												
v/c Ratio	0.34	0.09		0.73	0.17		0.75	0.22		0.68	0.85	
Uniform Delay, d1	31.3	29.7		43.8	43.1		41.9	10.7		44.4	19.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.1		40.9	1.7		24.2	0.1		45.6	4.3	
Delay (s)	31.9	29.8		84.7	44.7		66.1	10.7		90.1	24.2	
Level of Service	C	C		F	D		E	B		F	C	
Approach Delay (s)		30.9			70.0			19.8			25.1	
Approach LOS		C			E			B			C	
Intersection Summary												
HCM 2000 Control Delay		25.6										
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		91.0										
Intersection Capacity Utilization		65.6%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

Near-Term (2 CVN)

Timing Plan: PM PEAK

	↖	→	↗	↖	←	↖	↖	↑	↗	↗	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖		↖	↖		↖	↖		↖	↖	
Volume (vph)	59	1092	60	0	390	36	19	41	5	25	27	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5046			5021		1770	1833			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.15	
Satd. Flow (perm)	1770	5046			5021		1305	1833			269	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	67	1241	68	0	415	38	27	59	7	29	32	26
RTOR Reduction (vph)	0	3	0	0	6	0	0	2	0	0	8	0
Lane Group Flow (vph)	67	1306	0	0	447	0	27	64	0	0	79	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1909			2039		253	356			44	
v/s Ratio Prot	c0.04	c0.26			c0.09			c0.03				
v/s Ratio Perm							0.02				c0.29	
v/c Ratio	0.34	0.68			0.22		0.11	0.18			1.79	
Uniform Delay, d1	73.9	46.9			34.8		59.6	60.5			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	2.0			0.2		0.2	0.2			430.9	
Delay (s)	75.0	48.9			35.1		59.8	60.7			505.9	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		50.2			35.1			60.5			505.9	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		67.0										
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

Near-Term (2 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	1123	0	516	425	39	0	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3495							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3495							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1262	0	549	452	41	0	0	0	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	1262	0	549	493	0	0	0	0	0	0	4
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3176							609
v/s Ratio Prot		c0.25		c0.16	c0.14							
v/s Ratio Perm												0.00
v/c Ratio		0.66		0.29	0.16							0.01
Uniform Delay, d1		46.3		20.7	0.9							34.9
Progression Factor		0.19		1.00	1.00							1.00
Incremental Delay, d2		1.2		0.1	0.0							0.0
Delay (s)		9.9		20.8	0.9							34.9
Level of Service		A		C	A							C
Approach Delay (s)		9.9			11.4		0.0				34.9	
Approach LOS		A			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		10.7				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.46										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		45.6%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave



















Near-Term (2 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	4	214	0	0	308	41	0	0	0	105	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	5	249	0	0	350	47	0	0	0	159	0	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	397			249			645	655	249	631	631	373
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	397			249			645	655	249	631	631	373
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	59	100	98
cM capacity (veh/h)	1162			1317			376	384	790	392	396	673
Direction, Lane #												
Volume Total	253	397	0	173								
Volume Left	5	0	0	159								
Volume Right	0	47	0	14								
cSH	1162	1317	1700	405								
Volume to Capacity	0.00	0.00	0.00	0.43								
Queue Length 95th (ft)	0	0	0	52								
Control Delay (s)	0.2	0.0	0.0	20.3								
Lane LOS	A			A			C					
Approach Delay (s)	0.2	0.0	0.0	20.3								
Approach LOS				A			C					
Intersection Summary												
Average Delay		4.3										
Intersection Capacity Utilization		31.7%				ICU Level of Service		A				
Analysis Period (min)		15										













NBC Coastal Campus
22: 3rd St & Palm Ave

Near-Term (2 CVN)
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	296	13	86	322	25	15	39	69	29	34	14
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	10	379	17	97	362	28	26	68	121	63	74	30
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	10	396	97	390	216	167						
Volume Left (vph)	10	0	97	0	26	63						
Volume Right (vph)	0	17	0	28	121	30						
Hadj (s)	0.53	0.00	0.53	-0.02	-0.28	0.00						
Departure Headway (s)	7.3	6.8	7.2	6.6	6.7	7.1						
Degree Utilization, x	0.02	0.74	0.19	0.72	0.40	0.33						
Capacity (veh/h)	465	513	478	521	472	429						
Control Delay (s)	9.3	25.7	10.7	23.6	14.2	13.6						
Approach Delay (s)	25.3		21.1		14.2	13.6						
Approach LOS	D		C		B	B						
Intersection Summary												
Delay			20.3									
Level of Service			C									
Intersection Capacity Utilization			41.7%		ICU Level of Service				A			
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Near-Term (2 CVN)
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	74	425	458	40	53	142
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	76	438	533	47	62	167
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)	908					
pX, platoon unblocked						
vC, conflicting volume	579				1147	290
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	579				1147	290
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	92				65	76
cM capacity (veh/h)	991				178	707
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	76	438	355	224	229	
Volume Left	76	0	0	0	62	
Volume Right	0	0	0	47	167	
cSH	991	1700	1700	1700	391	
Volume to Capacity	0.08	0.26	0.21	0.13	0.59	
Queue Length 95th (ft)	6	0	0	0	90	
Control Delay (s)	8.9	0.0	0.0	0.0	26.5	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		26.5	
Approach LOS					D	
Intersection Summary						
Average Delay			5.1			
Intersection Capacity Utilization			40.7%	ICU Level of Service		A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Near-Term (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	434	30	32	460	4	55	26	23	13	43	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3535			1761			1842	1583
Flt Permitted	0.46	1.00		0.45	1.00			0.80			0.89	1.00
Satd. Flow (perm)	865	3505		829	3535			1437			1661	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	35	517	36	35	505	4	67	32	28	17	57	41
RTOR Reduction (vph)	0	7	0	0	1	0	0	22	0	0	0	32
Lane Group Flow (vph)	35	546	0	35	508	0	0	105	0	0	74	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.7	14.7		14.7	14.7			6.5			6.5	6.5
Effective Green, g (s)	14.7	14.7		14.7	14.7			6.5			6.5	6.5
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.21			0.21	0.21
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	418	1694		400	1709			307			355	338
v/s Ratio Prot		c0.16			0.14							
v/s Ratio Perm	0.04			0.04				c0.07			0.04	0.01
v/c Ratio	0.08	0.32		0.09	0.30			0.34			0.21	0.03
Uniform Delay, d1	4.2	4.8		4.2	4.7			10.1			9.8	9.4
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.7			0.3	0.0
Delay (s)	4.3	4.9		4.3	4.8			10.8			10.1	9.5
Level of Service	A	A		A	A			B			B	A
Approach Delay (s)		4.9			4.8			10.8			9.9	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.33										
Actuated Cycle Length (s)		30.4			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		45.3%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Near-Term (2 CVN)
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	482	9	0	0	7	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	588	11	0	0	10	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			599		588	588
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			599		588	588
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			978		472	509
Direction, Lane #						
Volume Total	588	11	15			
Volume Left	0	0	10			
Volume Right	0	11	4			
cSH	1700	1700	482			
Volume to Capacity	0.35	0.01	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.7			
Lane LOS			B			
Approach Delay (s)	0.0		12.7			
Approach LOS			B			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			35.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near-Term (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	43	1422	128	60	802	135	101	93	65	179	82	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5022		1770	4976			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5022		1770	4976			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	46	1513	136	61	810	136	111	102	71	201	92	30
RTOR Reduction (vph)	0	6	0	0	12	0	0	19	0	0	4	0
Lane Group Flow (vph)	46	1643	0	61	934	0	0	265	0	0	319	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2000		196	1982			649			658	
v/s Ratio Prot	0.03	c0.33		c0.03	0.19			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.23	0.82		0.31	0.47			0.41			0.48	
Uniform Delay, d1	73.0	48.4		73.7	40.1			63.4			64.5	
Progression Factor	1.00	1.00		1.24	0.75			1.00			1.00	
Incremental Delay, d2	0.6	2.8		0.9	0.8			0.4			0.6	
Delay (s)	73.6	51.3		91.9	31.0			63.9			65.0	
Level of Service	E	D		F	C			E			E	
Approach Delay (s)		51.9			34.7			63.9			65.0	
Approach LOS		D			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		49.0			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		119.9%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Near-Term (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	21	1713	59	51	1220	57	22	11	36	66	14	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.93			1.00	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.95	
Satd. Flow (prot)	1770	5060		1770	5051			1705			1770	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.61	
Satd. Flow (perm)	1770	5060		1770	5051			1544			1144	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	21	1748	60	53	1258	59	27	13	43	78	16	18
RTOR Reduction (vph)	0	2	0	0	2	0	0	23	0	0	16	0
Lane Group Flow (vph)	21	1806	0	53	1315	0	0	60	0	78	18	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2			22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2			22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12			0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	118	3558		157	3664			190			141	
v/s Ratio Prot	0.01	c0.36		c0.03	c0.26						0.01	
v/s Ratio Perm								0.04			c0.07	
v/c Ratio	0.18	0.51		0.34	0.36			0.32			0.55	
Uniform Delay, d1	79.3	12.3		77.0	9.2			72.0			74.2	
Progression Factor	1.46	0.13		1.54	0.30			1.00			1.00	
Incremental Delay, d2	0.5	0.3		1.1	0.2			1.0			4.6	
Delay (s)	115.9	1.9		119.9	3.0			72.9			78.9	
Level of Service	F	A		F	A			E			E	
Approach Delay (s)		3.2			7.5			72.9			76.2	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		9.1			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.50										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		62.2%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near-Term (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	1595	204	162	1297	84	133	42	132	159	46	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	4999		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	4999		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	30	1697	217	167	1337	87	145	46	143	215	62	28
RTOR Reduction (vph)	0	9	0	0	0	37	0	0	119	0	4	0
Lane Group Flow (vph)	30	1905	0	167	1337	50	0	191	24	0	301	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2213		192	2364	736		306	269		575	
v/s Ratio Prot	0.02	c0.38		c0.09	c0.26			c0.11			c0.09	
v/s Ratio Perm						0.03			0.02			
v/c Ratio	0.19	0.86		0.87	0.57	0.07		0.62	0.09		0.52	
Uniform Delay, d1	76.0	45.2		78.9	35.0	26.6		69.3	62.9		68.0	
Progression Factor	1.04	0.87		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	4.2		31.6	1.0	0.2		9.3	0.7		3.4	
Delay (s)	79.6	43.6		110.5	35.9	26.8		78.6	63.6		71.4	
Level of Service	E	D		F	D	C		E	E		E	
Approach Delay (s)		44.2			43.3			72.1			71.4	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		48.1			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		99.3%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Near-Term (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	1726	52	177	1605		41	9			25	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900		1900	1900	1900		1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6				5.6
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5063		1770	5077			1680			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.82	
Satd. Flow (perm)	1770	5063		1770	5077			1510			1487	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85		0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	11	1918	58	186	1689		18	48	11	99	31	14
RTOR Reduction (vph)	0	3	0	0	1	0		79	0	0	11	0
Lane Group Flow (vph)	11	1973	0	186	1706	0	0	79	0	0	48	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.4			17.4	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.4			17.4	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2411		234	3042			310			305	
v/s Ratio Prot	0.01	c0.39		c0.11	0.34							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.69	0.82		0.79	0.56			0.26			0.16	
Uniform Delay, d1	41.8	19.0		35.6	10.2			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	80.1	2.3		16.8	0.2			0.4			0.2	
Delay (s)	121.9	21.3		52.4	10.5			28.6			27.8	
Level of Service	F	C		D	B			C			C	
Approach Delay (s)		21.8			14.6			28.6			27.8	
Approach LOS		C			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		18.8			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		84.6			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		65.9%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near-Term (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	196	1666	26	340	1614	576	68	184	553	610	248	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	206	1754	27	366	1735	619	72	196	588	663	270	257
RTOR Reduction (vph)	0	1	0	0	0	89	0	26	282	0	2	128
Lane Group Flow (vph)	206	1780	0	366	1735	530	72	382	94	663	294	103
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.3	38.3	11.8	41.4	41.4
Effective Green, g (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.3	38.3	11.8	41.4	41.4
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1201		519	2318	721	100	407	375	264	471	406
v/s Ratio Prot	0.06	c0.35		c0.21	c0.34		0.04	c0.23		c0.19	c0.17	
v/s Ratio Perm						0.33			0.06			0.07
v/c Ratio	0.81	1.48		0.71	0.75	0.73	0.72	0.94	0.25	2.51	0.62	0.25
Uniform Delay, d1	69.9	58.5		48.2	34.4	34.1	71.1	56.4	46.0	70.8	49.1	43.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	16.9	221.5		4.3	1.4	3.9	21.9	29.4	0.4	691.3	2.6	0.3
Delay (s)	86.8	280.0		52.6	35.8	38.0	93.0	85.8	46.4	762.0	51.7	44.2
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		260.0			38.6			69.1			446.0	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		179.4			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.16										
Actuated Cycle Length (s)		153.3			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		121.1%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Near-Term (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	↔
Volume (vph)	0	521	878	0	456	1659
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	585	934	0	501	1823
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	585	934	0	501	1820
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.17	c0.26		0.28	c0.65
v/s Ratio Perm						
v/c Ratio		0.33	1.09		0.76	1.02
Uniform Delay, d1		11.7	30.3		21.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	57.7		4.9	27.9
Delay (s)		11.9	88.0		26.7	42.4
Level of Service		B	F		C	D
Approach Delay (s)		11.9	88.0		39.0	
Approach LOS		B	F		D	
Intersection Summary						
HCM 2000 Control Delay		46.8			HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio		1.11				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		87.1%			ICU Level of Service	E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Near-Term (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	970	0	0	546	260	445	3	111	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1010	0	0	613	292	478	3	119	0	0	0
RTOR Reduction (vph)	0	0	0	0	99	0	0	32	0	0	0	0
Lane Group Flow (vph)	0	1010	0	0	806	0	306	262	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.6			19.6		14.6	14.6				
Effective Green, g (s)		19.6			19.6		14.6	14.6				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1643			1564		581	558				
v/s Ratio Prot		0.29			0.24							
v/s Ratio Perm							0.18	0.16				
v/c Ratio		0.61			0.52		0.53	0.47				
Uniform Delay, d1		8.5			8.0		11.0	10.8				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.7			0.3		0.9	0.6				
Delay (s)		9.2			8.2		11.9	11.4				
Level of Service		A			A		B	B				
Approach Delay (s)		9.2			8.2		11.7				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		9.4			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		42.2			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		49.3%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Near-Term (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	11	9	4	37	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	18	10	4	54	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	78	54	54			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	78	54	54			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	920	1014	1552			
Direction, Lane #						
Volume Total	18	14	54			
Volume Left	0	10	0			
Volume Right	18	0	0			
cSH	1014	1552	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.6				
Intersection Capacity Utilization		17.4%		ICU Level of Service		
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St







Near-Term (2 CVN) with Alternative 1
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1417	35	0	3764	554	0	0	478	0	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1707	42	0	4091	602	0	0	598	0	0	13
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4713			1769			3145	6462	630	5001	6182	1705
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4713			1769			3145	6462	630	5001	6182	1705
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	83
cM capacity (veh/h)	22			342			4	0	1359	0	0	78
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	683	683	384	1637	1637	1420	598	13				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	42	0	0	602	598	13				
cSH	1700	1700	1700	1700	1700	1700	1359	78				
Volume to Capacity	0.40	0.40	0.23	0.96	0.96	0.84	0.44	0.17				
Queue Length 95th (ft)	0	0	0	0	0	0	57	14				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	60.6				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	60.6				
Approach LOS							A	F				
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			100.2%			ICU Level of Service		G				
Analysis Period (min)			15									

* User Entered Value



















NBC Coastal Campus
2: Pomona Ave & Fourth St

Near-Term (2 CVN) with Alternative 1
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↑	
Volume (veh/h)	1278	203	0	3663	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1452	231	0	4070	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1703		2964	639	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1703		2964	639	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	38	
cM capacity (veh/h)			363		11	405	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	581	581	521	1357	1357	1357	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	231	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	405
Volume to Capacity	0.34	0.34	0.31	0.80	0.80	0.80	0.62
Queue Length 95th (ft)	0	0	0	0	0	0	101
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.4
Lane LOS							D
Approach Delay (s)	0.0			0.0			27.4
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			85.6%		ICU Level of Service		E
Analysis Period (min)			15				











NBC Coastal Campus
3: Orange Ave & Third St

Near-Term (2 CVN) with Alternative 1
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1551	1948	344	108	103	0	0	279	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4640		1770	3539			3505	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4640		1770	3539			3505	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1668	2095	370	146	139	0	0	321	15
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1017	3108	0	146	139	0	0	334	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3212		186	872			397	
v/s Ratio Prot				0.67	c0.67		c0.08	0.04			c0.10	
v/s Ratio Perm												
v/c Ratio				0.97	0.97		0.78	0.16			0.84	
Uniform Delay, d1				27.1	27.2		82.7	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				19.8	9.5		19.2	0.1			14.9	
Delay (s)				46.8	36.6		101.9	56.1			97.2	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			39.2			79.5			97.2	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay			45.7	HCM 2000 Level of Service					D			
HCM 2000 Volume to Capacity ratio			0.93									
Actuated Cycle Length (s)			189.5	Sum of lost time (s)					16.8			
Intersection Capacity Utilization			201.0%	ICU Level of Service					H			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Near-Term (2 CVN) with Alternative 1
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑		↑	↑↑	
Volume (vph)	1	585	81	0	0	0	0	200	219	453	1434	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3245	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3245	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	636	88	0	0	0	0	233	238	492	1494	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	22	48	0	0	0
Lane Group Flow (vph)	0	637	59	0	0	0	0	304	97	492	1494	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1172	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.42	
v/s Ratio Perm		0.13	0.04						0.07			
v/c Ratio		0.36	0.11					0.26	0.19	0.70	0.72	
Uniform Delay, d1		41.5	37.7					38.6	37.5	63.3	25.9	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.3	
Delay (s)		41.6	37.8					38.7	37.7	66.3	27.1	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.1			0.0			38.4			36.9	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.1		HCM 2000 Level of Service					D			
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)					14.4			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Near-Term (2 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↕	↕
Volume (vph)	225	7	1187	624	0	1134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3315			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3315			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	262	8	1276	671	0	1194
RTOR Reduction (vph)	1	0	54	0	0	0
Lane Group Flow (vph)	269	0	1893	0	0	1194
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	17.3		42.6			42.6
Effective Green, g (s)	17.3		42.6			42.6
Actuated g/C Ratio	0.25		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	398		2046			2075
v/s Ratio Prot	c0.17		c0.57			0.36
v/s Ratio Perm						
v/c Ratio	0.67		0.93			0.58
Uniform Delay, d1	23.3		11.8			7.8
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	4.5		7.7			0.4
Delay (s)	27.8		19.5			8.2
Level of Service	C		B			A
Approach Delay (s)	27.8		19.5			8.2
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			16.2		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.90			
Actuated Cycle Length (s)			69.0		Sum of lost time (s)	12.1
Intersection Capacity Utilization			79.4%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Near-Term (2 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↕	↕	↕	↕	↕	↕
Volume (vph)	49	3	11	8	0	6	21	1408	27	41	1281	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1693	1583		1706		1770	3529		1770	3524	
Frt Permitted	0.74	0.78	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1308	1380	1583		1517		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	57	3	13	16	0	12	25	1676	32	45	1392	41
RTOR Reduction (vph)	0	0	11	0	24	0	0	1	0	0	1	0
Lane Group Flow (vph)	30	30	2	0	4	0	25	1707	0	45	1432	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.5	15.5	15.5		15.5		2.8	65.1		4.0	66.3	
Effective Green, g (s)	15.5	15.5	15.5		15.5		2.8	65.1		4.0	66.3	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	205	216	248		238		50	2327		71	2367	
v/s Ratio Prot							0.01	c0.48		c0.03	0.41	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.15	0.14	0.01		0.02		0.50	0.73		0.63	0.60	
Uniform Delay, d1	35.9	35.8	35.1		35.2		47.3	11.1		46.6	9.0	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		7.7	1.2		17.0	0.4	
Delay (s)	36.2	36.1	35.1		35.2		54.9	12.3		63.7	9.4	
Level of Service	D	D	D		D		D	B		E	A	
Approach Delay (s)		36.0			35.2			12.9			11.1	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.8		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.62									
Actuated Cycle Length (s)			98.7		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			57.0%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Near-Term (2 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	24	0	1350	8	444	829	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	36	0	1484	9	453	846	0
RTOR Reduction (vph)	0	0	0	0	33	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1484	4	453	846	0
Turn Type					NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.42		c0.26	0.24	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.89	0.01	0.74	0.28	
Uniform Delay, d1					60.6			35.1	20.4	41.8	2.3	
Progression Factor					1.00			0.35	1.00	1.00	1.00	
Incremental Delay, d2					0.1			5.1	0.0	4.9	0.2	
Delay (s)					60.6			17.4	20.5	46.7	2.6	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			17.4			18.0	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		18.2			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		80.7%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Near-Term (2 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	38	12	2	53	118	120	1207	6	135	464	271
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.88		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3308	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3308	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	35	58	18	2	60	134	133	1341	7	155	533	311
RTOR Reduction (vph)	0	0	17	0	0	113	0	0	4	0	57	0
Lane Group Flow (vph)	35	58	1	0	62	21	133	1341	3	155	787	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Effective Green, g (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Actuated g/C Ratio	0.06	0.06	0.06		0.16	0.16	0.31	0.46	0.46	0.19	0.34	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	97	102	77		295	239	549	1625	618	341	1131	
v/s Ratio Prot	0.02	c0.03			c0.03		0.08	c0.38		c0.09	0.24	
v/s Ratio Perm			0.00			0.01			0.00			
v/c Ratio	0.36	0.57	0.01		0.21	0.09	0.24	0.83	0.01	0.45	0.70	
Uniform Delay, d1	66.0	66.8	64.8		53.1	52.1	37.3	34.1	21.2	51.7	41.2	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.95	0.94	
Incremental Delay, d2	2.3	7.1	0.1		0.4	0.2	0.2	4.9	0.0	0.9	3.5	
Delay (s)	68.3	73.9	64.8		53.5	52.2	37.5	39.1	21.3	50.2	42.1	
Level of Service	E	E	E		D	D	D	D	C	D	D	
Approach Delay (s)		70.7			52.6			38.8			43.4	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			42.7		HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio			0.61									
Actuated Cycle Length (s)			145.0		Sum of lost time (s)				19.4			
Intersection Capacity Utilization			89.4%		ICU Level of Service				E			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Near-Term (2 CVN) with Alternative 1
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖			↖↗
Volume (veh/h)	43	190	5	34	158	9
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	51	224	6	42	172	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	381	28			49	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	381	28			49	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	79			89	
cM capacity (veh/h)	553	1048			1558	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	274	49	182			
Volume Left	51	0	172			
Volume Right	224	42	0			
cSH	1285	1700	1558			
Volume to Capacity	0.21	0.03	0.11			
Queue Length 95th (ft)	20	0	9			
Control Delay (s)	9.9	0.0	7.2			
Lane LOS	A		A			
Approach Delay (s)	9.9	0.0	7.2			
Approach LOS	A					
Intersection Summary						
Average Delay		8.0				
Intersection Capacity Utilization		25.9%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near-Term (2 CVN) with Alternative 1
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖↗	↖		↖↗
Volume (vph)	46	3	1345	368	0	439
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1754		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1754		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	61	4	1416	387	0	686
RTOR Reduction (vph)	4	0	0	117	0	0
Lane Group Flow (vph)	61	0	1416	270	0	686
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		29.6	29.6		29.6
Effective Green, g (s)	3.0		29.6	29.6		29.6
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	123		2464	1058		2464
v/s Ratio Prot	c0.03		c0.40			0.19
v/s Ratio Perm				0.18		
v/c Ratio	0.50		0.57	0.25		0.28
Uniform Delay, d1	19.0		3.3	2.4		2.4
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	3.2		0.3	0.1		0.1
Delay (s)	22.2		3.6	2.5		2.5
Level of Service	C		A	A		A
Approach Delay (s)	22.2		3.4			2.5
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.6		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.57				
Actuated Cycle Length (s)		42.5		Sum of lost time (s)	9.9	
Intersection Capacity Utilization		49.6%		ICU Level of Service	A	
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Near-Term (2 CVN) with Alternative 1

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (veh/h)	0	16	2141	6	6	484
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	28	2302	6	9	712
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2679	1154			2309	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2679	1154			2309	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			96	
cM capacity (veh/h)	17	190			214	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	28	1535	774	9	356	356
Volume Left	0	0	0	9	0	0
Volume Right	28	0	6	0	0	0
cSH	190	1700	1700	214	1700	1700
Volume to Capacity	0.14	0.90	0.46	0.04	0.21	0.21
Queue Length 95th (ft)	12	0	0	3	0	0
Control Delay (s)	27.1	0.0	0.0	22.6	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	27.1	0.0		0.3		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			69.4%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

Near-Term (2 CVN) with Alternative 1

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (vph)	18	90	2052	13	39	445
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	22	111	2206	14	57	645
RTOR Reduction (vph)	0	4	0	1	0	0
Lane Group Flow (vph)	22	107	2206	13	57	645
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases				2		
Actuated Green, G (s)	15.9	26.0	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.9	20.9	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	262	308	2251	1007	82	2707
v/s Ratio Prot	0.01	c0.07	c0.62		c0.03	0.18
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.35	0.98	0.01	0.70	0.24
Uniform Delay, d1	39.4	37.3	18.8	7.2	50.3	3.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	14.5	0.0	22.5	0.0
Delay (s)	39.5	37.9	33.4	7.2	72.9	3.7
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.2		33.2			9.3
Approach LOS	D		C			A
Intersection Summary						
HCM 2000 Control Delay			27.9		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.85			
Actuated Cycle Length (s)			107.2		Sum of lost time (s)	18.1
Intersection Capacity Utilization			73.1%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Near-Term (2 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖ ↗	↖ ↗			↖ ↗
Volume (veh/h)	0	34	2029	27	0	461
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	55	2136	28	0	623
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2461	1082			2164	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2461	1082			2164	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	74			100	
cM capacity (veh/h)	25	213			244	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	55	1424	740	311	311	
Volume Left	0	0	0	0	0	
Volume Right	55	0	28	0	0	
cSH	213	1700	1700	1700	1700	
Volume to Capacity	0.26	0.84	0.44	0.18	0.18	
Queue Length 95th (ft)	25	0	0	0	0	
Control Delay (s)	27.7	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	27.7	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			66.9%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Near-Term (2 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖ ↗	↖	↖	↖ ↗
Volume (vph)	11	7	2055	34	16	437
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	18	11	2141	35	20	540
RTOR Reduction (vph)	0	4	0	8	0	0
Lane Group Flow (vph)	18	7	2141	27	20	540
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.5	59.2	59.2	2.1	68.8
Effective Green, g (s)	1.4	3.5	59.2	59.2	2.1	68.8
Actuated g/C Ratio	0.02	0.05	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	72	2727	1220	48	3170
v/s Ratio Prot	c0.01	0.00	c0.60		c0.01	0.15
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.56	0.10	0.79	0.02	0.42	0.17
Uniform Delay, d1	37.4	35.1	5.1	2.1	36.7	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	20.7	0.6	1.5	0.0	5.8	0.0
Delay (s)	58.1	35.7	6.7	2.1	42.5	0.5
Level of Service	E	D	A	A	D	A
Approach Delay (s)	49.6		6.6			2.0
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay			6.1		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.77			
Actuated Cycle Length (s)			76.8		Sum of lost time (s)	14.1
Intersection Capacity Utilization			69.6%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (2 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	3	0	47	2	0	46	3	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	12	0	87	4	0	73	5	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	12	0	91	73	5					
Volume Left (vph)	0	0	87	0	0					
Volume Right (vph)	0	0	0	0	5					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.2	3.2					
Degree Utilization, x	0.01	0.00	0.11	0.08	0.00					
Capacity (veh/h)	829	1121	814	835	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.4%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (2 CVN) with Alternative 1
Timing Plan: AM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↑		↑	↑	↑	↑	↑			
Volume (vph)	3	38	0	0	34	233	4	1853	53	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1353	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	4	51	0	0	47	324	4	1971	56	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	23	0	0	0	0
Lane Group Flow (vph)	4	51	0	0	47	268	4	1971	33	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.9	16.9			16.9	16.9	47.7	43.6	43.6			
Effective Green, g (s)	16.9	16.9			16.9	16.9	47.7	43.6	43.6			
Actuated g/C Ratio	0.23	0.23			0.23	0.23	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	309	426			426	362	1142	2087	933			
v/s Ratio Prot		0.03			0.03		0.00	c0.56				
v/s Ratio Perm	0.00					c0.17			0.02			
v/c Ratio	0.01	0.12			0.11	0.74	0.00	0.94	0.04			
Uniform Delay, d1	22.0	22.6			22.6	26.5	4.7	14.0	6.3			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	8.0	0.0	9.6	0.0			
Delay (s)	22.1	22.7			22.7	34.4	4.7	23.6	6.4			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.7			32.9			23.1			0.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay		24.6						HCM 2000 Level of Service		C		
HCM 2000 Volume to Capacity ratio		0.89										
Actuated Cycle Length (s)		73.9				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		85.2%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near-Term (2 CVN) with Alternative 1

Timing Plan: AM PEAK





















							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	26	47	426	1621	0	176	229
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	104	188	444	1689	0	223	290
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None			None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2099	256	513		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2099	256	513		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	75	58		0		
cM capacity (veh/h)	26	743	1049		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	292	444	844	844	149	364	0
Volume Left	104	444	0	0	0	0	0
Volume Right	188	0	0	0	0	290	0
cSH	68	1049	1700	1700	1700	1700	1700
Volume to Capacity	4.29	0.42	0.50	0.50	0.09	0.21	0.00
Queue Length 95th (ft)	Err	53	0	0	0	0	0
Control Delay (s)	Err	10.9	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B					
Approach Delay (s)	Err	2.3			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay		995.8					
Intersection Capacity Utilization		62.5%		ICU Level of Service		B	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near-Term (2 CVN) with Alternative 1

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	409	2	40	50	8	21	27	1919	11	4	176	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	1.00		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1595		1770	1661		1770	3536		1770	3429	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1595		1770	1661		1770	3536		1770	3429	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	465	2	45	161	26	68	28	2020	12	6	255	67
RTOR Reduction (vph)	0	31	0	0	64	0	0	1	0	0	21	0
Lane Group Flow (vph)	465	16	0	161	30	0	28	2031	0	6	301	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	28.3	28.3		5.1	5.1		2.1	40.1		0.9	38.9	
Effective Green, g (s)	28.3	28.3		5.1	5.1		2.1	40.1		0.9	38.9	
Actuated g/C Ratio	0.30	0.30		0.05	0.05		0.02	0.43		0.01	0.42	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	536	483		96	90		39	1519		17	1429	
v/s Ratio Prot	c0.26	0.01		c0.09	0.02		c0.02	c0.57		0.00	0.09	
v/s Ratio Perm												
v/c Ratio	0.87	0.03		1.68	0.33		0.72	1.34		0.35	0.21	
Uniform Delay, d1	30.7	22.9		44.1	42.5		45.3	26.6		45.9	17.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	13.8	0.0		345.6	2.2		47.4	156.4		12.2	0.1	
Delay (s)	44.6	22.9		389.7	44.6		92.7	183.0		58.1	17.5	
Level of Service	D	C		F	D		F	F		E	B	
Approach Delay (s)		42.6			262.5			181.7			18.2	
Approach LOS		D			F			F			B	
Intersection Summary												
HCM 2000 Control Delay		148.7						HCM 2000 Level of Service		F		
HCM 2000 Volume to Capacity ratio		1.18										
Actuated Cycle Length (s)		93.3						Sum of lost time (s)		18.9		
Intersection Capacity Utilization		91.1%						ICU Level of Service		F		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

Near-Term (2 CVN) with Alternative 1

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Volume (vph)	8	259	20	0	1770	18	42	24	2	21	43	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5032			5078		1770	1845			1732	
Flt Permitted	0.95	1.00			1.00		0.66	1.00			0.17	
Satd. Flow (perm)	1770	5032			5078		1229	1845			292	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	0.77
Adj. Flow (vph)	9	291	22	0	1945	20	50	29	2	27	56	70
RTOR Reduction (vph)	0	5	0	0	1	0	0	2	0	0	17	0
Lane Group Flow (vph)	9	308	0	0	1964	0	50	29	0	0	136	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2062		238	358			48	
v/s Ratio Prot	c0.01	0.06			c0.39			0.02				
v/s Ratio Perm							c0.04				c0.47	
v/c Ratio	0.05	0.16			0.95		0.21	0.08			2.84	
Uniform Delay, d1	71.5	37.1			51.8		60.9	59.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.2			10.3		0.4	0.1			882.4	
Delay (s)	71.6	37.2			62.0		61.3	59.4			957.4	
Level of Service	E	D			E		E	E			F	
Approach Delay (s)		38.2			62.0			60.6			957.4	
Approach LOS		D			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		113.3			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.02										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		73.0%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

Near-Term (2 CVN) with Alternative 1

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Volume (vph)	0	276	0	407	1779	9	0	0	0	0	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	337	0	433	1893	10	0	0	0	0	0	19
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	337	0	433	1903	0	0	0	0	0	0	7
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.07		0.13	c0.54							
v/s Ratio Perm												0.00
v/c Ratio		0.18		0.25	0.59							0.01
Uniform Delay, d1		37.3		25.7	1.6							34.9
Progression Factor		0.37		1.00	1.00							1.00
Incremental Delay, d2		0.2		0.1	0.3							0.0
Delay (s)		14.1		25.8	1.9							35.0
Level of Service		B		C	A							C
Approach Delay (s)		14.1			6.3		0.0					35.0
Approach LOS		B			A		A					C
Intersection Summary												
HCM 2000 Control Delay		7.5			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		71.1%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

Near-Term (2 CVN) with Alternative 1

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	10	241	0	0	130	105	0	0	0	48	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	12	287	0	0	140	113	0	0	0	53	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	253			287			512	563	287	507	507	196
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	253			287			512	563	287	507	507	196
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1313			1275			466	431	752	473	464	845
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	299	253	0	58								
Volume Left	12	0	0	53								
Volume Right	0	113	0	5								
cSH	1313	1275	1700	493								
Volume to Capacity	0.01	0.00	0.00	0.12								
Queue Length 95th (ft)	1	0	0	10								
Control Delay (s)	0.4	0.0	0.0	13.3								
Lane LOS	A			A	B							
Approach Delay (s)	0.4	0.0	0.0	13.3								
Approach LOS				A	B							
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				30.8%			ICU Level of Service					A
Analysis Period (min)				15								

NBC Coastal Campus

22: 3rd St & Palm Ave













Near-Term (2 CVN) with Alternative 1

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations	↕	↕		↕	↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	280	5	27	211	25	12	15	127	12	11	15
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	9	326	6	29	227	27	15	19	157	15	14	19
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	331	29	254	190	48						
Volume Left (vph)	9	0	29	0	15	15						
Volume Right (vph)	0	6	0	27	157	19						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.1	5.5	5.1	5.7						
Degree Utilization, x	0.02	0.51	0.05	0.39	0.27	0.08						
Capacity (veh/h)	574	631	561	623	628	540						
Control Delay (s)	7.9	12.9	8.2	10.8	10.0	9.2						
Approach Delay (s)	12.8		10.5		10.0	9.2						
Approach LOS	B		B		B	A						
Intersection Summary												
Delay				11.2								
Level of Service				B								
Intersection Capacity Utilization				38.1%			ICU Level of Service					A
Analysis Period (min)				15								

























NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Near-Term (2 CVN) with Alternative 1
Timing Plan: AM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	229	428	335	154	18	70
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	290	542	409	188	25	99
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	596				1624	298
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	596				1624	298
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	70				61	86
cM capacity (veh/h)	976				66	698
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	290	542	272	324	124	
Volume Left	290	0	0	0	25	
Volume Right	0	0	0	188	99	
cSH	976	1700	1700	1700	235	
Volume to Capacity	0.30	0.32	0.16	0.19	0.53	
Queue Length 95th (ft)	31	0	0	0	70	
Control Delay (s)	10.2	0.0	0.0	0.0	36.3	
Lane LOS	B				E	
Approach Delay (s)	3.6		0.0		36.3	
Approach LOS					E	
Intersection Summary						
Average Delay			4.8			
Intersection Capacity Utilization			42.2%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Near-Term (2 CVN) with Alternative 1
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	421	16	27	336		0	66	40	82	2	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3520		1770	3539			1723			1857	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.87			0.98	1.00
Satd. Flow (perm)	929	3520		817	3539			1532			1824	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	22	547	21	35	436	0	100	61	124	3	48	48
RTOR Reduction (vph)	0	4	0	0	0	0	0	32	0	0	0	30
Lane Group Flow (vph)	22	564	0	35	436	0	0	253	0	0	51	18
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.5	13.5		13.5	13.5			13.4			13.4	13.4
Effective Green, g (s)	13.5	13.5		13.5	13.5			13.4			13.4	13.4
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	347	1316		305	1323			568			677	587
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.17			0.03	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.45			0.08	0.03
Uniform Delay, d1	7.2	8.4		7.4	8.1			8.6			7.3	7.2
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.1			0.6			0.0	0.0
Delay (s)	7.3	8.7		7.6	8.2			9.1			7.4	7.2
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.6			8.2			9.1			7.3	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.5							A		
HCM 2000 Volume to Capacity ratio			0.44									
Actuated Cycle Length (s)			36.1						9.2			
Intersection Capacity Utilization			47.5%							A		
Analysis Period (min)			15									
c Critical Lane Group												







NBC Coastal Campus
25: Delaware St & Palm Ave

Near-Term (2 CVN) with Alternative 1
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗			↙	
Volume (veh/h)	506	5	0	0	3	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	550	5	0	0	3	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			555		550	550
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			555		550	550
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1015		496	535
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	550	5	10			
Volume Left	0	0	3			
Volume Right	0	5	7			
cSH	1700	1700	521			
Volume to Capacity	0.32	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.0			
Lane LOS			B			
Approach Delay (s)	0.0		12.0			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 1
Timing Plan: AM PEAK








Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	707	40	25	1917	45	171	38	53	93	47	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5044		1770	5068			3323			3361	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5044		1770	5068			3323			3361	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	26	842	48	27	2107	49	206	46	64	113	57	32
RTOR Reduction (vph)	0	3	0	0	1	0	0	13	0	0	9	0
Lane Group Flow (vph)	26	887	0	27	2155	0	0	303	0	0	193	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2233		118	2159			646			653	
v/s Ratio Prot	0.01	c0.18		c0.02	c0.43			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.18	0.40		0.23	1.00			0.47			0.30	
Uniform Delay, d1	76.8	33.9		79.6	51.6			64.3			62.0	
Progression Factor	1.00	1.00		1.23	0.78			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.8	16.7			0.5			0.3	
Delay (s)	77.3	34.4		98.8	56.9			64.8			62.2	
Level of Service	E	C		F	E			E			E	
Approach Delay (s)		35.7			57.4			64.8			62.2	
Approach LOS		D			E			E			E	
Intersection Summary												
HCM 2000 Control Delay			52.8			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.66									
Actuated Cycle Length (s)			180.0			Sum of lost time (s)				18.3		
Intersection Capacity Utilization			75.1%			ICU Level of Service				D		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

27: Florida St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 1

Timing Plan: AM PEAK








Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	945	36	21	2096		19	5	32	57	11	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5058		1770	5081			1691		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.65	1.00	
Satd. Flow (perm)	1770	5058		1770	5081			1545		1208	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	3	1062	40	24	2382	15	26	7	44	81	16	23
RTOR Reduction (vph)	0	2	0	0	0	0	0	27	0	0	19	0
Lane Group Flow (vph)	3	1100	0	24	2397	0	0	50	0	81	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			257		201	283	
v/s Ratio Prot	0.00	0.22		c0.01	c0.47						0.01	
v/s Ratio Perm								0.03		c0.07		
v/c Ratio	0.08	0.32		0.20	0.64			0.20		0.40	0.07	
Uniform Delay, d1	86.2	11.3		79.5	12.3			64.6		67.0	63.2	
Progression Factor	1.62	0.26		1.42	0.35			1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.2		0.5	0.5			0.4		1.3	0.1	
Delay (s)	140.6	3.2		113.3	4.7			65.0		68.3	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.6			5.8			65.0			66.7	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		74.2%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

28: 13th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	1018	66	100	1945	54	152	20	94	174	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	0.85	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1144	74	120	2343	65	171	22	106	232	49	21
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	88	0	3	0
Lane Group Flow (vph)	4	1214	0	120	2343	35	0	193	18	0	299	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.24		c0.07	c0.46			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.10	0.54		0.61	0.87	0.04		0.63	0.07		0.51	
Uniform Delay, d1	86.2	36.8		76.3	36.6	20.2		69.2	62.4		67.7	
Progression Factor	1.19	0.61		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.9		5.6	4.1	0.1		4.0	0.1		0.8	
Delay (s)	103.7	23.6		81.9	40.7	20.3		73.2	62.5		68.4	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.8			42.1			69.4			68.4	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		40.7			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		91.5%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	15	1292	27	45	2079	13	17	7	51	40	3	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1672			1725	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.77	
Satd. Flow (perm)	1770	5070		1770	5081			1561			1370	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	16	1404	29	52	2417	15	20	8	61	53	4	29
RTOR Reduction (vph)	0	2	0	0	0	0	0	48	0	0	23	0
Lane Group Flow (vph)	16	1431	0	52	2432	0	0	41	0	0	63	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.6		2.8	39.7			15.2			15.2	
Effective Green, g (s)	0.7	37.6		2.8	39.7			15.2			15.2	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2673		69	2829			332			292	
v/s Ratio Prot	0.01	0.28		c0.03	c0.48							
v/s Ratio Perm								0.03			c0.05	
v/c Ratio	0.94	0.54		0.75	0.86			0.12			0.22	
Uniform Delay, d1	35.3	11.1		33.9	13.4			22.7			23.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	188.5	0.2		36.6	2.8			0.2			0.4	
Delay (s)	223.8	11.3		70.5	16.3			22.8			23.5	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		13.7			17.4			22.8			23.5	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		16.3			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		71.3			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		57.8%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	95	1305	31	254	2014	223	79	75	800	244	96	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	110	1517	36	270	2143	237	88	83	889	290	114	95
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	180	0	3	61
Lane Group Flow (vph)	110	1551	0	270	2143	170	88	339	300	290	121	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.4	31.1	31.1	10.4	33.1	33.1
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.4	31.1	31.1	10.4	33.1	33.1
Actuated g/C Ratio	0.05	0.30		0.15	0.40	0.40	0.07	0.27	0.27	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	176	1531		271	2055	639	127	413	401	306	496	427
v/s Ratio Prot	0.03	0.31		c0.15	c0.42		0.05	c0.22		c0.08	0.07	
v/s Ratio Perm						0.11			0.20			0.02
v/c Ratio	0.62	1.01		1.00	1.04	0.27	0.69	0.82	0.75	0.95	0.24	0.06
Uniform Delay, d1	54.1	40.6		49.3	34.7	23.2	52.8	40.1	39.1	52.8	32.1	30.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.8	26.3		53.3	32.1	0.2	15.1	12.3	7.4	37.3	0.3	0.1
Delay (s)	60.9	66.9		102.6	66.8	23.4	67.9	52.4	46.5	90.1	32.3	30.4
Level of Service	E	E		F	E	C	E	D	D	F	C	C
Approach Delay (s)		66.5			66.5			51.0			65.6	
Approach LOS		E			E			D			E	
Intersection Summary												
HCM 2000 Control Delay		63.6			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.98										
Actuated Cycle Length (s)		116.5			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		88.7%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Near-Term (2 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	295	1166	0	161	1325
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	331	1254	0	179	1472
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	331	1254	0	179	1468
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.35		0.10	c0.53
v/s Ratio Perm						
v/c Ratio		0.12	1.07		0.86	0.96
Uniform Delay, d1		2.5	26.8		34.7	17.1
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	48.8		29.2	14.1
Delay (s)		2.5	75.6		63.8	31.2
Level of Service		A	E		E	C
Approach Delay (s)		2.5	75.6		34.8	
Approach LOS		A	E		C	
Intersection Summary						
HCM 2000 Control Delay		47.3			HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio		1.07				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		69.2%			ICU Level of Service	C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)







Near-Term (2 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	456	0	0	443	543	829	2	149	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3247		1681	1632				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3247		1681	1632				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	524	0	0	482	590	901	2	162	0	0	0
RTOR Reduction (vph)	0	0	0	0	369	0	0	30	0	0	0	0
Lane Group Flow (vph)	0	524	0	0	703	0	541	494	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		17.4			17.4		21.0	21.0				
Effective Green, g (s)		17.4			17.4		21.0	21.0				
Actuated g/C Ratio		0.37			0.37		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1327			1217		760	738				
v/s Ratio Prot		0.15			c0.22							
v/s Ratio Perm							c0.32	0.30				
v/c Ratio		0.39			0.58		0.71	0.67				
Uniform Delay, d1		10.6			11.6		10.3	10.0				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		3.2	2.3				
Delay (s)		10.8			12.2		13.4	12.3				
Level of Service		B			B		B	B				
Approach Delay (s)		10.8			12.2		12.9				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay		12.2								HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		46.4								Sum of lost time (s)	8.0	
Intersection Capacity Utilization		70.6%								ICU Level of Service	C	
Analysis Period (min)		15										
c Critical Lane Group												













NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Near-Term (2 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	4	5	66	14	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	16	7	92	34	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	140	34	34			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	140	34	34			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	850	1039	1577			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	16	99	34			
Volume Left	0	7	0			
Volume Right	16	0	0			
cSH	1039	1577	1700			
Volume to Capacity	0.02	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.5	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		1.3				
Intersection Capacity Utilization		17.6%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Near-Term (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	4044	18	0	1794	245	0	0	910	0	0	56
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%			0%			0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4212	19	0	1849	253	0	0	1011	0	0	85
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2122			4251			4963	6364	1454	3420	6247	783
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2122			4251			4963	6364	1454	3420	6247	783
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	249			34			0	0	1828	1	0	326
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1685	1685	861	740	740	622	1011	85				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	19	0	0	253	1011	85				
cSH	1700	1700	1700	1700	1700	1700	1828	326				
Volume to Capacity	0.99	0.99	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	90	26				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.4	19.9				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.4	19.9				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				143.5%			ICU Level of Service	H				
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Near-Term (2 CVN) with Alternative 1
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3810	131	0	1831	0	184	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3928	135	0	1907	0	224	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4083		4671	1417	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4083		4671	1417	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			40		1	122	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1571	1571	921	636	636	636	224
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	135	0	0	0	224
cSH	1700	1700	1700	1700	1700	1700	122
Volume to Capacity	0.92	0.92	0.54	0.37	0.37	0.37	1.83
Queue Length 95th (ft)	0	0	0	0	0	0	439
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	465.9
Lane LOS							F
Approach Delay (s)	0.0			0.0			465.9
Approach LOS							F
Intersection Summary							
Average Delay			16.9				
Intersection Capacity Utilization			96.6%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Near-Term (2 CVN) with Alternative 1
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	↘
Volume (vph)	0	0	0	984	636	110	102	253			863	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3526	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3526	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1036	669	116	105	261	0	0	890	18
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	518	1291	0	105	261	0	0	906	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1432		98	1989			1567	
v/s Ratio Prot				c0.34	0.28		c0.06	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.10	0.98dl		1.07	0.13			0.58	
Uniform Delay, d1				31.1	29.8		42.5	9.3			18.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				72.2	8.2		111.5	0.0			0.5	
Delay (s)				103.3	38.0		154.0	9.3			19.2	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			56.6			50.9			19.2	
Approach LOS		A			E			D			B	
Intersection Summary												
HCM 2000 Control Delay			44.9				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.81									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)				17.2		
Intersection Capacity Utilization		135.8%				ICU Level of Service				H		
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Near-Term (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	7	2114	110	0	0	0	0	354	437	762	1107	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.95	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3139	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3139	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2323	121	0	0	0	0	412	508	794	1153	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2331	92	0	0	0	0	630	255	794	1153	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm				NA	Perm	Prot	NA		
Protected Phases	4	4					2		1	6		
Permitted Phases			4					2				
Actuated Green, G (s)		63.4	63.4				53.1	53.1	44.1	100.0		
Effective Green, g (s)		63.4	63.4				53.1	53.1	44.1	100.0		
Actuated g/C Ratio		0.36	0.36				0.30	0.30	0.25	0.57		
Clearance Time (s)		5.6	5.6				4.6	4.6	4.2	6.0		
Vehicle Extension (s)		3.0	3.0				3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)		1841	573				952	409	865	2022		
v/s Ratio Prot		c0.46					c0.20		c0.23	0.33		
v/s Ratio Perm			0.06					0.19				
v/c Ratio		1.27	0.16				0.66	0.62	0.92	0.57		
Uniform Delay, d1		55.8	37.8				53.1	52.3	63.7	23.8		
Progression Factor		1.00	1.00				1.00	1.00	1.00	1.00		
Incremental Delay, d2		124.3	0.1				1.7	2.9	14.3	0.4		
Delay (s)		180.1	37.9				54.9	55.3	78.0	24.2		
Level of Service		F	D				D	E	E	C		
Approach Delay (s)		173.0		0.0			55.0			46.2		
Approach LOS		F		A			E			D		
Intersection Summary												
HCM 2000 Control Delay		106.2		HCM 2000 Level of Service			F					
HCM 2000 Volume to Capacity ratio		0.97										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)			14.4					
Intersection Capacity Utilization		135.8%		ICU Level of Service			H					
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Near-Term (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑↑
Volume (vph)	181	13	905	698	0	1256
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1582		3261			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1582		3261			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	232	17	1017	784	0	1351
RTOR Reduction (vph)	2	0	66	0	0	0
Lane Group Flow (vph)	247	0	1735	0	0	1351
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	296		2464			2540
v/s Ratio Prot	c0.16		c0.53			0.40
v/s Ratio Perm						
v/c Ratio	0.84		0.70			0.53
Uniform Delay, d1	62.6		10.2			8.0
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	18.1		1.7			0.8
Delay (s)	80.7		11.9			8.8
Level of Service	F		B			A
Approach Delay (s)	80.7		11.9			8.8
Approach LOS	F		B			A
Intersection Summary						
HCM 2000 Control Delay		15.7		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.74				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		80.8%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						








NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Near-Term (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	11	30	27	11	26	24	1518	52	70	1489	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1723		1770	3522		1770	3488	
Flt Permitted	0.67	0.67	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1188	1193	1583		1459		1770	3522		1770	3488	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.92	0.92	0.92	0.92
Adj. Flow (vph)	192	14	38	42	17	41	26	1632	56	76	1618	172
RTOR Reduction (vph)	0	0	32	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	102	104	6	0	78	0	26	1687	0	76	1787	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	19.3	19.3	19.3		19.3		4.6	71.0		8.1	74.5	
Effective Green, g (s)	19.3	19.3	19.3		19.3		4.6	71.0		8.1	74.5	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.04	0.63		0.07	0.66	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	203	269		248		71	2209		126	2295	
v/s Ratio Prot							0.01	0.48		c0.04	c0.51	
v/s Ratio Perm	0.09	c0.09	0.00		0.05							
v/c Ratio	0.50	0.51	0.02		0.31		0.37	0.76		0.60	0.78	
Uniform Delay, d1	42.6	42.7	39.1		41.1		52.9	15.1		51.0	13.6	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.0	2.2	0.0		0.7		3.2	1.6		7.9	1.7	
Delay (s)	44.6	44.8	39.1		41.9		56.1	16.7		58.9	15.3	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.9			41.9			17.3			17.1	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		19.5			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		113.2			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		76.1%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Near-Term (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	8	0	151	0	1316	0	34	1633	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	12	0	219	0	1400	0	37	1756	0
RTOR Reduction (vph)	0	0	0	0	178	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	53	0	0	1400	0	37	1756	0
Turn Type				Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			44.9		1.7	50.8	
Effective Green, g (s)					14.1			44.9		1.7	50.8	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					304			2118		40	2397	
v/s Ratio Prot					c0.03			0.40		0.02	c0.50	
v/s Ratio Perm												
v/c Ratio					0.17			0.66		0.93	0.73	
Uniform Delay, d1					25.6			10.0		36.6	7.7	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			0.8		112.0	1.2	
Delay (s)					25.8			10.8		148.6	8.9	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			25.8			10.8			11.8	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay				12.3				HCM 2000 Level of Service			B	
HCM 2000 Volume to Capacity ratio				0.71								
Actuated Cycle Length (s)				75.0				Sum of lost time (s)			18.9	
Intersection Capacity Utilization				63.3%				ICU Level of Service			B	
Analysis Period (min)				15								
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Near-Term (2 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	226	36	101	7	55	302	23	813	3	103	1504	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.96	1.00	1.00	0.86	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1514		1852	1514	1770	3539	1360	1770	3517	
Flt Permitted	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1514		1852	1514	1770	3539	1360	1770	3517	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	297	47	133	8	60	328	25	893	3	110	1600	60
RTOR Reduction (vph)	0	0	108	0	0	218	0	0	2	0	1	0
Lane Group Flow (vph)	297	47	25	0	68	110	25	893	1	110	1659	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	25.4	25.4	25.4		18.0	18.0	2.8	59.7	59.7	13.7	70.6	
Effective Green, g (s)	25.4	25.4	25.4		18.0	18.0	2.8	59.7	59.7	13.7	70.6	
Actuated g/C Ratio	0.19	0.19	0.19		0.13	0.13	0.02	0.44	0.44	0.10	0.52	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	330	347	282		244	200	36	1551	596	178	1823	
v/s Ratio Prot	c0.17	0.03			0.04		0.01	0.25		c0.06	c0.47	
v/s Ratio Perm			0.02			c0.07			0.00			
v/c Ratio	0.90	0.14	0.09		0.28	0.55	0.69	0.58	0.00	0.62	0.91	
Uniform Delay, d1	54.2	46.2	45.8		53.3	55.3	66.3	28.7	21.5	58.7	29.9	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	26.1	0.2	0.1		0.6	3.3	44.9	1.6	0.0	6.3	8.3	
Delay (s)	80.3	46.4	46.0		53.9	58.6	111.2	30.3	21.5	65.0	38.2	
Level of Service	F	D	D		D	E	F	C	C	E	D	
Approach Delay (s)		67.4			57.8			32.5			39.8	
Approach LOS		E			E			C			D	
Intersection Summary												
HCM 2000 Control Delay		43.6			HCM 2000 Level of Service					D		
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		136.2			Sum of lost time (s)					19.4		
Intersection Capacity Utilization		79.1%			ICU Level of Service					D		
Analysis Period (min)		15										

c Critical Lane Group

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

Near-Term (2 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	271	364	4	49	142	4
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	301	404	6	69	161	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915				600
pX, platoon unblocked						
vC, conflicting volume	367	40			75	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	367	40			75	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	47	61			89	
cM capacity (veh/h)	566	1031			1525	
Direction, Lane #						
Volume Total	706	75	166			
Volume Left	301	0	161			
Volume Right	404	69	0			
cSH	1138	1700	1525			
Volume to Capacity	0.62	0.04	0.11			
Queue Length 95th (ft)	113	0	9			
Control Delay (s)	13.2	0.0	7.5			
Lane LOS	B		A			
Approach Delay (s)	13.2	0.0	7.5			
Approach LOS	B					
Intersection Summary						
Average Delay		11.1				
Intersection Capacity Utilization		36.4%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near-Term (2 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	277	3	849	52	0	1636
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1772		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1772		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	351	4	943	58	0	1838
RTOR Reduction (vph)	1	0	0	33	0	0
Lane Group Flow (vph)	354	0	943	25	0	1838
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	843		1520	633		1520
v/s Ratio Prot	c0.20		0.27			c0.52
v/s Ratio Perm				0.02		
v/c Ratio	0.42		0.62	0.04		1.21
Uniform Delay, d1	18.0		23.3	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.3		0.8	0.0		100.6
Delay (s)	18.4		24.1	17.4		130.5
Level of Service	B		C	B		F
Approach Delay (s)	18.4		23.7			130.5
Approach LOS	B		C			F

Intersection Summary

HCM 2000 Control Delay	84.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	9.9
Intersection Capacity Utilization	95.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Near-Term (2 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗	↖	↗
Volume (veh/h)	5	7	691	4	16	1495
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	10	14	803	5	18	1643
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1662	404			808	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1662	404			808	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	88	98			98	
cM capacity (veh/h)	86	596			813	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	24	536	272	18	821	821
Volume Left	10	0	0	18	0	0
Volume Right	14	0	5	0	0	0
cSH	172	1700	1700	813	1700	1700
Volume to Capacity	0.14	0.32	0.16	0.02	0.48	0.48
Queue Length 95th (ft)	12	0	0	2	0	0
Control Delay (s)	29.3	0.0	0.0	9.5	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	29.3	0.0		0.1		
Approach LOS	D					

Intersection Summary







Average Delay	0.3		
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

Near-Term (2 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	31	59	635	13	107	1393
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	34	64	722	15	118	1531
RTOR Reduction (vph)	0	47	0	7	0	0
Lane Group Flow (vph)	34	17	722	8	118	1531
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.4	21.7	28.1	28.1	7.2	44.1
Effective Green, g (s)	9.4	16.6	28.1	28.1	7.2	44.1
Actuated g/C Ratio	0.15	0.26	0.45	0.45	0.11	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	264	418	1583	708	202	2485
v/s Ratio Prot	c0.02	0.01	0.20		0.07	c0.43
v/s Ratio Perm				0.00		
v/c Ratio	0.13	0.04	0.46	0.01	0.58	0.62
Uniform Delay, d1	23.1	17.2	12.0	9.6	26.4	4.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.2	0.0	4.3	0.5
Delay (s)	23.4	17.2	12.3	9.6	30.6	5.4
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.4		12.2			7.2
Approach LOS	B		B			A

Intersection Summary




HCM 2000 Control Delay	9.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	62.8	Sum of lost time (s)	18.1
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

Near-Term (2 CVN) with Alternative 1

Timing Plan: PM PEAK







Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	24	625	20	0	1424
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	32	718	23	0	1548
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1504	371			741	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1504	371			741	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	112	627			861	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	32	479	262	774	774	
Volume Left	0	0	0	0	0	
Volume Right	32	0	23	0	0	
cSH	627	1700	1700	1700	1700	
Volume to Capacity	0.05	0.28	0.15	0.46	0.46	
Queue Length 95th (ft)	4	0	0	0	0	
Control Delay (s)	11.1	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	11.1	0.0		0.0		
Approach LOS	B					

Intersection Summary

Average Delay	0.2				
Intersection Capacity Utilization	42.7%	ICU Level of Service	A		
Analysis Period (min)	15				





NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Near-Term (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	31	27	618	20	24	1399
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	43	38	657	21	26	1537
RTOR Reduction (vph)	0	34	0	8	0	0
Lane Group Flow (vph)	43	4	657	13	26	1537
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	27.4	27.4	1.7	36.6
Effective Green, g (s)	2.6	4.3	27.4	27.4	1.7	36.6
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	148	2117	947	65	2828
v/s Ratio Prot	c0.02	0.00	0.19		0.01	c0.43
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.43	0.02	0.31	0.01	0.40	0.54
Uniform Delay, d1	20.9	18.8	4.5	3.7	21.6	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.1	0.1	0.0	4.0	0.2
Delay (s)	23.8	18.9	4.6	3.7	25.6	1.8
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.5		4.6			2.2
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.6		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.66			
Actuated Cycle Length (s)			45.8		Sum of lost time (s)	14.1
Intersection Capacity Utilization			49.6%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	12	15	88	8	0	185	14	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	12	16	114	10	0	208	16	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	13	16	125	224						
Volume Left (vph)	0	0	114	0						
Volume Right (vph)	0	16	0	16						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.1	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.20						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱	↰	↱	↰			
Volume (vph)	11	191	0	0	85	143	13	537	71	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.69	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1292	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	12	217	0	0	98	164	14	590	78	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	117	0	43	0	0	0	0
Lane Group Flow (vph)	12	217	0	0	98	47	14	590	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.5	8.5			8.5	8.5	18.0	18.0	18.0			
Effective Green, g (s)	8.5	8.5			8.5	8.5	18.0	18.0	18.0			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.45	0.45	0.45			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	275	396			396	337	798	1596	714			
v/s Ratio Prot		c0.12			0.05		0.01	c0.17				
v/s Ratio Perm	0.01					0.03			0.02			
v/c Ratio	0.04	0.55			0.25	0.14	0.02	0.37	0.05			
Uniform Delay, d1	12.5	14.0			13.0	12.7	6.1	7.2	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.6			0.3	0.2	0.0	0.1	0.0			
Delay (s)	12.5	15.5			13.4	12.9	6.1	7.4	6.2			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.1		7.2				0.0	
Approach LOS		B			B		A				A	
Intersection Summary												
HCM 2000 Control Delay		10.1			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.43										
Actuated Cycle Length (s)		39.9			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		43.3%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near-Term (2 CVN) with Alternative 1
Timing Plan: PM PEAK









Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱	↰
Volume (veh/h)	226	421	105	460	0	1515	57
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	904	1684	119	523	0	1683	63
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2215	873	1747		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2215	873	1747		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	0	66		0		
cM capacity (veh/h)	25	293	355		0		
Direction, Lane #							
Volume Total	2588	119	261	261	1122	624	0
Volume Left	904	119	0	0	0	0	0
Volume Right	1684	0	0	0	0	63	0
cSH	61	355	1700	1700	1700	1700	1700
Volume to Capacity	42.33	0.34	0.15	0.15	0.66	0.37	0.00
Queue Length 95th (ft)	Err	36	0	0	0	0	0
Control Delay (s)	Err	20.2	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C					
Approach Delay (s)	Err	3.7			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			5200.2				
Intersection Capacity Utilization			97.9%		ICU Level of Service		
Analysis Period (min)			15				F

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near-Term (2 CVN) with Alternative 1

Timing Plan: PM PEAK









Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	91	7	70	19	4	7	76	416	58	19	1475	201
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.86		1.00	0.90		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1608		1770	1685		1770	3474		1770	3476	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1608		1770	1685		1770	3474		1770	3476	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	121	9	93	38	8	14	84	457	64	21	1639	223
RTOR Reduction (vph)	0	75	0	0	14	0	0	8	0	0	8	0
Lane Group Flow (vph)	121	27	0	38	8	0	84	513	0	21	1854	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	18.1	18.1		2.7	2.7		5.8	49.7		1.6	45.5	
Effective Green, g (s)	18.1	18.1		2.7	2.7		5.8	49.7		1.6	45.5	
Actuated g/C Ratio	0.20	0.20		0.03	0.03		0.06	0.55		0.02	0.50	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	352	319		52	49		112	1897		31	1738	
v/s Ratio Prot	c0.07	0.02		c0.02	0.00		c0.05	c0.15		0.01	c0.53	
v/s Ratio Perm												
v/c Ratio	0.34	0.09		0.73	0.17		0.75	0.27		0.68	1.07	
Uniform Delay, d1	31.3	29.7		43.8	43.1		41.9	11.0		44.4	22.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.1		40.9	1.7		24.2	0.1		45.6	41.9	
Delay (s)	31.9	29.8		84.7	44.7		66.1	11.1		90.1	64.6	
Level of Service	C	C		F	D		E	B		F	E	
Approach Delay (s)		31.0			70.0			18.7			64.9	
Approach LOS		C			E			B			E	
Intersection Summary												
HCM 2000 Control Delay		52.2										
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		91.0										
Intersection Capacity Utilization		75.0%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

Near-Term (2 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	1425	62	0	473	36	20	41	5	25	27	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5054			5032		1770	1833			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.15	
Satd. Flow (perm)	1770	5054			5032		1305	1833			269	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	67	1619	70	0	503	38	29	59	7	29	32	26
RTOR Reduction (vph)	0	2	0	0	5	0	0	2	0	0	8	0
Lane Group Flow (vph)	67	1687	0	0	536	0	29	64	0	0	79	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1912			2043		253	356			44	
v/s Ratio Prot	c0.04	c0.33			c0.11			c0.03				
v/s Ratio Perm							0.02				c0.29	
v/c Ratio	0.34	0.88			0.26		0.11	0.18			1.79	
Uniform Delay, d1	73.9	52.2			35.5		59.7	60.5			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	6.3			0.3		0.2	0.2			430.9	
Delay (s)	75.0	58.5			35.8		59.9	60.7			505.9	
Level of Service	E	E			D		E	E			F	
Approach Delay (s)		59.1			35.8			60.5			505.9	
Approach LOS		E			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		69.8										
HCM 2000 Volume to Capacity ratio		0.80										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		69.4%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

Near-Term (2 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	1456	0	516	508	39	0	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3502							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3502							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1636	0	549	540	41	0	0	0	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	1636	0	549	581	0	0	0	0	0	0	4
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3182							609
v/s Ratio Prot		c0.32		c0.16	c0.17							
v/s Ratio Perm												0.00
v/c Ratio		0.85		0.29	0.18							0.01
Uniform Delay, d1		51.3		20.7	0.9							34.9
Progression Factor		0.23		1.00	1.00							1.00
Incremental Delay, d2		2.2		0.1	0.0							0.0
Delay (s)		14.1		20.8	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		14.1			10.6		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		12.8				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		52.6%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave



















Near-Term (2 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑							↑↑
Volume (veh/h)	4	216	0	0	314	41	0	0	0	105	0	9
Sign Control		Free			Free			Stop				Stop
Grade		0%			0%			0%				0%
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	5	251	0	0	357	47	0	0	0	159	0	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	403			251			654	664	251	641	641	380
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	403			251			654	664	251	641	641	380
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	59	100	98
cM capacity (veh/h)	1155			1314			371	380	788	387	391	667
Direction, Lane #												
Volume Total	256	403	0	173								
Volume Left	5	0	0	159								
Volume Right	0	47	0	14								
cSH	1155	1314	1700	400								
Volume to Capacity	0.00	0.00	0.00	0.43								
Queue Length 95th (ft)	0	0	0	53								
Control Delay (s)	0.2	0.0	0.0	20.7								
Lane LOS	A			A			C					
Approach Delay (s)	0.2	0.0	0.0	20.7								
Approach LOS				A			C					
Intersection Summary												
Average Delay		4.3										
Intersection Capacity Utilization		32.0%				ICU Level of Service		A				
Analysis Period (min)		15										










NBC Coastal Campus
22: 3rd St & Palm Ave

Near-Term (2 CVN) with Alternative 1
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	298	13	86	328	25	15	39	69	29	34	14
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	10	382	17	97	369	28	26	68	121	63	74	30
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	10	399	97	397	216	167						
Volume Left (vph)	10	0	97	0	26	63						
Volume Right (vph)	0	17	0	28	121	30						
Hadj (s)	0.53	0.00	0.53	-0.02	-0.28	0.00						
Departure Headway (s)	7.3	6.8	7.2	6.7	6.8	7.2						
Degree Utilization, x	0.02	0.75	0.19	0.73	0.40	0.33						
Capacity (veh/h)	464	512	477	521	469	427						
Control Delay (s)	9.3	26.3	10.8	24.6	14.3	13.7						
Approach Delay (s)	25.9		21.9		14.3	13.7						
Approach LOS	D		C		B	B						
Intersection Summary												
Delay			20.8									
Level of Service			C									
Intersection Capacity Utilization			42.0%		ICU Level of Service		A					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Near-Term (2 CVN) with Alternative 1
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	75	425	458	40	53	144
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	77	438	533	47	62	169
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	579				1149	290
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	579				1149	290
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	92				65	76
cM capacity (veh/h)	991				177	707
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	77	438	355	224	232	
Volume Left	77	0	0	0	62	
Volume Right	0	0	0	47	169	
cSH	991	1700	1700	1700	392	
Volume to Capacity	0.08	0.26	0.21	0.13	0.59	
Queue Length 95th (ft)	6	0	0	0	92	
Control Delay (s)	8.9	0.0	0.0	0.0	26.7	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		26.7	
Approach LOS					D	
Intersection Summary						
Average Delay			5.2			
Intersection Capacity Utilization			40.8%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Near-Term (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↱	↱	↰	↰↱	↱		↰↱			↰	↱
Volume (vph)	29	434	30	32	460	4	55	27	23	13	45	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3535			1762			1842	1583
Flt Permitted	0.46	1.00		0.45	1.00			0.80			0.89	1.00
Satd. Flow (perm)	865	3505		829	3535			1438			1665	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	35	517	36	35	505	4	67	33	28	17	59	41
RTOR Reduction (vph)	0	7	0	0	1	0	0	22	0	0	0	32
Lane Group Flow (vph)	35	546	0	35	508	0	0	106	0	0	76	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.7	14.7		14.7	14.7			6.5			6.5	6.5
Effective Green, g (s)	14.7	14.7		14.7	14.7			6.5			6.5	6.5
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.21			0.21	0.21
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	418	1694		400	1709			307			356	338
v/s Ratio Prot		c0.16			0.14							
v/s Ratio Perm	0.04			0.04				c0.07			0.05	0.01
v/c Ratio	0.08	0.32		0.09	0.30			0.35			0.21	0.03
Uniform Delay, d1	4.2	4.8		4.2	4.7			10.1			9.8	9.4
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.7			0.3	0.0
Delay (s)	4.3	4.9		4.3	4.8			10.8			10.1	9.5
Level of Service	A	A		A	A			B			B	A
Approach Delay (s)		4.9			4.8			10.8			9.9	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.33										
Actuated Cycle Length (s)		30.4			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		45.3%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Near-Term (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↱			↰	↱
Volume (veh/h)	482	9	0	0	7	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	588	11	0	0	10	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			599		588	588
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			599		588	588
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			978		472	509
Direction, Lane #						
Volume Total	588	11	15			
Volume Left	0	0	10			
Volume Right	0	11	4			
cSH	1700	1700	482			
Volume to Capacity	0.35	0.01	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.7			
Lane LOS			B			
Approach Delay (s)	0.0		12.7			
Approach LOS			B			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			35.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	43	1751	130	60	884	135	102	93	65	179	82	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5033		1770	4984			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5033		1770	4984			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	46	1863	138	61	893	136	112	102	71	201	92	30
RTOR Reduction (vph)	0	5	0	0	11	0	0	18	0	0	4	0
Lane Group Flow (vph)	46	1996	0	61	1018	0	0	267	0	0	319	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2004		196	1985			649			658	
v/s Ratio Prot	0.03	c0.40		c0.03	0.20			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.23	1.00		0.31	0.51			0.41			0.48	
Uniform Delay, d1	73.0	54.0		73.7	40.9			63.5			64.5	
Progression Factor	1.00	1.00		1.22	0.82			1.00			1.00	
Incremental Delay, d2	0.6	19.0		0.9	0.9			0.4			0.6	
Delay (s)	73.6	73.1		91.0	34.6			63.9			65.0	
Level of Service	E	E		F	C			E			E	
Approach Delay (s)		73.1			37.8			63.9			65.0	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		61.4			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		119.9%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	21	2042	59	51	1302	57	22	11	36	66	14	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5064		1770	5053			1705		1770	1715	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.61	1.00	
Satd. Flow (perm)	1770	5064		1770	5053			1544		1144	1715	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85	0.85
Adj. Flow (vph)	21	2084	60	53	1342	59	27	13	43	78	16	18
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	16	0
Lane Group Flow (vph)	21	2143	0	53	1399	0	0	60	0	78	18	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3561		157	3666			190		141	211	
v/s Ratio Prot	0.01	c0.42		c0.03	c0.28						0.01	
v/s Ratio Perm								0.04		c0.07		
v/c Ratio	0.18	0.60		0.34	0.38			0.32		0.55	0.09	
Uniform Delay, d1	79.3	13.7		77.0	9.4			72.0		74.2	69.9	
Progression Factor	1.43	0.11		1.55	0.28			1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3		1.0	0.2			1.0		4.6	0.2	
Delay (s)	114.0	1.8		120.6	2.9			72.9		78.9	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		2.9			7.2			72.9			76.2	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		62.2%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰		↰↰	
Volume (vph)	28	1921	206	162	1378	84	134	42	132	159	46	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5011		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5011		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	30	2044	219	167	1421	87	146	46	143	215	62	28
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	119	0	4	0
Lane Group Flow (vph)	30	2256	0	167	1421	50	0	192	24	0	301	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2			4				
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2218		192	2364	736		306	269		575	
v/s Ratio Prot	0.02	c0.45		c0.09	c0.28			c0.11			c0.09	
v/s Ratio Perm					0.03			0.02				
v/c Ratio	0.19	1.02		0.87	0.60	0.07		0.63	0.09		0.52	
Uniform Delay, d1	76.0	50.1		78.9	35.8	26.6		69.3	62.9		68.0	
Progression Factor	1.02	1.00		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	21.8		31.6	1.1	0.2		9.4	0.7		3.4	
Delay (s)	77.7	72.0		110.5	36.9	26.8		78.7	63.6		71.4	
Level of Service	E	E		F	D	C		E	E		E	
Approach Delay (s)		72.1			43.7			72.2			71.4	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		61.7			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		105.6%			ICU Level of Service				G			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰						↰↰	
Volume (vph)	10	2052	52	177	1686		17	41	9		25	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900		1900	1900	1900		1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9				5.6			5.6
Lane Util. Factor	1.00	0.91		1.00	0.91				1.00		1.00	
Frt	1.00	1.00		1.00	1.00				0.92		0.97	
Flt Protected	0.95	1.00		0.95	1.00				0.99		0.97	
Satd. Flow (prot)	1770	5066		1770	5078				1680		1757	
Flt Permitted	0.95	1.00		0.95	1.00				0.89		0.82	
Satd. Flow (perm)	1770	5066		1770	5078				1510		1487	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85		0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	11	2280	58	186	1775	18	48	11	99	31	14	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	79	0	0	11	0
Lane Group Flow (vph)	11	2336	0	186	1792	0	0	79	0	0	48	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7				17.4		17.4	
Effective Green, g (s)	0.8	40.3		11.2	50.7				17.4		17.4	
Actuated g/C Ratio	0.01	0.48		0.13	0.60				0.21		0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9				5.6		5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0				3.0		3.0	
Lane Grp Cap (vph)	16	2413		234	3043				310		305	
v/s Ratio Prot	0.01	c0.46		c0.11	0.35							
v/s Ratio Perm									c0.05		0.03	
v/c Ratio	0.69	0.97		0.79	0.59				0.26		0.16	
Uniform Delay, d1	41.8	21.5		35.6	10.5				28.2		27.6	
Progression Factor	1.00	1.00		1.00	1.00				1.00		1.00	
Incremental Delay, d2	80.1	11.7		16.8	0.3				0.4		0.2	
Delay (s)	121.9	33.2		52.4	10.8				28.6		27.8	
Level of Service	F	C		D	B				C		C	
Approach Delay (s)		33.6			14.7				28.6		27.8	
Approach LOS		C			B				C		C	
Intersection Summary												
HCM 2000 Control Delay		25.1			HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		84.6			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		72.2%			ICU Level of Service				C			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 1

Timing Plan: PM PEAK







Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↔↔↔		↔	↔↔↔	↔	↔	↔	↔	↔↔	↔	↔
Volume (vph)	196	1989	28	340	1694	576	69	184	553	610	248	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	206	2094	29	366	1822	619	73	196	588	663	270	257
RTOR Reduction (vph)	0	1	0	0	0	85	0	26	282	0	2	127
Lane Group Flow (vph)	206	2122	0	366	1822	534	73	382	94	663	294	104
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.3	38.3	11.8	41.4	41.4
Effective Green, g (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.3	38.3	11.8	41.4	41.4
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1201		519	2318	721	100	407	375	264	471	406
v/s Ratio Prot	0.06	c0.42		c0.21	c0.36		0.04	c0.23		c0.19	c0.17	
v/s Ratio Perm					0.34			0.06				0.07
v/c Ratio	0.81	1.77		0.71	0.79	0.74	0.73	0.94	0.25	2.51	0.62	0.26
Uniform Delay, d1	69.9	58.5		48.2	35.4	34.2	71.1	56.4	46.0	70.8	49.1	43.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	16.9	348.6		4.3	1.8	4.1	23.2	29.4	0.4	691.3	2.6	0.3
Delay (s)	86.8	407.1		52.6	37.2	38.3	94.4	85.8	46.4	762.0	51.7	44.2
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		378.8			39.4			69.2			446.0	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		220.4			HCM 2000 Level of Service					F		
HCM 2000 Volume to Capacity ratio		1.24										
Actuated Cycle Length (s)		153.3			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		129.0%			ICU Level of Service					H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Near-Term (2 CVN) with Alternative 1

Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕	↕↕
Volume (vph)	0	527	889	0	456	1727
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	592	946	0	501	1898
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	592	946	0	501	1895
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.17	c0.27		0.28	c0.68
v/s Ratio Perm						
v/c Ratio		0.33	1.10		0.76	1.07
Uniform Delay, d1		11.8	30.3		21.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	62.7		4.9	41.7
Delay (s)		11.9	93.0		26.7	56.2
Level of Service		B	F		C	E
Approach Delay (s)		11.9	93.0		50.1	
Approach LOS		B	F		D	
Intersection Summary						
HCM 2000 Control Delay		54.7		HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio		1.15				
Actuated Cycle Length (s)		80.0		Sum of lost time (s)	14.2	
Intersection Capacity Utilization		89.6%		ICU Level of Service	E	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	976	0	0	547	260	455	3	111	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1616				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1616				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1017	0	0	615	292	489	3	119	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	31	0	0	0	0
Lane Group Flow (vph)	0	1017	0	0	809	0	313	267	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases							2					
Actuated Green, G (s)		19.7			19.7		14.8	14.8				
Effective Green, g (s)		19.7			19.7		14.8	14.8				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)	1640			1561			585	562				
v/s Ratio Prot	c0.29			0.24								
v/s Ratio Perm							c0.19	0.17				
v/c Ratio	0.62			0.52			0.54	0.47				
Uniform Delay, d1	8.6			8.0			11.1	10.8				
Progression Factor	1.00			1.00			1.00	1.00				
Incremental Delay, d2	0.7			0.3			0.9	0.6				
Delay (s)	9.3			8.3			12.0	11.4				
Level of Service	A			A			B	B				
Approach Delay (s)	9.3			8.3			11.8			0.0		
Approach LOS	A			A			B			A		
Intersection Summary												
HCM 2000 Control Delay		9.6				HCM 2000 Level of Service		A				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		42.5				Sum of lost time (s)		8.0				
Intersection Capacity Utilization		49.7%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Near-Term (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	11	9	4	37	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	18	10	4	54	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	78	54	54			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	78	54	54			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	920	1014	1552			
Direction, Lane #						
Volume Total	18	14	54			
Volume Left	0	10	0			
Volume Right	18	0	0			
cSH	1014	1552	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.6				
Intersection Capacity Utilization		17.4%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St






Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1409	35	0	3699	554	0	0	478	0	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1698	42	0	4021	602	0	0	598	0	0	13
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4643			1760			3112	6382	627	4928	6101	1681
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4643			1760			3112	6382	627	4928	6101	1681
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	83
cM capacity (veh/h)	23			345			4	0	1357	0	0	81
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	679	679	382	1608	1608	1406	598	13				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	42	0	0	602	598	13				
cSH	1700	1700	1700	1700	1700	1700	1357	81				
Volume to Capacity	0.40	0.40	0.22	0.95	0.95	0.83	0.44	0.17				
Queue Length 95th (ft)	0	0	0	0	0	0	58	14				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	58.2				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	58.2				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				98.9%			ICU Level of Service		F			
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑↑			↑↑↑↑		↑	
Volume (veh/h)	1270	203	0	3598	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1443	231	0	3998	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1694			2931	636
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1694			2931	636
tC, single (s)			4.1			6.8	6.9
tC, 2 stage (s)							
tF (s)			2.2			3.5	3.3
p0 queue free %			100			100	38
cM capacity (veh/h)			366			11	406
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	577	577	519	1333	1333	1333	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	231	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	406
Volume to Capacity	0.34	0.34	0.31	0.78	0.78	0.78	0.62
Queue Length 95th (ft)	0	0	0	0	0	0	100
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.1
Lane LOS							D
Approach Delay (s)	0.0				0.0	27.1	
Approach LOS							D
Intersection Summary							
Average Delay	1.2						
Intersection Capacity Utilization	84.4%			ICU Level of Service		E	
Analysis Period (min)	15						

NBC Coastal Campus
3: Orange Ave & Third St

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↔↔↔	↔↔↔		↔	↔			↔↔	
Volume (vph)	0	0	0	1486	1948	344	108	103	0	0	279	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4641		1770	3539			3505	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4641		1770	3539			3505	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1598	2095	370	146	139	0	0	321	15
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1007	3047	0	146	139	0	0	334	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3213		186	872			397	
v/s Ratio Prot				c0.66	0.66		c0.08	0.04			c0.10	
v/s Ratio Perm												
v/c Ratio				0.96	0.95		0.78	0.16			0.84	
Uniform Delay, d1				26.5	26.1		82.7	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				18.0	7.1		19.2	0.1			14.9	
Delay (s)				44.5	33.2		101.9	56.1			97.2	
Level of Service				D	C		F	E			F	
Approach Delay (s)		0.0			36.0			79.5			97.2	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay			43.1			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			0.92									
Actuated Cycle Length (s)			189.5			Sum of lost time (s)			16.8			
Intersection Capacity Utilization			201.0%			ICU Level of Service			H			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔↔	↔					↔↔	↔	↔↔	↔↔	
Volume (vph)	1	585	81	0	0	0	0	200	211	453	1369	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3252	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3252	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	636	88	0	0	0	0	233	229	492	1426	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	20	48	0	0	0
Lane Group Flow (vph)	0	637	59	0	0	0	0	300	94	492	1426	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1174	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.40	
v/s Ratio Perm		0.13	0.04						0.07			
v/c Ratio		0.36	0.11					0.26	0.18	0.70	0.69	
Uniform Delay, d1		41.5	37.7					38.6	37.4	63.3	25.0	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.0	
Delay (s)		41.6	37.8					38.7	37.6	66.3	26.0	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.1			0.0			38.3			36.4	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay			37.8			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			0.58									
Actuated Cycle Length (s)			171.6			Sum of lost time (s)			14.4			
Intersection Capacity Utilization			201.0%			ICU Level of Service			H			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗		↖	↗
Volume (vph)	225	7	1179	624	0	1069
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3314			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3314			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	262	8	1268	671	0	1125
RTOR Reduction (vph)	1	0	55	0	0	0
Lane Group Flow (vph)	269	0	1884	0	0	1125
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	17.3		42.1			42.1
Effective Green, g (s)	17.3		42.1			42.1
Actuated g/C Ratio	0.25		0.61			0.61
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	401		2036			2066
v/s Ratio Prot	c0.17		c0.57			0.33
v/s Ratio Perm						
v/c Ratio	0.67		0.93			0.54
Uniform Delay, d1	23.0		11.8			7.6
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	4.2		7.8			0.3
Delay (s)	27.2		19.6			7.9
Level of Service	C		B			A
Approach Delay (s)	27.2		19.6			7.9
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			16.3		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.90			
Actuated Cycle Length (s)			68.5		Sum of lost time (s)	12.1
Intersection Capacity Utilization			79.2%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↗	↖	↗	↖	↖	↗	↖
Volume (vph)	49	3	11	8	0	6	21	1400	27	41	1216	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1693	1583		1706		1770	3529		1770	3523	
Frt Permitted	0.74	0.78	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1308	1379	1583		1516		1770	3529		1770	3523	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	57	3	13	16	0	12	25	1667	32	45	1322	41
RTOR Reduction (vph)	0	0	11	0	24	0	0	1	0	0	1	0
Lane Group Flow (vph)	30	30	2	0	4	0	25	1698	0	45	1362	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.1	15.1	15.1		15.1		2.7	63.2		3.9	64.4	
Effective Green, g (s)	15.1	15.1	15.1		15.1		2.7	63.2		3.9	64.4	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	205	216	248		237		49	2316		71	2355	
v/s Ratio Prot							0.01	c0.48		c0.03	0.39	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.15	0.14	0.01		0.02		0.51	0.73		0.63	0.58	
Uniform Delay, d1	35.0	35.0	34.3		34.3		46.1	11.0		45.5	8.6	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		8.7	1.2		17.0	0.3	
Delay (s)	35.4	35.3	34.3		34.4		54.8	12.2		62.5	9.0	
Level of Service	D	D	C		C		D	B		E	A	
Approach Delay (s)		35.1			34.4			12.8			10.7	
Approach LOS		D			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.6		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.62									
Actuated Cycle Length (s)			96.3		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			55.3%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	24	0	1342	8	444	764	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	36	0	1475	9	453	780	0
RTOR Reduction (vph)	0	0	0	0	33	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1475	4	453	780	0
Turn Type					NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.42		c0.26	0.22	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.89	0.01	0.74	0.26	
Uniform Delay, d1					60.6			35.0	20.4	41.8	2.3	
Progression Factor					1.00			0.35	1.00	1.00	1.00	
Incremental Delay, d2					0.1			4.9	0.0	4.9	0.2	
Delay (s)					60.6			17.0	20.5	46.7	2.5	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			17.0			18.7	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		18.4			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		80.5%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	38	12	2	53	118	120	1198	6	135	399	271
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.88		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3286	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3286	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	35	58	18	2	60	134	133	1331	7	155	459	311
RTOR Reduction (vph)	0	0	17	0	0	113	0	0	4	0	80	0
Lane Group Flow (vph)	35	58	1	0	62	21	133	1331	3	155	690	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Effective Green, g (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Actuated g/C Ratio	0.06	0.06	0.06		0.16	0.16	0.31	0.46	0.46	0.19	0.34	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	97	102	77		295	239	549	1625	618	341	1124	
v/s Ratio Prot	0.02	c0.03			c0.03		0.08	c0.38		c0.09	0.21	
v/s Ratio Perm			0.00			0.01			0.00			
v/c Ratio	0.36	0.57	0.01		0.21	0.09	0.24	0.82	0.01	0.45	0.61	
Uniform Delay, d1	66.0	66.8	64.8		53.1	52.1	37.3	34.0	21.2	51.7	39.7	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.93	
Incremental Delay, d2	2.3	7.1	0.1		0.4	0.2	0.2	4.7	0.0	1.0	2.5	
Delay (s)	68.3	73.9	64.8		53.5	52.2	37.5	38.7	21.3	50.4	39.5	
Level of Service	E	E	E		D	D	D	D	C	D	D	
Approach Delay (s)		70.7			52.6			38.5			41.3	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			41.8		HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio			0.61									
Actuated Cycle Length (s)			145.0		Sum of lost time (s)				19.4			
Intersection Capacity Utilization			87.4%		ICU Level of Service				E			
Analysis Period (min)			15									
c Critical Lane Group												

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

HCM Unsignalized Intersection Capacity Analysis

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

HCM Signalized Intersection Capacity Analysis

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (veh/h)	0	16	2133	6	6	419
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	28	2294	6	9	616
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2623	1150			2300	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2623	1150			2300	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			96	
cM capacity (veh/h)	19	192			215	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	28	1529	771	9	308	308
Volume Left	0	0	0	9	0	0
Volume Right	28	0	6	0	0	0
cSH	192	1700	1700	215	1700	1700
Volume to Capacity	0.14	0.90	0.45	0.04	0.18	0.18
Queue Length 95th (ft)	12	0	0	3	0	0
Control Delay (s)	26.9	0.0	0.0	22.4	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	26.9	0.0		0.3		
Approach LOS	D					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		69.2%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (vph)	18	90	2044	13	39	380
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	22	111	2198	14	57	551
RTOR Reduction (vph)	0	4	0	1	0	0
Lane Group Flow (vph)	22	107	2198	13	57	551
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases				2		
Actuated Green, G (s)	15.9	26.0	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.9	20.9	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	262	308	2251	1007	82	2707
v/s Ratio Prot	0.01	c0.07	c0.62		c0.03	0.16
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.35	0.98	0.01	0.70	0.20
Uniform Delay, d1	39.4	37.3	18.7	7.2	50.3	3.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	13.7	0.0	22.5	0.0
Delay (s)	39.5	37.9	32.5	7.2	72.9	3.5
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.2		32.3			10.0
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay		28.0		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio		0.85				
Actuated Cycle Length (s)		107.2		Sum of lost time (s)		18.1
Intersection Capacity Utilization		72.9%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK











	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↖↗			↖↗
Volume (veh/h)	0	34	2021	27	0	396
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	55	2127	28	0	535
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2409	1078			2156	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2409	1078			2156	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	74			100	
cM capacity (veh/h)	27	214			246	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	55	1418	738	268	268	
Volume Left	0	0	0	0	0	
Volume Right	55	0	28	0	0	
cSH	214	1700	1700	1700	1700	
Volume to Capacity	0.26	0.83	0.43	0.16	0.16	
Queue Length 95th (ft)	25	0	0	0	0	
Control Delay (s)	27.5	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	27.5	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			66.7%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd





















Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖↗	↖	↖	↖↗
Volume (vph)	11	7	2047	34	16	372
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	18	11	2132	35	20	459
RTOR Reduction (vph)	0	5	0	8	0	0
Lane Group Flow (vph)	18	6	2132	27	20	459
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.5	59.2	59.2	2.1	68.8
Effective Green, g (s)	1.4	3.5	59.2	59.2	2.1	68.8
Actuated g/C Ratio	0.02	0.05	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	72	2727	1220	48	3170
v/s Ratio Prot	c0.01	0.00	c0.60		c0.01	0.13
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.56	0.09	0.78	0.02	0.42	0.14
Uniform Delay, d1	37.4	35.1	5.1	2.1	36.7	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	20.7	0.5	1.5	0.0	5.8	0.0
Delay (s)	58.1	35.6	6.6	2.1	42.5	0.5
Level of Service	E	D	A	A	D	A
Approach Delay (s)	49.6		6.5			2.3
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay			6.2		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.76			
Actuated Cycle Length (s)			76.8		Sum of lost time (s)	14.1
Intersection Capacity Utilization			69.4%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus Near Term (2 CVN) with Alternative 1 No Hooper
 15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: AM PEAK

										
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	3	0	47	2	0	46	3	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	12	0	87	4	0	73	5	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	12	0	91	73	5					
Volume Left (vph)	0	0	87	0	0					
Volume Right (vph)	0	0	0	0	5					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.2	3.2					
Degree Utilization, x	0.01	0.00	0.11	0.08	0.00					
Capacity (veh/h)	829	1121	814	835	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.4%	ICU Level of Service		A				
Analysis Period (min)			15							

NBC Coastal Campus Near Term (2 CVN) with Alternative 1 No Hooper
 16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	38	0	0	34	233	4	1845	53	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1353	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	4	51	0	0	47	324	4	1963	56	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	0	23	0	0	0
Lane Group Flow (vph)	4	51	0	0	47	268	4	1963	33	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.9	16.9			16.9	16.9	47.7	43.6	43.6			
Effective Green, g (s)	16.9	16.9			16.9	16.9	47.7	43.6	43.6			
Actuated g/C Ratio	0.23	0.23			0.23	0.23	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	309	426			426	362	1142	2087	933			
v/s Ratio Prot		0.03			0.03		0.00	c0.55				
v/s Ratio Perm	0.00					c0.17			0.02			
v/c Ratio	0.01	0.12			0.11	0.74	0.00	0.94	0.04			
Uniform Delay, d1	22.0	22.6			22.6	26.5	4.7	14.0	6.3			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	8.0	0.0	9.2	0.0			
Delay (s)	22.1	22.7			22.7	34.4	4.7	23.1	6.4			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.7			32.9			22.6			0.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay	24.2			HCM 2000 Level of Service					C			
HCM 2000 Volume to Capacity ratio	0.88											
Actuated Cycle Length (s)	73.9			Sum of lost time (s)					13.4			
Intersection Capacity Utilization	85.0%			ICU Level of Service					E			
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near Term (2 CVN) with Alternative 1 No Hooper





















Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔
Volume (veh/h)	0	0	0	1639	0	340	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	0	1707	0	430	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked				0.00			
vC, conflicting volume	1284	215	430		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1284	215	430		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	157	790	1126		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	854	854	287	143	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.50	0.50	0.17	0.08	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			48.6%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	420	2	40	50	8	21	27	1500	11	4	129	209
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	1.00		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1595		1770	1661		1770	3535		1770	3211	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1595		1770	1661		1770	3535		1770	3211	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	477	2	45	161	26	68	28	1579	12	6	187	303
RTOR Reduction (vph)	0	31	0	0	64	0	0	1	0	0	177	0
Lane Group Flow (vph)	477	16	0	161	30	0	28	1590	0	6	313	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	28.9	28.9		5.0	5.0		2.1	40.1		0.9	38.9	
Effective Green, g (s)	28.9	28.9		5.0	5.0		2.1	40.1		0.9	38.9	
Actuated g/C Ratio	0.31	0.31		0.05	0.05		0.02	0.43		0.01	0.41	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	545	491		94	88		39	1511		16	1331	
v/s Ratio Prot	c0.27	0.01		c0.09	0.02		c0.02	c0.45		0.00	0.10	
v/s Ratio Perm												
v/c Ratio	0.88	0.03		1.71	0.34		0.72	1.05		0.38	0.23	
Uniform Delay, d1	30.7	22.7		44.4	42.8		45.6	26.8		46.2	17.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	14.6	0.0		361.6	2.3		47.4	38.4		14.1	0.1	
Delay (s)	45.3	22.7		406.0	45.1		92.9	65.2		60.3	17.9	
Level of Service	D	C		F	D		F	E		E	B	
Approach Delay (s)		43.3			272.9			65.7			18.4	
Approach LOS		D			F			E			B	
Intersection Summary												
HCM 2000 Control Delay			71.8			HCM 2000 Level of Service				E		
HCM 2000 Volume to Capacity ratio			1.03									
Actuated Cycle Length (s)			93.8			Sum of lost time (s)			18.9			
Intersection Capacity Utilization			80.2%			ICU Level of Service				D		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	8	213	19	0	1357	18	35	24	2	21	43	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5024			5075		1770	1845			1732	
Flt Permitted	0.95	1.00			1.00		0.66	1.00			0.17	
Satd. Flow (perm)	1770	5024			5075		1229	1845			292	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	9	239	21	0	1491	20	42	29	2	27	56	70
RTOR Reduction (vph)	0	6	0	0	1	0	0	2	0	0	17	0
Lane Group Flow (vph)	9	254	0	0	1510	0	42	29	0	0	136	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1900			2061		238	358			48	
v/s Ratio Prot	c0.01	0.05			c0.30			0.02				
v/s Ratio Perm							c0.03				c0.47	
v/c Ratio	0.05	0.13			0.73		0.18	0.08			2.84	
Uniform Delay, d1	71.5	36.6			45.2		60.5	59.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			2.2		0.4	0.1			882.4	
Delay (s)	71.6	36.8			47.4		60.8	59.4			957.4	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		37.9			47.4			60.2			957.4	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		116.0			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.92										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		65.0%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	230	0	885	1366	9	0	0	0	0	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	280	0	941	1453	10	0	0	0	0	0	19
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	280	0	941	1463	0	0	0	0	0	0	7
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.06		c0.27	c0.41							
v/s Ratio Perm												0.00
v/c Ratio		0.15		0.55	0.46							0.01
Uniform Delay, d1		36.8		31.0	1.3							34.9
Progression Factor		0.41		1.00	1.00							1.00
Incremental Delay, d2		0.2		0.4	0.1							0.0
Delay (s)		15.1		31.4	1.4							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.1			13.1			0.0				35.0
Approach LOS		B			B			A				C
Intersection Summary												
HCM 2000 Control Delay		13.5			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.52										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		59.7%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	17	234	0	0	129	753	0	0	0	120	0	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	20	279	0	0	139	810	0	0	0	132	0	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	948			279			869	1267	279	863	863	544
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	948			279			869	1267	279	863	863	544
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			100			100	100	100	51	100	99
cM capacity (veh/h)	724			1284			263	164	760	269	284	539
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	299	948	0	138								
Volume Left	20	0	0	132								
Volume Right	0	810	0	7								
cSH	724	1284	1700	276								
Volume to Capacity	0.03	0.00	0.00	0.50								
Queue Length 95th (ft)	2	0	0	66								
Control Delay (s)	1.0	0.0	0.0	30.5								
Lane LOS	A			D								
Approach Delay (s)	1.0	0.0	0.0	30.5								
Approach LOS				A								
Intersection Summary												
Average Delay				3.3								
Intersection Capacity Utilization				66.9%								
Analysis Period (min)				15								
ICU Level of Service												C

NBC Coastal Campus
22: 3rd St & Palm Ave

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	345	5	27	858	25	12	15	127	12	11	15
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	9	401	6	29	923	27	15	19	157	15	14	19
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	407	29	949	190	48						
Volume Left (vph)	9	0	29	0	15	15						
Volume Right (vph)	0	6	0	27	157	19						
Hadj (s)	0.53	0.02	0.53	0.01	-0.45	-0.14						
Departure Headway (s)	6.6	6.1	6.4	5.9	6.3	7.1						
Degree Utilization, x	0.02	0.69	0.05	1.0	0.33	0.09						
Capacity (veh/h)	532	570	543	613	542	452						
Control Delay (s)	8.6	20.7	8.6	275.8	12.4	10.8						
Approach Delay (s)	20.4		267.9		12.4	10.8						
Approach LOS	C		F		B	B						
Intersection Summary												
Delay				167.6								
Level of Service				F								
Intersection Capacity Utilization				63.1%								
Analysis Period (min)				15								
ICU Level of Service												B




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱	↕	↕	↰	↱
Volume (veh/h)	240	482	820	154	18	233
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	304	610	1000	188	25	328
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked	0.80				0.80	0.80
vC, conflicting volume	1188				2312	594
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	749				2145	11
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	56				0	62
cM capacity (veh/h)	689				19	859
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	304	610	667	521	354	
Volume Left	304	0	0	0	25	
Volume Right	0	0	0	188	328	
cSH	689	1700	1700	1700	203	
Volume to Capacity	0.44	0.36	0.39	0.31	1.74	
Queue Length 95th (ft)	57	0	0	0	606	
Control Delay (s)	14.3	0.0	0.0	0.0	392.4	
Lane LOS	B				F	
Approach Delay (s)	4.7		0.0		392.4	
Approach LOS					F	
Intersection Summary						
Average Delay			58.3			
Intersection Capacity Utilization			66.3%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	474	17	27	814	0	73	32	82	2	27	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1719			1857	1583
Flt Permitted	0.20	1.00		0.39	1.00			0.85			0.98	1.00
Satd. Flow (perm)	377	3521		732	3539			1496			1826	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	22	616	22	35	1057	0	111	48	124	3	47	48
RTOR Reduction (vph)	0	3	0	0	0	0	0	36	0	0	0	33
Lane Group Flow (vph)	22	635	0	35	1057	0	0	247	0	0	50	15
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	25.2	25.2		25.2	25.2			15.3			15.3	15.3
Effective Green, g (s)	25.2	25.2		25.2	25.2			15.3			15.3	15.3
Actuated g/C Ratio	0.51	0.51		0.51	0.51			0.31			0.31	0.31
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	191	1785		371	1794			460			562	487
v/s Ratio Prot		0.18			c0.30							
v/s Ratio Perm	0.06			0.05				c0.17			0.03	0.01
v/c Ratio	0.12	0.36		0.09	0.59			0.54			0.09	0.03
Uniform Delay, d1	6.4	7.4		6.3	8.6			14.3			12.2	12.0
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.3	0.1		0.1	0.5			1.2			0.1	0.0
Delay (s)	6.7	7.5		6.5	9.1			15.5			12.3	12.0
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)		7.5			9.0			15.5			12.2	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay		9.5		HCM 2000 Level of Service				A				
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		49.7		Sum of lost time (s)				9.2				
Intersection Capacity Utilization		53.1%		ICU Level of Service				A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

	→	↗	↖	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗			↖	
Volume (veh/h)	559	5	0	0	3	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	608	5	0	0	3	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			613		608	608
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			613		608	608
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			966		459	496
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	608	5	10			
Volume Left	0	0	3			
Volume Right	0	5	7			
cSH	1700	1700	483			
Volume to Capacity	0.36	0.00	0.02			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.6			
Lane LOS			B			
Approach Delay (s)	0.0		12.6			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			39.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

	↗	→	↘	↖	←	↖	↗	↑	↗	↘	↓	↖
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑	↘	↖	↑↑↑			↖			↖	
Volume (vph)	22	715	40	25	1983	45	171	38	53	93	47	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5045		1770	5069			3323			3361	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5045		1770	5069			3323			3361	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	26	851	48	27	2179	49	206	46	64	113	57	32
RTOR Reduction (vph)	0	3	0	0	1	0	0	13	0	0	9	0
Lane Group Flow (vph)	26	896	0	27	2227	0	0	303	0	0	193	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2233		118	2159			646			653	
v/s Ratio Prot	0.01	c0.18		c0.02	c0.44			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.18	0.40		0.23	1.03			0.47			0.30	
Uniform Delay, d1	76.8	34.0		79.6	51.6			64.3			62.0	
Progression Factor	1.00	1.00		1.22	0.81			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.8	25.7			0.5			0.3	
Delay (s)	77.3	34.5		97.6	67.4			64.8			62.2	
Level of Service	E	C		F	E			E			E	
Approach Delay (s)		35.7			67.7			64.8			62.2	
Approach LOS		D			E			E			E	
Intersection Summary												
HCM 2000 Control Delay		59.2			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		76.4%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	3	953	36	21	2162	13	19	5	32	57	11	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5058		1770	5081			1691		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.65	1.00	
Satd. Flow (perm)	1770	5058		1770	5081			1545		1208	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	3	1071	40	24	2457	15	26	7	44	81	16	23
RTOR Reduction (vph)	0	2	0	0	0	0	0	27	0	0	19	0
Lane Group Flow (vph)	3	1109	0	24	2472	0	0	50	0	81	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			257		201	283	
v/s Ratio Prot	0.00	0.22		c0.01	c0.49						0.01	
v/s Ratio Perm								0.03		c0.07		
v/c Ratio	0.08	0.32		0.20	0.66			0.20		0.40	0.07	
Uniform Delay, d1	86.2	11.3		79.5	12.6			64.6		67.0	63.2	
Progression Factor	1.63	0.26		1.42	0.35			1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.2		0.4	0.5			0.4		1.3	0.1	
Delay (s)	141.6	3.2		113.0	4.9			65.0		68.3	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.5			6.0			65.0			66.7	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.4			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		75.5%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	4	1025	66	100	2010	54	152	20	94	174	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.85	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1152	74	120	2422	65	171	22	106	232	49	21
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	88	0	3	0
Lane Group Flow (vph)	4	1222	0	120	2422	35	0	193	18	0	299	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.24		c0.07	c0.48			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.10	0.55		0.61	0.90	0.04		0.63	0.07		0.51	
Uniform Delay, d1	86.2	36.9		76.3	37.7	20.2		69.2	62.4		67.7	
Progression Factor	1.19	0.61		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.9		5.6	5.2	0.1		4.0	0.1		0.8	
Delay (s)	104.2	23.5		81.9	42.9	20.3		73.2	62.5		68.4	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.8			44.1			69.4			68.4	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		41.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		92.8%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	15	1299	27	45	2144	13	17	7	51	40	3	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1672			1725	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.77	
Satd. Flow (perm)	1770	5070		1770	5081			1561			1370	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	16	1412	29	52	2493	15	20	8	61	53	4	29
RTOR Reduction (vph)	0	1	0	0	0	0	0	48	0	0	23	0
Lane Group Flow (vph)	16	1440	0	52	2508	0	0	41	0	0	63	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.7		2.8	39.8			15.2			15.2	
Effective Green, g (s)	0.7	37.7		2.8	39.8			15.2			15.2	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2677		69	2832			332			291	
v/s Ratio Prot	0.01	0.28		c0.03	c0.49							
v/s Ratio Perm								0.03			c0.05	
v/c Ratio	0.94	0.54		0.75	0.89			0.12			0.22	
Uniform Delay, d1	35.3	11.1		34.0	13.8			22.7			23.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	188.5	0.2		36.6	3.7			0.2			0.4	
Delay (s)	223.9	11.3		70.6	17.5			22.9			23.6	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		13.7			18.6			22.9			23.6	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		17.1			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		71.4			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		59.1%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰		↰	↰	↰	↰	↰	↰
Volume (vph)	95	1312	31	254	2080	223	79	75	800	244	96	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	110	1526	36	270	2213	237	88	83	889	290	114	95
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	180	0	3	61
Lane Group Flow (vph)	110	1560	0	270	2213	170	88	339	300	290	121	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.4	31.1	31.1	10.4	33.1	33.1
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.4	31.1	31.1	10.4	33.1	33.1
Actuated g/C Ratio	0.05	0.30		0.15	0.40	0.40	0.07	0.27	0.27	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	176	1531		271	2055	639	127	413	401	306	496	427
v/s Ratio Prot	0.03	0.31		c0.15	c0.44		0.05	c0.22		c0.08	0.07	
v/s Ratio Perm						0.11			0.20			0.02
v/c Ratio	0.62	1.02		1.00	1.08	0.27	0.69	0.82	0.75	0.95	0.24	0.06
Uniform Delay, d1	54.1	40.6		49.3	34.7	23.2	52.8	40.1	39.1	52.8	32.1	30.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.8	27.9		53.3	44.2	0.2	15.1	12.3	7.4	37.3	0.3	0.1
Delay (s)	60.9	68.5		102.6	78.9	23.4	67.9	52.4	46.5	90.1	32.3	30.4
Level of Service	E	E		F	E	C	E	D	D	F	C	C
Approach Delay (s)		68.0			76.4			51.0			65.6	
Approach LOS		E			E			D			E	
Intersection Summary												
HCM 2000 Control Delay		68.6			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		1.00										
Actuated Cycle Length (s)		116.5			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		89.9%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	295	1166	0	161	1390
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	331	1254	0	179	1544
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	331	1254	0	179	1540
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	18
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.35		0.10	c0.55
v/s Ratio Perm						
v/c Ratio		0.12	1.07		0.86	1.00
Uniform Delay, d1		2.5	26.8		34.7	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	48.8		29.2	24.2
Delay (s)		2.5	75.6		63.8	42.2
Level of Service		A	E		E	D
Approach Delay (s)		2.5	75.6		44.4	
Approach LOS		A	E		D	
Intersection Summary						
HCM 2000 Control Delay			52.1		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			1.10			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			71.4%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	456	0	0	443	543	829	2	149	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3247		1681	1632				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3247		1681	1632				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	524	0	0	482	590	901	2	162	0	0	0
RTOR Reduction (vph)	0	0	0	0	369	0	0	30	0	0	0	0
Lane Group Flow (vph)	0	524	0	0	703	0	541	494	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		17.4			17.4		21.0	21.0				
Effective Green, g (s)		17.4			17.4		21.0	21.0				
Actuated g/C Ratio		0.37			0.37		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1327			1217		760	738				
v/s Ratio Prot		0.15			c0.22							
v/s Ratio Perm							c0.32	0.30				
v/c Ratio		0.39			0.58		0.71	0.67				
Uniform Delay, d1		10.6			11.6		10.3	10.0				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		3.2	2.3				
Delay (s)		10.8			12.2		13.4	12.3				
Level of Service		B			B		B	B				
Approach Delay (s)		10.8			12.2		12.9				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					12.2					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.65							
Actuated Cycle Length (s)					46.4					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					70.6%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	4	5	721	87	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	16	7	1001	212	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1227	212	212			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1227	212	212			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	196	828	1358			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	16	1008	212			
Volume Left	0	7	0			
Volume Right	16	0	0			
cSH	828	1358	1700			
Volume to Capacity	0.02	0.01	0.12			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	9.4	0.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.4	0.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			51.9%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	3980	18	0	1778	245	0	0	910	0	0	56
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4146	19	0	1833	253	0	0	1011	0	0	85
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2106			4185			4891	6281	1431	3381	6164	777
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2106			4185			4891	6281	1431	3381	6164	777
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	44	100	100	74
cM capacity (veh/h)	253			36			0	0	1815	1	0	328
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1658	1658	848	733	733	619	1011	85				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	19	0	0	253	1011	85				
cSH	1700	1700	1700	1700	1700	1700	1815	328				
Volume to Capacity	0.98	0.98	0.50	0.43	0.43	0.36	0.56	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	91	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.4	19.7				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.4	19.7				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				142.3%	ICU Level of Service		H					
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3746	131	0	1815	0	184	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3862	135	0	1891	0	224	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4017		4600	1395	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4017		4600	1395	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			43		1	127	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1545	1545	907	630	630	630	224
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	135	0	0	0	224
cSH	1700	1700	1700	1700	1700	1700	127
Volume to Capacity	0.91	0.91	0.53	0.37	0.37	0.37	1.77
Queue Length 95th (ft)	0	0	0	0	0	0	428
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	436.9
Lane LOS							F
Approach Delay (s)	0.0			0.0			436.9
Approach LOS							F
Intersection Summary							
Average Delay			16.0				
Intersection Capacity Utilization			95.4%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	↗
Volume (vph)	0	0	0	968	636	110	102	253		0	0	863
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4636		1770	3539				3526
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4636		1770	3539				3526
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1019	669	116	105	261	0	0	0	890
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	0	2
Lane Group Flow (vph)	0	0	0	509	1283	0	105	261	0	0	0	906
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA				NA
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1432		98	1989				1567
v/s Ratio Prot				c0.33	0.28		c0.06	0.07				c0.26
v/s Ratio Perm												
v/c Ratio				1.08	0.96dl		1.07	0.13				0.58
Uniform Delay, d1				31.1	29.7		42.5	9.3				18.7
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				65.7	7.7		111.5	0.0				0.5
Delay (s)				96.8	37.4		154.0	9.3				19.2
Level of Service				F	D		F	A				B
Approach Delay (s)		0.0			54.2			50.9				19.2
Approach LOS		A			D			D				B
Intersection Summary												
HCM 2000 Control Delay			43.5			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			0.80									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			17.2			
Intersection Capacity Utilization		135.6%				ICU Level of Service			H			
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	7	2114	110	0	0	0	0	354	373	762	1091	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3178	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3178	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2323	121	0	0	0	0	412	434	794	1136	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2331	92	0	0	0	0	580	231	794	1136	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					964	409	865	2022	
v/s Ratio Prot		c0.46						c0.18		c0.23	0.32	
v/s Ratio Perm			0.06						0.17			
v/c Ratio		1.27	0.16					0.60	0.56	0.92	0.56	
Uniform Delay, d1		55.8	37.8					51.9	51.2	63.7	23.7	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		124.3	0.1					1.1	1.8	14.3	0.4	
Delay (s)		180.1	37.9					53.0	53.0	78.0	24.0	
Level of Service		F	D					D	D	E	C	
Approach Delay (s)		173.0		0.0				53.0			46.2	
Approach LOS		F		A				D			D	
Intersection Summary												
HCM 2000 Control Delay		106.8		HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio		0.95										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		135.6%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave













Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑↑
Volume (vph)	181	13	840	698	0	1240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1582		3249			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1582		3249			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	232	17	944	784	0	1333
RTOR Reduction (vph)	2	0	72	0	0	0
Lane Group Flow (vph)	247	0	1656	0	0	1333
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	296		2455			2540
v/s Ratio Prot	c0.16		c0.51			0.40
v/s Ratio Perm						
v/c Ratio	0.84		0.67			0.52
Uniform Delay, d1	62.6		9.7			7.9
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	18.1		1.5			0.8
Delay (s)	80.7		11.2			8.7
Level of Service	F		B			A
Approach Delay (s)	80.7		11.2			8.7
Approach LOS	F		B			A
Intersection Summary						
HCM 2000 Control Delay		15.4		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.72				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		79.1%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Near Term (2 CVN) with Alternative 1 No Hooper








Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	11	30	27	11	26	24	1453	52	70	1473	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.94		1.00	0.99		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1723		1770	3521		1770	3488	
Flt Permitted	0.67	0.67	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1188	1193	1583		1459		1770	3521		1770	3488	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	192	14	38	42	17	41	26	1562	56	76	1601	172
RTOR Reduction (vph)	0	0	32	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	102	104	6	0	78	0	26	1617	0	76	1770	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	19.3	19.3	19.3		19.3		4.6	71.0		8.1	74.5	
Effective Green, g (s)	19.3	19.3	19.3		19.3		4.6	71.0		8.1	74.5	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.04	0.63		0.07	0.66	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	203	269		248		71	2208		126	2295	
v/s Ratio Prot							0.01	0.46		c0.04	c0.51	
v/s Ratio Perm	0.09	c0.09	0.00		0.05							
v/c Ratio	0.50	0.51	0.02		0.31		0.37	0.73		0.60	0.77	
Uniform Delay, d1	42.6	42.7	39.1		41.1		52.9	14.5		51.0	13.4	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.0	2.2	0.0		0.7		3.2	1.3		7.9	1.7	
Delay (s)	44.6	44.8	39.1		41.9		56.1	15.8		58.9	15.1	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.9			41.9			16.5			16.9	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		19.1			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		113.2			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		75.7%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	8	0	151	0	1251	0	34	1617	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	12	0	219	0	1331	0	37	1739	0
RTOR Reduction (vph)	0	0	0	0	178	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	53	0	0	1331	0	37	1739	0
Turn Type				Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			44.9		1.7	50.8	
Effective Green, g (s)					14.1			44.9		1.7	50.8	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					304			2118		40	2397	
v/s Ratio Prot					c0.03			0.38		0.02	c0.49	
v/s Ratio Perm												
v/c Ratio					0.17			0.63		0.93	0.73	
Uniform Delay, d1					25.6			9.7		36.6	7.7	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			0.6		112.0	1.1	
Delay (s)					25.8			10.3		148.6	8.8	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			25.8			10.3			11.7	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					12.1			HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio					0.70							
Actuated Cycle Length (s)					75.0			Sum of lost time (s)		18.9		
Intersection Capacity Utilization					62.9%			ICU Level of Service		B		
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑	↱		↰	↑	↱	↰	↑	↱	↰	↱
Volume (vph)	226	36	101	7	55	302	23	735	3	103	1488	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.96	1.00	1.00	0.86	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1514		1852	1514	1770	3539	1360	1770	3517	
Flt Permitted	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1514		1852	1514	1770	3539	1360	1770	3517	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	297	47	133	8	60	328	25	808	3	110	1583	60
RTOR Reduction (vph)	0	0	108	0	0	224	0	0	2	0	1	0
Lane Group Flow (vph)	297	47	25	0	68	104	25	808	1	110	1642	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	25.4	25.4	25.4		17.9	17.9	2.8	59.6	59.6	13.7	70.5	
Effective Green, g (s)	25.4	25.4	25.4		17.9	17.9	2.8	59.6	59.6	13.7	70.5	
Actuated g/C Ratio	0.19	0.19	0.19		0.13	0.13	0.02	0.44	0.44	0.10	0.52	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	330	347	282		243	199	36	1550	596	178	1823	
v/s Ratio Prot	c0.17	0.03			0.04		0.01	0.23		c0.06	c0.47	
v/s Ratio Perm			0.02			c0.07			0.00			
v/c Ratio	0.90	0.14	0.09		0.28	0.52	0.69	0.52	0.00	0.62	0.90	
Uniform Delay, d1	54.1	46.1	45.7		53.2	55.1	66.2	27.8	21.5	58.6	29.6	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	26.1	0.2	0.1		0.6	2.5	44.9	1.3	0.0	6.3	7.6	
Delay (s)	80.2	46.3	45.9		53.9	57.5	111.1	29.1	21.5	64.9	37.2	
Level of Service	F	D	D		D	E	F	C	C	E	D	
Approach Delay (s)		67.3			56.9			31.5			39.0	
Approach LOS		E			E			C			D	
Intersection Summary												
HCM 2000 Control Delay		43.1			HCM 2000 Level of Service					D		
HCM 2000 Volume to Capacity ratio		0.84										
Actuated Cycle Length (s)		136.0			Sum of lost time (s)			19.4				
Intersection Capacity Utilization		78.7%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰			↱
Volume (veh/h)	271	364	4	49	142	4
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	301	404	6	69	161	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	367	40			75	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	367	40			75	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	47	61			89	
cM capacity (veh/h)	566	1031			1525	
Direction, Lane #						
Volume Total	706	75	166			
Volume Left	301	0	161			
Volume Right	404	69	0			
cSH	1138	1700	1525			
Volume to Capacity	0.62	0.04	0.11			
Queue Length 95th (ft)	113	0	9			
Control Delay (s)	13.2	0.0	7.5			
Lane LOS	B		A			
Approach Delay (s)	13.2	0.0	7.5			
Approach LOS	B					
Intersection Summary						
Average Delay		11.1				
Intersection Capacity Utilization		36.4%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕		↕
Volume (vph)	277	3	771	52	0	1620
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1772		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1772		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	351	4	857	58	0	1820
RTOR Reduction (vph)	1	0	0	33	0	0
Lane Group Flow (vph)	354	0	857	25	0	1820
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	843		1520	633		1520
v/s Ratio Prot	c0.20		0.24			c0.51
v/s Ratio Perm				0.02		
v/c Ratio	0.42		0.56	0.04		1.20
Uniform Delay, d1	18.0		22.5	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.3		0.5	0.0		95.5
Delay (s)	18.4		23.0	17.4		125.4
Level of Service	B		C	B		F
Approach Delay (s)	18.4		22.7			125.4
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay			82.7		HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio			0.79			
Actuated Cycle Length (s)			105.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			94.7%		ICU Level of Service	F
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕	↕	↕
Volume (veh/h)	5	7	627	4	16	1479
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	10	14	729	5	18	1625
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1579	367			734	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1579	367			734	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	90	98			98	
cM capacity (veh/h)	98	630			867	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	24	486	248	18	813	813
Volume Left	10	0	0	18	0	0
Volume Right	14	0	5	0	0	0
cSH	193	1700	1700	867	1700	1700
Volume to Capacity	0.12	0.29	0.15	0.02	0.48	0.48
Queue Length 95th (ft)	10	0	0	2	0	0
Control Delay (s)	26.3	0.0	0.0	9.2	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	26.3	0.0		0.1		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			50.9%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↕	↕	↰	↱
Volume (vph)	31	59	571	13	107	1377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	34	64	649	15	118	1513
RTOR Reduction (vph)	0	47	0	8	0	0
Lane Group Flow (vph)	34	17	649	7	118	1513
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases				2		
Actuated Green, G (s)	9.4	21.7	27.9	27.9	7.2	43.9
Effective Green, g (s)	9.4	16.6	27.9	27.9	7.2	43.9
Actuated g/C Ratio	0.15	0.27	0.45	0.45	0.12	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	265	419	1577	705	203	2481
v/s Ratio Prot	c0.02	0.01	0.18		0.07	c0.43
v/s Ratio Perm				0.00		
v/c Ratio	0.13	0.04	0.41	0.01	0.58	0.61
Uniform Delay, d1	23.0	17.1	11.8	9.7	26.3	4.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.2	0.0	4.2	0.4
Delay (s)	23.3	17.1	12.0	9.7	30.5	5.3
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.3		11.9			7.1
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			9.0		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.63			
Actuated Cycle Length (s)			62.6		Sum of lost time (s)	18.1
Intersection Capacity Utilization			50.0%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						







NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Near Term (2 CVN) with Alternative 1 No Hooper





Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↰	↕			↱
Volume (veh/h)	0	24	561	20	0	1408
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	32	645	23	0	1530
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1422	334			668	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1422	334			668	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	127	662			918	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	32	430	238	765	765	
Volume Left	0	0	0	0	0	
Volume Right	32	0	23	0	0	
cSH	662	1700	1700	1700	1700	
Volume to Capacity	0.05	0.25	0.14	0.45	0.45	
Queue Length 95th (ft)	4	0	0	0	0	
Control Delay (s)	10.7	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.7	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			42.3%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus Near Term (2 CVN) with Alternative 1 No Hooper
 14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	31	27	554	20	24	1383
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	43	38	589	21	26	1520
RTOR Reduction (vph)	0	34	0	8	0	0
Lane Group Flow (vph)	43	4	589	13	26	1520
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	27.3	27.3	1.7	36.5
Effective Green, g (s)	2.6	4.3	27.3	27.3	1.7	36.5
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	148	2114	945	65	2826
v/s Ratio Prot	c0.02	0.00	0.17		0.01	c0.43
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.43	0.02	0.28	0.01	0.40	0.54
Uniform Delay, d1	20.8	18.8	4.4	3.7	21.5	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.1	0.1	0.0	4.0	0.2
Delay (s)	23.8	18.9	4.5	3.7	25.5	1.8
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.5		4.5			2.2
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.5		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.66			
Actuated Cycle Length (s)			45.7		Sum of lost time (s)	14.1
Intersection Capacity Utilization			49.1%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus Near Term (2 CVN) with Alternative 1 No Hooper
 15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	12	15	88	8	0	185	14	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	12	16	114	10	0	208	16	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	13	16	125	224						
Volume Left (vph)	0	0	114	0						
Volume Right (vph)	0	16	0	16						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.1	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.20						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱	↰	↱	↰			
Volume (vph)	11	191	0	0	85	143	13	473	71	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.69	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1292	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	12	217	0	0	98	164	14	520	78	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	129	0	43	0	0	0	0
Lane Group Flow (vph)	12	217	0	0	98	35	14	520	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.0	18.0	18.0			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.0	18.0	18.0			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.45	0.45	0.45			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	272	393			393	334	800	1600	715			
v/s Ratio Prot		c0.12			0.05		0.01	c0.15				
v/s Ratio Perm	0.01					0.02		0.02				
v/c Ratio	0.04	0.55			0.25	0.10	0.02	0.33	0.05			
Uniform Delay, d1	12.5	14.0			13.1	12.7	6.0	7.0	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.7			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.6	15.7			13.4	12.8	6.0	7.1	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.5			13.0		7.0			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.2			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.40										
Actuated Cycle Length (s)		39.8			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		41.5%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near Term (2 CVN) with Alternative 1 No Hooper









Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱	↰
Volume (veh/h)	0	0	0	622	0	1556	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	0	0	707	0	1729	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2082	864	1729		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2082	864	1729		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	46	297	361		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	353	353	1153	576	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.21	0.21	0.68	0.34	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			46.3%		ICU Level of Service		
Analysis Period (min)			15				A

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near Term (2 CVN) with Alternative 1 No Hooper









Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	251	7	70	19	4	7	76	312	58	19	1061	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.86		1.00	0.90		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1608		1770	1685		1770	3456		1770	3443	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1608		1770	1685		1770	3456		1770	3443	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	335	9	93	38	8	14	84	343	64	21	1179	262
RTOR Reduction (vph)	0	69	0	0	14	0	0	12	0	0	16	0
Lane Group Flow (vph)	335	33	0	38	8	0	84	395	0	21	1425	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	24.4	24.4		2.7	2.7		5.7	47.3		1.7	43.3	
Effective Green, g (s)	24.4	24.4		2.7	2.7		5.7	47.3		1.7	43.3	
Actuated g/C Ratio	0.26	0.26		0.03	0.03		0.06	0.50		0.02	0.46	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	454	413		50	47		106	1720		31	1569	
v/s Ratio Prot	c0.19	0.02		c0.02	0.00		c0.05	c0.11		0.01	c0.41	
v/s Ratio Perm												
v/c Ratio	0.74	0.08		0.76	0.18		0.79	0.23		0.68	0.91	
Uniform Delay, d1	32.4	26.8		45.8	45.1		44.1	13.5		46.4	24.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	6.2	0.1		48.9	1.8		32.1	0.1		45.6	8.0	
Delay (s)	38.5	26.9		94.8	46.9		76.2	13.6		92.0	32.0	
Level of Service	D	C		F	D		E	B		F	C	
Approach Delay (s)		35.8			77.2			24.3			32.9	
Approach LOS		D			E			C			C	
Intersection Summary												
HCM 2000 Control Delay		32.8										
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		95.0						18.9				
Intersection Capacity Utilization		73.6%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	1017	56	0	371	36	18	41	5	25	27	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5045			5018		1770	1833			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.15	
Satd. Flow (perm)	1770	5045			5018		1305	1833			269	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	67	1156	64	0	395	38	26	59	7	29	32	26
RTOR Reduction (vph)	0	3	0	0	7	0	0	2	0	0	8	0
Lane Group Flow (vph)	67	1217	0	0	426	0	26	64	0	0	79	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1908			2037		253	356			44	
v/s Ratio Prot	c0.04	c0.24			c0.08			c0.03				
v/s Ratio Perm							0.02				c0.29	
v/c Ratio	0.34	0.64			0.21		0.10	0.18			1.79	
Uniform Delay, d1	73.9	45.8			34.7		59.6	60.5			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	1.6			0.2		0.2	0.2			430.9	
Delay (s)	75.0	47.5			34.9		59.8	60.7			505.9	
Level of Service	E	D			C		E	E			F	
Approach Delay (s)		48.9			34.9			60.5			505.9	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		67.2										
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		180.0						22.3				
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	1048	0	634	406	39	0	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3493							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3493							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1178	0	674	432	41	0	0	0	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	1178	0	674	473	0	0	0	0	0	0	4
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3174							609
v/s Ratio Prot		c0.23		c0.20	c0.14							
v/s Ratio Perm												0.00
v/c Ratio		0.61		0.35	0.15							0.01
Uniform Delay, d1		45.3		21.7	0.9							34.9
Progression Factor		0.19		1.00	1.00							1.00
Incremental Delay, d2		1.1		0.1	0.0							0.0
Delay (s)		9.8		21.8	0.9							34.9
Level of Service		A		C	A							C
Approach Delay (s)		9.8			13.2		0.0				34.9	
Approach LOS		A			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		11.6				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.49										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		47.5%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave



















Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	6	214	0	0	308	201	0	0	0	746	0	15
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	7	249	0	0	350	228	0	0	0	1130	0	23
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	578			249			750	841	249	727	727	464
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	578			249			750	841	249	727	727	464
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	0	100	96
cM capacity (veh/h)	995			1317			314	299	790	338	348	598
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	256	578	0	1153								
Volume Left	7	0	0	1130								
Volume Right	0	228	0	23								
cSH	995	1317	1700	341								
Volume to Capacity	0.01	0.00	0.00	3.39								
Queue Length 95th (ft)	1	0	0	Err								
Control Delay (s)	0.3	0.0	0.0	Err								
Lane LOS	A		A	F								
Approach Delay (s)	0.3	0.0	0.0	Err								
Approach LOS			A	F								
Intersection Summary												
Average Delay		5801.6										
Intersection Capacity Utilization		77.4%			ICU Level of Service					D		
Analysis Period (min)		15										













NBC Coastal Campus
22: 3rd St & Palm Ave

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	937	13	86	482	25	15	39	69	29	34	14
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	10	1201	17	97	542	28	26	68	121	63	74	30
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	10	1218	97	570	216	167						
Volume Left (vph)	10	0	97	0	26	63						
Volume Right (vph)	0	17	0	28	121	30						
Hadj (s)	0.53	0.02	0.53	0.00	-0.28	0.00						
Departure Headway (s)	7.7	7.2	7.6	7.1	7.6	8.1						
Degree Utilization, x	0.02	1.0	0.20	1.0	0.46	0.38						
Capacity (veh/h)	456	511	467	512	451	427						
Control Delay (s)	9.7	666.4	11.4	101.5	16.8	15.9						
Approach Delay (s)	660.9		88.4		16.8	15.9						
Approach LOS	F		F		C	C						
Intersection Summary												
Delay			385.0									
Level of Service			F									
Intersection Capacity Utilization			74.7%		ICU Level of Service		D					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	235	904	578	40	53	179
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	242	932	672	47	62	211
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	719				2112	359
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	719				2112	359
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	72				0	67
cM capacity (veh/h)	878				32	637
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	242	932	448	271	273	
Volume Left	242	0	0	0	62	
Volume Right	0	0	0	47	211	
cSH	878	1700	1700	1700	119	
Volume to Capacity	0.28	0.55	0.26	0.16	2.30	
Queue Length 95th (ft)	28	0	0	0	590	
Control Delay (s)	10.7	0.0	0.0	0.0	669.1	
Lane LOS	B				F	
Approach Delay (s)	2.2		0.0		669.1	
Approach LOS					F	
Intersection Summary						
Average Delay			85.5			
Intersection Capacity Utilization			68.2%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱		↱		↰	↱	↱
Volume (vph)	29	906	36	32	578	4	57	25	23	13	39	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3519		1770	3536			1760			1840	1583
Flt Permitted	0.41	1.00		0.20	1.00			0.79			0.90	1.00
Satd. Flow (perm)	762	3519		377	3536			1433			1686	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	35	1079	43	35	635	4	70	30	28	17	51	41
RTOR Reduction (vph)	0	4	0	0	0	0	0	22	0	0	0	32
Lane Group Flow (vph)	35	1118	0	35	639	0	0	106	0	0	68	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	21.8	21.8		21.8	21.8			9.3			9.3	9.3
Effective Green, g (s)	21.8	21.8		21.8	21.8			9.3			9.3	9.3
Actuated g/C Ratio	0.54	0.54		0.54	0.54			0.23			0.23	0.23
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	412	1903		203	1912			330			389	365
v/s Ratio Prot		c0.32			0.18							
v/s Ratio Perm	0.05			0.09				c0.07			0.04	0.01
v/c Ratio	0.08	0.59		0.17	0.33			0.32			0.17	0.03
Uniform Delay, d1	4.5	6.2		4.7	5.2			12.9			12.4	12.0
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.5		0.4	0.1			0.6			0.2	0.0
Delay (s)	4.5	6.7		5.1	5.3			13.5			12.6	12.0
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)		6.6			5.3			13.5			12.4	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay		6.9			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.51										
Actuated Cycle Length (s)		40.3			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		46.8%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↱	↱			↰	↱
Volume (veh/h)	954	9	0	0	7	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1163	11	0	0	10	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			1174		1163	1163
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1174		1163	1163
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		95	98
cM capacity (veh/h)			595		215	237
Direction, Lane #						
Volume Total	1163	11	15			
Volume Left	0	0	10			
Volume Right	0	11	4			
cSH	1700	1700	221			
Volume to Capacity	0.68	0.01	0.07			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.0	0.0	22.4			
Lane LOS			C			
Approach Delay (s)	0.0		22.4			
Approach LOS			C			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			60.2%		ICU Level of Service	B
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	43	1816	130	60	901	135	102	93	65	179	82	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5034		1770	4986			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5034		1770	4986			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	46	1932	138	61	910	136	112	102	71	201	92	30
RTOR Reduction (vph)	0	4	0	0	10	0	0	18	0	0	4	0
Lane Group Flow (vph)	46	2066	0	61	1036	0	0	267	0	0	319	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2005		196	1986			649			658	
v/s Ratio Prot	0.03	c0.41		c0.03	0.21			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.23	1.03		0.31	0.52			0.41			0.48	
Uniform Delay, d1	73.0	54.1		73.7	41.1			63.5			64.5	
Progression Factor	1.00	1.00		1.22	0.84			1.00			1.00	
Incremental Delay, d2	0.6	28.3		0.9	0.9			0.4			0.6	
Delay (s)	73.6	82.5		90.9	35.3			63.9			65.0	
Level of Service	E	F		F	D			E			E	
Approach Delay (s)		82.3			38.3			63.9			65.0	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		66.8			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		119.9%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	21	2107	59	51	1319		22	11	36	66	14	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5065		1770	5054			1705		1770	1715	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.61	1.00	
Satd. Flow (perm)	1770	5065		1770	5054			1544		1144	1715	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	21	2150	60	53	1360	59	27	13	43	78	16	18
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	16	0
Lane Group Flow (vph)	21	2209	0	53	1417	0	0	60	0	78	18	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3562		157	3666			190		141	211	
v/s Ratio Prot	0.01	c0.44		c0.03	c0.28						0.01	
v/s Ratio Perm								0.04		c0.07		
v/c Ratio	0.18	0.62		0.34	0.39			0.32		0.55	0.09	
Uniform Delay, d1	79.3	14.0		77.0	9.4			72.0		74.2	69.9	
Progression Factor	1.44	0.12		1.55	0.28			1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.3		1.0	0.2			1.0		4.6	0.2	
Delay (s)	114.6	1.9		120.6	2.9			72.9		78.9	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.0			7.1			72.9			76.2	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.1			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		62.2%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												








NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	1985	206	162	1394	84	134	42	132	159	46	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5014		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5014		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	30	2112	219	167	1437	87	146	46	143	215	62	28
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	119	0	4	0
Lane Group Flow (vph)	30	2324	0	167	1437	50	0	192	24	0	301	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2220		192	2364	736		306	269		575	
v/s Ratio Prot	0.02	c0.46		c0.09	c0.28			c0.11			c0.09	
v/s Ratio Perm						0.03			0.02			
v/c Ratio	0.19	1.05		0.87	0.61	0.07		0.63	0.09		0.52	
Uniform Delay, d1	76.0	50.1		78.9	35.9	26.6		69.3	62.9		68.0	
Progression Factor	1.01	1.02		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	31.2		31.6	1.2	0.2		9.4	0.7		3.4	
Delay (s)	77.4	82.1		110.5	37.1	26.8		78.7	63.6		71.4	
Level of Service	E	F		F	D	C		E	E		E	
Approach Delay (s)		82.1			43.8			72.2			71.4	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		66.9			HCM 2000 Level of Service					E		
HCM 2000 Volume to Capacity ratio		0.84										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)					19.3		
Intersection Capacity Utilization		106.9%			ICU Level of Service					G		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	2116	52	177	1702		17	41	9		25	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900		1900	1900	1900		1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9				5.6			5.6
Lane Util. Factor	1.00	0.91		1.00	0.91				1.00		1.00	
Frt	1.00	1.00		1.00	1.00				0.92		0.97	
Flt Protected	0.95	1.00		0.95	1.00				0.99		0.97	
Satd. Flow (prot)	1770	5067		1770	5078				1680		1757	
Flt Permitted	0.95	1.00		0.95	1.00				0.89		0.82	
Satd. Flow (perm)	1770	5067		1770	5078				1510		1487	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.95	0.85	0.85	0.85	0.85	0.81	0.81
Adj. Flow (vph)	11	2351	58	186	1792		18	48	11	99	31	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	79	0	0	11	0
Lane Group Flow (vph)	11	2407	0	186	1809	0	0	79	0	0	48	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7				17.4			17.4
Effective Green, g (s)	0.8	40.3		11.2	50.7				17.4			17.4
Actuated g/C Ratio	0.01	0.48		0.13	0.60				0.21			0.21
Clearance Time (s)	5.2	4.9		5.2	4.9				5.6			5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0				3.0			3.0
Lane Grp Cap (vph)	16	2413		234	3043				310			305
v/s Ratio Prot	0.01	c0.48		c0.11	0.36							
v/s Ratio Perm									c0.05			0.03
v/c Ratio	0.69	1.00		0.79	0.59				0.26			0.16
Uniform Delay, d1	41.8	22.1		35.6	10.6				28.2			27.6
Progression Factor	1.00	1.00		1.00	1.00				1.00			1.00
Incremental Delay, d2	80.1	17.6		16.8	0.3				0.4			0.2
Delay (s)	121.9	39.7		52.4	10.9				28.6			27.8
Level of Service	F	D		D	B				C			C
Approach Delay (s)		40.1			14.7				28.6			27.8
Approach LOS		D			B				C			C
Intersection Summary												
HCM 2000 Control Delay		28.6			HCM 2000 Level of Service					C		
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		84.6			Sum of lost time (s)					15.7		
Intersection Capacity Utilization		73.4%			ICU Level of Service					D		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	196	2054	28	340	1710	576	69	184	553	610	248	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	206	2162	29	366	1839	619	73	196	588	663	270	257
RTOR Reduction (vph)	0	1	0	0	0	84	0	26	282	0	2	126
Lane Group Flow (vph)	206	2190	0	366	1839	535	73	382	94	663	294	105
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2			4				8
Actuated Green, G (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.3	38.3	11.8	41.4	41.4
Effective Green, g (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.3	38.3	11.8	41.4	41.4
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1201		519	2318	721	100	407	375	264	471	406
v/s Ratio Prot	0.06	c0.43		c0.21	c0.36		0.04	c0.23		c0.19	c0.17	
v/s Ratio Perm					0.34			0.06				0.07
v/c Ratio	0.81	1.82		0.71	0.79	0.74	0.73	0.94	0.25	2.51	0.62	0.26
Uniform Delay, d1	69.9	58.5		48.2	35.5	34.3	71.1	56.4	46.0	70.8	49.1	43.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	16.9	373.9		4.3	1.9	4.1	23.2	29.4	0.4	691.3	2.6	0.3
Delay (s)	86.8	432.4		52.6	37.5	38.4	94.4	85.8	46.4	762.0	51.7	44.2
Level of Service	F	F		D	D	D	F	D	D	F	D	D
Approach Delay (s)		402.7			39.6			69.2			446.0	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		229.4			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.26										
Actuated Cycle Length (s)		153.3			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		130.5%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	↔
Volume (vph)	0	527	889	0	456	1743
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	592	946	0	501	1915
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	592	946	0	501	1912
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.17	c0.27		0.28	c0.69
v/s Ratio Perm						
v/c Ratio		0.33	1.10		0.76	1.08
Uniform Delay, d1		11.8	30.3		21.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	62.7		4.9	45.2
Delay (s)		11.9	93.0		26.7	59.7
Level of Service		B	F		C	E
Approach Delay (s)		11.9	93.0		52.9	
Approach LOS		B	F		D	
Intersection Summary						
HCM 2000 Control Delay		56.4			HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio		1.16				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		90.2%			ICU Level of Service	E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	976	0	0	547	260	455	3	111	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1616				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1616				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1017	0	0	615	292	489	3	119	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	31	0	0	0	0
Lane Group Flow (vph)	0	1017	0	0	809	0	313	267	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases						2						
Actuated Green, G (s)		19.7			19.7		14.8	14.8				
Effective Green, g (s)		19.7			19.7		14.8	14.8				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1640			1561		585	562				
v/s Ratio Prot		0.29			0.24							
v/s Ratio Perm							0.19	0.17				
v/c Ratio		0.62			0.52		0.54	0.47				
Uniform Delay, d1		8.6			8.0		11.1	10.8				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.7			0.3		0.9	0.6				
Delay (s)		9.3			8.3		12.0	11.4				
Level of Service		A			A		B	B				
Approach Delay (s)		9.3			8.3		11.8			0.0		
Approach LOS		A			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		9.6			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		42.5			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		49.7%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy















Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	11	9	166	684	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	18	10	180	991	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1191	991	991			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1191	991	991			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	94	99			
cM capacity (veh/h)	204	299	697			
Direction, Lane #						
Volume Total	18	190	991			
Volume Left	0	10	0			
Volume Right	18	0	0			
cSH	299	697	1700			
Volume to Capacity	0.06	0.01	0.58			
Queue Length 95th (ft)	5	1	0			
Control Delay (s)	17.8	0.7	0.0			
Lane LOS	C	A				
Approach Delay (s)	17.8	0.7	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		46.0%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St










Near-Term (2 CVN) with Alternative 3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1421	35	0	3813	554	0	0	478	0	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1712	42	0	4145	602	0	0	598	0	0	13
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4767			1774			3168	6520	632	5056	6240	1723
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4767			1774			3168	6520	632	5056	6240	1723
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	82
cM capacity (veh/h)	21			341			3	0	1359	0	0	76
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	685	685	385	1658	1658	1431	598	13				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	42	0	0	602	598	13				
cSH	1700	1700	1700	1700	1700	1700	1359	76				
Volume to Capacity	0.40	0.40	0.23	0.98	0.98	0.84	0.44	0.18				
Queue Length 95th (ft)	0	0	0	0	0	0	57	15				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	62.5				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	62.5				
Approach LOS							A	F				
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			101.1%	ICU Level of Service				G				
Analysis Period (min)			15									

* User Entered Value


















NBC Coastal Campus
2: Pomona Ave & Fourth St

Near-Term (2 CVN) with Alternative 3
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1282	203	0	3712	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1457	231	0	4124	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1708		2987	641	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1708		2987	641	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	38	
cM capacity (veh/h)			362		10	404	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	583	583	522	1375	1375	1375	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	231	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	404
Volume to Capacity	0.34	0.34	0.31	0.81	0.81	0.81	0.62
Queue Length 95th (ft)	0	0	0	0	0	0	102
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.5
Lane LOS							D
Approach Delay (s)	0.0			0.0			27.5
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			86.6%		ICU Level of Service		E
Analysis Period (min)			15				













NBC Coastal Campus
3: Orange Ave & Third St

Near-Term (2 CVN) with Alternative 3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1590	1958	344	107	103	0	0	279	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4640		1770	3539			3505	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4640		1770	3539			3505	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1710	2105	370	145	139	0	0	321	15
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1026	3151	0	145	139	0	0	334	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3212		186	872			397	
v/s Ratio Prot				0.67	c0.68		c0.08	0.04			c0.10	
v/s Ratio Perm												
v/c Ratio				0.97	0.98		0.78	0.16			0.84	
Uniform Delay, d1				27.6	27.9		82.6	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				21.6	11.8		18.4	0.1			14.9	
Delay (s)				49.1	39.7		101.0	56.1			97.2	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			42.0			79.0			97.2	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay			48.1	HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio			0.94									
Actuated Cycle Length (s)			189.5	Sum of lost time (s)				16.8				
Intersection Capacity Utilization			201.0%	ICU Level of Service				H				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Near-Term (2 CVN) with Alternative 3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑		↑↑	↑↑	
Volume (vph)	1	586	81	0	0	0	0	199	222	453	1473	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3241	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3241	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	637	88	0	0	0	0	231	241	492	1534	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	24	48	0	0	0
Lane Group Flow (vph)	0	638	59	0	0	0	0	303	97	492	1534	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1170	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.43	
v/s Ratio Perm		0.13	0.04						0.07			
v/c Ratio		0.36	0.11					0.26	0.19	0.70	0.74	
Uniform Delay, d1		41.5	37.7					38.6	37.5	63.3	26.4	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.5	
Delay (s)		41.6	37.8					38.7	37.7	66.3	27.9	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.4			37.2	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.3		HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		201.0%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Near-Term (2 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↕	↕
Volume (vph)	225	7	1191	624	0	1173
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3315			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3315			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	262	8	1281	671	0	1235
RTOR Reduction (vph)	2	0	54	0	0	0
Lane Group Flow (vph)	268	0	1898	0	0	1235
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	17.2		43.0			43.0
Effective Green, g (s)	17.2		43.0			43.0
Actuated g/C Ratio	0.25		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	394		2056			2086
v/s Ratio Prot	c0.17		c0.57			0.37
v/s Ratio Perm						
v/c Ratio	0.68		0.92			0.59
Uniform Delay, d1	23.6		11.7			7.9
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	4.8		7.5			0.5
Delay (s)	28.4		19.2			8.3
Level of Service	C		B			A
Approach Delay (s)	28.4		19.2			8.3
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			16.1		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.90			
Actuated Cycle Length (s)			69.3		Sum of lost time (s)	12.1
Intersection Capacity Utilization			79.6%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Near-Term (2 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↕	↕	↕	↕	↕	↕
Volume (vph)	49	3	11	8	0	6	21	1412	27	41	1320	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1693	1583		1706		1770	3529		1770	3524	
Frt Permitted	0.74	0.78	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1308	1380	1583		1517		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	57	3	13	16	0	12	25	1681	32	45	1435	41
RTOR Reduction (vph)	0	0	11	0	24	0	0	1	0	0	1	0
Lane Group Flow (vph)	30	30	2	0	4	0	25	1712	0	45	1475	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.5	15.5	15.5		15.5		2.8	65.6		4.0	66.8	
Effective Green, g (s)	15.5	15.5	15.5		15.5		2.8	65.6		4.0	66.8	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	204	215	247		237		49	2333		71	2373	
v/s Ratio Prot							0.01	c0.49		c0.03	0.42	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.15	0.14	0.01		0.02		0.51	0.73		0.63	0.62	
Uniform Delay, d1	36.1	36.1	35.4		35.4		47.5	11.1		46.9	9.1	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		8.7	1.2		17.0	0.5	
Delay (s)	36.5	36.4	35.4		35.4		56.2	12.3		63.9	9.6	
Level of Service	D	D	D		D		E	B		E	A	
Approach Delay (s)		36.2			35.4			12.9			11.2	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.8				HCM 2000 Level of Service			B		
HCM 2000 Volume to Capacity ratio			0.62									
Actuated Cycle Length (s)			99.2				Sum of lost time (s)			14.1		
Intersection Capacity Utilization			58.1%				ICU Level of Service			B		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Near-Term (2 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	24	0	1354	8	444	868	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	36	0	1488	9	453	886	0
RTOR Reduction (vph)	0	0	0	0	33	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1488	4	453	886	0
Turn Type					NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.42		c0.26	0.25	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.90	0.01	0.74	0.30	
Uniform Delay, d1					60.6			35.2	20.4	41.8	2.4	
Progression Factor					1.00			0.35	1.00	1.00	1.00	
Incremental Delay, d2					0.1			5.2	0.0	4.9	0.3	
Delay (s)					60.6			17.7	20.5	46.7	2.6	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			17.7			17.5	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		18.2			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		80.9%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd











Near-Term (2 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	43	13	2	58	123	127	1203	6	191	430	288
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.88		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3287	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3287	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	40	66	20	2	66	140	141	1337	7	220	494	331
RTOR Reduction (vph)	0	0	19	0	0	118	0	0	4	0	78	0
Lane Group Flow (vph)	40	66	1	0	68	22	141	1337	3	220	747	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Effective Green, g (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Actuated g/C Ratio	0.06	0.06	0.06		0.16	0.16	0.31	0.46	0.46	0.19	0.34	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	97	102	77		295	239	549	1625	618	341	1124	
v/s Ratio Prot	0.02	c0.04			c0.04		0.08	c0.38		c0.12	0.23	
v/s Ratio Perm			0.00			0.01			0.00			
v/c Ratio	0.41	0.65	0.01		0.23	0.09	0.26	0.82	0.01	0.65	0.66	
Uniform Delay, d1	66.2	67.1	64.8		53.3	52.1	37.5	34.1	21.2	53.9	40.6	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.93	
Incremental Delay, d2	2.8	13.3	0.1		0.4	0.2	0.2	4.8	0.0	4.1	3.0	
Delay (s)	69.1	80.4	64.8		53.7	52.3	37.7	38.9	21.3	55.6	40.9	
Level of Service	E	F	E		D	D	D	D	C	E	D	
Approach Delay (s)		74.3			52.7			38.7			44.0	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			43.2		HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio			0.66									
Actuated Cycle Length (s)			145.0		Sum of lost time (s)				19.4			
Intersection Capacity Utilization			89.0%		ICU Level of Service				E			
Analysis Period (min)			15									
c Critical Lane Group												











NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Near-Term (2 CVN) with Alternative 3
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	41	195	5	53	218	9
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	48	229	6	66	237	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	523	39			72	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	523	39			72	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	78			84	
cM capacity (veh/h)	434	1032			1527	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	278	72	247			
Volume Left	48	0	237			
Volume Right	229	66	0			
cSH	1249	1700	1527			
Volume to Capacity	0.22	0.04	0.16			
Queue Length 95th (ft)	21	0	14			
Control Delay (s)	10.3	0.0	7.5			
Lane LOS	B		A			
Approach Delay (s)	10.3	0.0	7.5			
Approach LOS	B					
Intersection Summary						
Average Delay		7.9				
Intersection Capacity Utilization		29.2%	ICU Level of Service	A		
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near-Term (2 CVN) with Alternative 3
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	44	3	1348	387	0	405
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1753		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1753		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	59	4	1419	407	0	633
RTOR Reduction (vph)	4	0	0	123	0	0
Lane Group Flow (vph)	59	0	1419	284	0	633
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		29.7	29.7		29.7
Effective Green, g (s)	3.0		29.7	29.7		29.7
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	123		2467	1059		2467
v/s Ratio Prot	c0.03		c0.40			0.18
v/s Ratio Perm				0.19		
v/c Ratio	0.48		0.58	0.27		0.26
Uniform Delay, d1	19.1		3.3	2.4		2.4
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	3.0		0.3	0.1		0.1
Delay (s)	22.0		3.6	2.5		2.4
Level of Service	C		A	A		A
Approach Delay (s)	22.0		3.4			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.6	HCM 2000 Level of Service		A	
HCM 2000 Volume to Capacity ratio		0.57				
Actuated Cycle Length (s)		42.6	Sum of lost time (s)		9.9	
Intersection Capacity Utilization		49.7%	ICU Level of Service		A	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Near-Term (2 CVN) with Alternative 3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (veh/h)	0	16	2163	6	6	449
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	28	2326	6	9	660
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2677	1166			2332	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2677	1166			2332	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	85			96	
cM capacity (veh/h)	17	187			209	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	28	1551	782	9	330	330
Volume Left	0	0	0	9	0	0
Volume Right	28	0	6	0	0	0
cSH	187	1700	1700	209	1700	1700
Volume to Capacity	0.15	0.91	0.46	0.04	0.19	0.19
Queue Length 95th (ft)	13	0	0	3	0	0
Control Delay (s)	27.6	0.0	0.0	23.0	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	27.6	0.0		0.3		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			70.0%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Near-Term (2 CVN) with Alternative 3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (vph)	18	90	2074	13	39	410
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	22	111	2230	14	57	594
RTOR Reduction (vph)	0	3	0	1	0	0
Lane Group Flow (vph)	22	108	2230	13	57	594
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.9	26.0	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.9	20.9	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	262	308	2251	1007	82	2707
v/s Ratio Prot	0.01	c0.07	c0.63		c0.03	0.17
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.35	0.99	0.01	0.70	0.22
Uniform Delay, d1	39.4	37.3	19.2	7.2	50.3	3.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	16.7	0.0	22.5	0.0
Delay (s)	39.5	38.0	35.9	7.2	72.9	3.6
Level of Service	D	D	D	A	E	A
Approach Delay (s)	38.2		35.8			9.7
Approach LOS	D		D			A
Intersection Summary						
HCM 2000 Control Delay			30.3		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.86			
Actuated Cycle Length (s)			107.2		Sum of lost time (s)	18.1
Intersection Capacity Utilization			73.7%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Near-Term (2 CVN) with Alternative 3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↖↗			↖↗
Volume (veh/h)	0	34	2051	27	0	426
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	55	2159	28	0	576
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2461	1094			2187	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2461	1094			2187	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	74			100	
cM capacity (veh/h)	25	209			239	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	55	1439	748	288	288	
Volume Left	0	0	0	0	0	
Volume Right	55	0	28	0	0	
cSH	209	1700	1700	1700	1700	
Volume to Capacity	0.26	0.85	0.44	0.17	0.17	
Queue Length 95th (ft)	25	0	0	0	0	
Control Delay (s)	28.2	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	28.2	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		67.6%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Near-Term (2 CVN) with Alternative 3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖↗	↖	↖	↖↗
Volume (vph)	11	7	2077	34	16	402
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	18	11	2164	35	20	496
RTOR Reduction (vph)	0	4	0	8	0	0
Lane Group Flow (vph)	18	7	2164	27	20	496
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.5	59.2	59.2	2.1	68.8
Effective Green, g (s)	1.4	3.5	59.2	59.2	2.1	68.8
Actuated g/C Ratio	0.02	0.05	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	72	2727	1220	48	3170
v/s Ratio Prot	c0.01	0.00	c0.61		c0.01	0.14
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.56	0.10	0.79	0.02	0.42	0.16
Uniform Delay, d1	37.4	35.1	5.2	2.1	36.7	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	20.7	0.6	1.7	0.0	5.8	0.0
Delay (s)	58.1	35.7	6.9	2.1	42.5	0.5
Level of Service	E	D	A	A	D	A
Approach Delay (s)	49.6		6.8			2.1
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		6.4		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.78				
Actuated Cycle Length (s)		76.8		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		70.2%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (2 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	3	0	47	2	0	46	3	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	12	0	87	4	0	73	5	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	12	0	91	73	5					
Volume Left (vph)	0	0	87	0	0					
Volume Right (vph)	0	0	0	0	5					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.2	3.2					
Degree Utilization, x	0.01	0.00	0.11	0.08	0.00					
Capacity (veh/h)	829	1121	814	835	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.4%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (2 CVN) with Alternative 3

Timing Plan: AM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↑		↑	↑	↑	↑	↑			
Volume (vph)	3	38	0	0	34	233	4	1875	53	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1353	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	4	51	0	0	47	324	4	1995	56	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	23	0	0	0	0
Lane Group Flow (vph)	4	51	0	0	47	268	4	1995	33	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.9	16.9			16.9	16.9	47.7	43.6	43.6			
Effective Green, g (s)	16.9	16.9			16.9	16.9	47.7	43.6	43.6			
Actuated g/C Ratio	0.23	0.23			0.23	0.23	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	309	426			426	362	1142	2087	933			
v/s Ratio Prot		0.03			0.03		0.00	c0.56				
v/s Ratio Perm	0.00					c0.17			0.02			
v/c Ratio	0.01	0.12			0.11	0.74	0.00	0.96	0.04			
Uniform Delay, d1	22.0	22.6			22.6	26.5	4.7	14.2	6.3			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	8.0	0.0	11.1	0.0			
Delay (s)	22.1	22.7			22.7	34.4	4.7	25.3	6.4			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.7				32.9		24.7			0.0	
Approach LOS		C				C		C			A	
Intersection Summary												
HCM 2000 Control Delay		25.9				HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio		0.90										
Actuated Cycle Length (s)		73.9				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		85.8%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near-Term (2 CVN) with Alternative 3

Timing Plan: AM PEAK





















							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	21	40	355	1648	0	179	191
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	84	160	370	1717	0	227	242
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None		None		
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1945	234	468		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1945	234	468		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	79	66		0		
cM capacity (veh/h)	37	768	1090		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	244	370	858	858	151	317	0
Volume Left	84	370	0	0	0	0	0
Volume Right	160	0	0	0	0	242	0
cSH	100	1090	1700	1700	1700	1700	1700
Volume to Capacity	2.45	0.34	0.50	0.50	0.09	0.19	0.00
Queue Length 95th (ft)	554	38	0	0	0	0	0
Control Delay (s)	749.5	10.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	A					
Approach Delay (s)	749.5	1.8			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay		66.7					
Intersection Capacity Utilization		62.5%		ICU Level of Service		B	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near-Term (2 CVN) with Alternative 3

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	408	2	40	50	8	21	27	1875		4	171	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	1.00		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1595		1770	1661		1770	3536		1770	3426	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1595		1770	1661		1770	3536		1770	3426	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	464	2	45	161	26	68	28	1974	12	6	248	67
RTOR Reduction (vph)	0	31	0	0	64	0	0	1	0	0	22	0
Lane Group Flow (vph)	464	16	0	161	30	0	28	1985	0	6	293	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	28.2	28.2		5.1	5.1		2.1	40.1		0.9	38.9	
Effective Green, g (s)	28.2	28.2		5.1	5.1		2.1	40.1		0.9	38.9	
Actuated g/C Ratio	0.30	0.30		0.05	0.05		0.02	0.43		0.01	0.42	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	535	482		96	90		39	1521		17	1429	
v/s Ratio Prot	c0.26	0.01		c0.09	0.02		c0.02	c0.56		0.00	0.09	
v/s Ratio Perm												
v/c Ratio	0.87	0.03		1.68	0.33		0.72	1.31		0.35	0.21	
Uniform Delay, d1	30.7	22.9		44.1	42.4		45.3	26.6		45.9	17.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	13.9	0.0		345.6	2.2		47.4	142.3		12.2	0.1	
Delay (s)	44.6	22.9		389.7	44.6		92.6	168.8		58.1	17.4	
Level of Service	D	C		F	D		F	F		E	B	
Approach Delay (s)		42.6			262.5			167.8			18.1	
Approach LOS		D			F			F			B	
Intersection Summary												
HCM 2000 Control Delay		139.4						HCM 2000 Level of Service		F		
HCM 2000 Volume to Capacity ratio		1.17										
Actuated Cycle Length (s)		93.2			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		89.9%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

Near-Term (2 CVN) with Alternative 3

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Volume (vph)	8	254	20	0	1726	18	41	24	2	21	43	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5031			5077		1770	1845			1732	
Flt Permitted	0.95	1.00			1.00		0.66	1.00			0.17	
Satd. Flow (perm)	1770	5031			5077		1229	1845			292	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	9	285	22	0	1897	20	49	29	2	27	56	70
RTOR Reduction (vph)	0	5	0	0	1	0	0	2	0	0	17	0
Lane Group Flow (vph)	9	302	0	0	1916	0	49	29	0	0	136	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2061		238	358			48	
v/s Ratio Prot	c0.01	0.06			c0.38			0.02				
v/s Ratio Perm							c0.04				c0.47	
v/c Ratio	0.05	0.16			0.93		0.21	0.08			2.84	
Uniform Delay, d1	71.5	37.0			51.0		60.8	59.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.2			8.1		0.4	0.1			882.4	
Delay (s)	71.6	37.2			59.1		61.3	59.4			957.4	
Level of Service	E	D			E		E	E			F	
Approach Delay (s)		38.2			59.1			60.6			957.4	
Approach LOS		D			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		112.2			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.01										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		72.2%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

Near-Term (2 CVN) with Alternative 3

Timing Plan: AM PEAK

















	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Volume (vph)	0	271	0	407	1735	9	0	0	0	0	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	330	0	433	1846	10	0	0	0	0	0	19
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	330	0	433	1856	0	0	0	0	0	0	7
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.06		0.13	c0.52							
v/s Ratio Perm												0.00
v/c Ratio		0.17		0.25	0.58							0.01
Uniform Delay, d1		37.2		25.7	1.6							34.9
Progression Factor		0.38		1.00	1.00							1.00
Incremental Delay, d2		0.2		0.1	0.3							0.0
Delay (s)		14.2		25.8	1.8							35.0
Level of Service		B		C	A							C
Approach Delay (s)		14.2			6.4		0.0				35.0	
Approach LOS		B			A		A				C	
Intersection Summary												
HCM 2000 Control Delay		7.5			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		69.9%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

Near-Term (2 CVN) with Alternative 3

Timing Plan: AM PEAK




















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	239	0	0	130	105	0	0	0	48	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	12	285	0	0	140	113	0	0	0	53	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	253			285			510	561	285	505	505	196
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	253			285			510	561	285	505	505	196
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1313			1278			468	432	754	475	466	845
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	296	253	0	58								
Volume Left	12	0	0	53								
Volume Right	0	113	0	5								
cSH	1313	1278	1700	495								
Volume to Capacity	0.01	0.00	0.00	0.12								
Queue Length 95th (ft)	1	0	0	10								
Control Delay (s)	0.4	0.0	0.0	13.2								
Lane LOS	A		A	B								
Approach Delay (s)	0.4	0.0	0.0	13.2								
Approach LOS			A	B								
Intersection Summary												
Average Delay			1.5									
Intersection Capacity Utilization			30.7%	ICU Level of Service		A						
Analysis Period (min)			15									

NBC Coastal Campus

22: 3rd St & Palm Ave













Near-Term (2 CVN) with Alternative 3

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	278	5	27	211	25	12	15	127	12	11	15
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	9	323	6	29	227	27	15	19	157	15	14	19
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	329	29	254	190	48						
Volume Left (vph)	9	0	29	0	15	15						
Volume Right (vph)	0	6	0	27	157	19						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.1	5.5	5.1	5.7						
Degree Utilization, x	0.02	0.50	0.05	0.39	0.27	0.08						
Capacity (veh/h)	574	631	561	624	629	541						
Control Delay (s)	7.9	12.8	8.2	10.8	10.0	9.2						
Approach Delay (s)	12.7		10.5		10.0	9.2						
Approach LOS	B		B		B	A						
Intersection Summary												
Delay			11.2									
Level of Service			B									
Intersection Capacity Utilization			38.0%		ICU Level of Service		A					
Analysis Period (min)			15									

























NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Near-Term (2 CVN) with Alternative 3
Timing Plan: AM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	228	428	335	154	18	70
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	289	542	409	188	25	99
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	596				1621	298
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	596				1621	298
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	70				62	86
cM capacity (veh/h)	976				66	698
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	289	542	272	324	124	
Volume Left	289	0	0	0	25	
Volume Right	0	0	0	188	99	
cSH	976	1700	1700	1700	236	
Volume to Capacity	0.30	0.32	0.16	0.19	0.53	
Queue Length 95th (ft)	31	0	0	0	69	
Control Delay (s)	10.2	0.0	0.0	0.0	36.0	
Lane LOS	B				E	
Approach Delay (s)	3.6		0.0		36.0	
Approach LOS					E	
Intersection Summary						
Average Delay			4.8			
Intersection Capacity Utilization			42.1%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Near-Term (2 CVN) with Alternative 3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	421	16	27	336	0	66	39	82	2	28	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3520		1770	3539			1722			1857	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.87			0.98	1.00
Satd. Flow (perm)	929	3520		817	3539			1530			1824	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	22	547	21	35	436	0	100	59	124	3	48	48
RTOR Reduction (vph)	0	4	0	0	0	0	0	33	0	0	0	30
Lane Group Flow (vph)	22	564	0	35	436	0	0	250	0	0	51	18
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.5	13.5		13.5	13.5			13.3			13.3	13.3
Effective Green, g (s)	13.5	13.5		13.5	13.5			13.3			13.3	13.3
Actuated g/C Ratio	0.38	0.38		0.38	0.38			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	348	1320		306	1327			565			673	584
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.16			0.03	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.44			0.08	0.03
Uniform Delay, d1	7.2	8.4		7.3	8.0			8.6			7.4	7.2
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.1			0.6			0.0	0.0
Delay (s)	7.3	8.6		7.5	8.2			9.1			7.4	7.3
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.5			8.1			9.1			7.3	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.4							A		
HCM 2000 Volume to Capacity ratio			0.44									
Actuated Cycle Length (s)			36.0						9.2			
Intersection Capacity Utilization			47.5%							A		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Near-Term (2 CVN) with Alternative 3
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗			↙	
Volume (veh/h)	506	5	0	0	3	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	550	5	0	0	3	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			555		550	550
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			555		550	550
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1015		496	535
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	550	5	10			
Volume Left	0	0	3			
Volume Right	0	5	7			
cSH	1700	1700	521			
Volume to Capacity	0.32	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.0			
Lane LOS			B			
Approach Delay (s)	0.0		12.0			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 3
Timing Plan: AM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↙
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑↑	↘	↙	↑↑↑			↗			↙	↘
Volume (vph)	22	702	40	25	1874	45	170	38	53	93	47	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5044		1770	5068			3323			3361	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5044		1770	5068			3323			3361	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	26	836	48	27	2059	49	205	46	64	113	57	32
RTOR Reduction (vph)	0	3	0	0	1	0	0	13	0	0	9	0
Lane Group Flow (vph)	26	881	0	27	2107	0	0	302	0	0	193	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2233		118	2159			646			653	
v/s Ratio Prot	0.01	c0.17		c0.02	c0.42			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.18	0.39		0.23	0.98			0.47			0.30	
Uniform Delay, d1	76.8	33.9		79.6	50.7			64.2			62.0	
Progression Factor	1.00	1.00		1.24	0.76			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.8	12.5			0.5			0.3	
Delay (s)	77.3	34.4		99.5	50.9			64.8			62.2	
Level of Service	E	C		F	D			E			E	
Approach Delay (s)		35.6			51.5			64.8			62.2	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		49.2			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		74.3%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

27: Florida St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	3	940	36	21	2053	13	19	5	32	57	11	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5080			1691		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.65	1.00	
Satd. Flow (perm)	1770	5057		1770	5080			1545		1208	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	3	1056	40	24	2333	15	26	7	44	81	16	23
RTOR Reduction (vph)	0	2	0	0	0	0	0	27	0	0	19	0
Lane Group Flow (vph)	3	1094	0	24	2348	0	0	50	0	81	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3716			257		201	283	
v/s Ratio Prot	0.00	0.22		c0.01	c0.46						0.01	
v/s Ratio Perm								0.03		c0.07		
v/c Ratio	0.08	0.31		0.20	0.63			0.20		0.40	0.07	
Uniform Delay, d1	86.2	11.2		79.5	12.1			64.6		67.0	63.2	
Progression Factor	1.62	0.26		1.41	0.34			1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.2		0.5	0.5			0.4		1.3	0.1	
Delay (s)	140.1	3.2		112.7	4.5			65.0		68.3	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.6			5.6			65.0			66.7	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		73.4%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

28: 13th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	4	1012	66	100	1901	54	151	20	94	174	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.85	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1137	74	120	2290	65	170	22	106	232	49	21
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	88	0	3	0
Lane Group Flow (vph)	4	1207	0	120	2290	35	0	192	18	0	299	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.24		c0.07	c0.45			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.10	0.54		0.61	0.85	0.04		0.63	0.07		0.51	
Uniform Delay, d1	86.2	36.7		76.3	35.9	20.2		69.1	62.4		67.7	
Progression Factor	1.19	0.62		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.9		5.6	3.5	0.1		3.9	0.1		0.8	
Delay (s)	104.0	23.5		81.9	39.4	20.3		73.1	62.5		68.4	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.8			41.0			69.3			68.4	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		40.0			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		90.6%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	15	1286	27	45	2035	13	17	7	51	40	3	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5080			1672			1725	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.77	
Satd. Flow (perm)	1770	5070		1770	5080			1561			1370	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	16	1398	29	52	2366	15	20	8	61	53	4	29
RTOR Reduction (vph)	0	2	0	0	0	0	0	48	0	0	23	0
Lane Group Flow (vph)	16	1425	0	52	2381	0	0	41	0	0	63	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.6		2.8	39.7			15.2			15.2	
Effective Green, g (s)	0.7	37.6		2.8	39.7			15.2			15.2	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2673		69	2828			332			292	
v/s Ratio Prot	0.01	0.28		c0.03	c0.47							
v/s Ratio Perm								0.03			c0.05	
v/c Ratio	0.94	0.53		0.75	0.84			0.12			0.22	
Uniform Delay, d1	35.3	11.1		33.9	13.2			22.7			23.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	188.5	0.2		36.6	2.4			0.2			0.4	
Delay (s)	223.8	11.3		70.5	15.6			22.8			23.5	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		13.6			16.8			22.8			23.5	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		15.9			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		71.3			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		57.0%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	95	1301	31	254	1971	223	78	75	800	244	96	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	110	1513	36	270	2097	237	87	83	889	290	114	95
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	180	0	3	61
Lane Group Flow (vph)	110	1547	0	270	2097	170	87	339	300	290	121	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.4	31.1	31.1	10.4	33.1	33.1
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.4	31.1	31.1	10.4	33.1	33.1
Actuated g/C Ratio	0.05	0.30		0.15	0.40	0.40	0.07	0.27	0.27	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	176	1531		271	2055	639	127	413	401	306	496	427
v/s Ratio Prot	0.03	0.31		c0.15	c0.41		0.05	c0.22		c0.08	0.07	
v/s Ratio Perm						0.11			0.20			0.02
v/c Ratio	0.62	1.01		1.00	1.02	0.27	0.69	0.82	0.75	0.95	0.24	0.06
Uniform Delay, d1	54.1	40.6		49.3	34.7	23.2	52.8	40.1	39.1	52.8	32.1	30.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.8	25.6		53.3	25.2	0.2	14.2	12.3	7.4	37.3	0.3	0.1
Delay (s)	60.9	66.2		102.6	59.9	23.4	67.0	52.4	46.5	90.1	32.3	30.4
Level of Service	E	E		F	E	C	E	D	D	F	C	C
Approach Delay (s)		65.9			61.0			50.9			65.6	
Approach LOS		E			E			D			E	
Intersection Summary												
HCM 2000 Control Delay		60.9			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.97										
Actuated Cycle Length (s)		116.5			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		87.8%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Near-Term (2 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	295	1167	0	161	1282
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	331	1255	0	179	1424
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	331	1255	0	179	1420
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	18
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.35		0.10	c0.51
v/s Ratio Perm						
v/c Ratio		0.12	1.08		0.86	0.93
Uniform Delay, d1		2.5	26.8		34.7	16.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	49.1		29.2	9.9
Delay (s)		2.5	75.9		63.8	26.5
Level of Service		A	E		E	C
Approach Delay (s)		2.5	75.9		30.6	
Approach LOS		A	E		C	
Intersection Summary						
HCM 2000 Control Delay		45.5			HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio		1.05				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		67.7%			ICU Level of Service	C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)







Near-Term (2 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	456	0	0	443	543	829	2	149	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3247		1681	1632				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3247		1681	1632				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	524	0	0	482	590	901	2	162	0	0	0
RTOR Reduction (vph)	0	0	0	0	369	0	0	30	0	0	0	0
Lane Group Flow (vph)	0	524	0	0	703	0	541	494	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		17.4			17.4		21.0	21.0				
Effective Green, g (s)		17.4			17.4		21.0	21.0				
Actuated g/C Ratio		0.37			0.37		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1327			1217		760	738				
v/s Ratio Prot		0.15			c0.22							
v/s Ratio Perm							c0.32	0.30				
v/c Ratio		0.39			0.58		0.71	0.67				
Uniform Delay, d1		10.6			11.6		10.3	10.0				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		3.2	2.3				
Delay (s)		10.8			12.2		13.4	12.3				
Level of Service		B			B		B	B				
Approach Delay (s)		10.8			12.2		12.9				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay		12.2								HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		46.4								Sum of lost time (s)	8.0	
Intersection Capacity Utilization		70.6%								ICU Level of Service	C	
Analysis Period (min)		15										
c Critical Lane Group												













NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Near-Term (2 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	4	5	66	14	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	16	7	92	34	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	140	34	34			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	140	34	34			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	850	1039	1577			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	16	99	34			
Volume Left	0	7	0			
Volume Right	16	0	0			
cSH	1039	1577	1700			
Volume to Capacity	0.02	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.5	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		1.3				
Intersection Capacity Utilization		17.6%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	4089	18	0	1806	245	0	0	910	0	0	56
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%			0%			0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4259	19	0	1862	253	0	0	1011	0	0	85
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2134			4298			5014	6423	1469	3448	6306	787
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2134			4298			5014	6423	1469	3448	6306	787
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	246			32			0	0	1838	1	0	323
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1704	1704	871	745	745	625	1011	85				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	19	0	0	253	1011	85				
cSH	1700	1700	1700	1700	1700	1700	1838	323				
Volume to Capacity	1.00	1.00	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	89	26				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3	20.0				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.3	20.0				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization			144.4%				ICU Level of Service	H				
Analysis Period (min)			15									

* User Entered Value

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

NBC Coastal Campus
3: Orange Ave & Third St

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

HCM Unsignalized Intersection Capacity Analysis

NBC Coastal Campus
4: Orange Ave & Fourth St

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	7	2124	111	0	0	0	0	355	472	762	1116	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3124	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3124	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2334	122	0	0	0	0	413	549	794	1162	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2342	93	0	0	0	0	654	273	794	1162	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm				NA	Perm	Prot	NA		
Protected Phases	4	4					2		1	6		
Permitted Phases			4					2				
Actuated Green, G (s)		63.4	63.4				53.1	53.1	44.1	100.0		
Effective Green, g (s)		63.4	63.4				53.1	53.1	44.1	100.0		
Actuated g/C Ratio		0.36	0.36				0.30	0.30	0.25	0.57		
Clearance Time (s)		5.6	5.6				4.6	4.6	4.2	6.0		
Vehicle Extension (s)		3.0	3.0				3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)		1841	573				947	409	865	2022		
v/s Ratio Prot		c0.46					c0.21		c0.23	0.33		
v/s Ratio Perm			0.06					0.20				
v/c Ratio		1.27	0.16				0.69	0.67	0.92	0.57		
Uniform Delay, d1		55.8	37.8				53.7	53.2	63.7	23.9		
Progression Factor		1.00	1.00				1.00	1.00	1.00	1.00		
Incremental Delay, d2		126.9	0.1				2.2	4.1	14.3	0.4		
Delay (s)		182.7	37.9				55.9	57.3	78.0	24.3		
Level of Service		F	D				E	E	E	C		
Approach Delay (s)		175.5		0.0			56.4			46.1		
Approach LOS		F		A			E			D		
Intersection Summary												
HCM 2000 Control Delay		107.2		HCM 2000 Level of Service			F					
HCM 2000 Volume to Capacity ratio		0.98										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)			14.4					
Intersection Capacity Utilization		136.0%		ICU Level of Service			H					
Analysis Period (min)		15										
c Critical Lane Group												











NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑		↑↑			↑↑
Volume (vph)	181	13	938	704	0	1266
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1582		3265			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1582		3265			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	232	17	1054	791	0	1361
RTOR Reduction (vph)	2	0	65	0	0	0
Lane Group Flow (vph)	247	0	1780	0	0	1361
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA		NA	
Protected Phases	8		2		6	
Permitted Phases						
Actuated Green, G (s)	30.0		120.9		120.9	
Effective Green, g (s)	30.0		120.9		120.9	
Actuated g/C Ratio	0.19		0.76		0.76	
Clearance Time (s)	4.1		5.0		5.0	
Vehicle Extension (s)	3.0		3.0		3.0	
Lane Grp Cap (vph)	296		2467		2540	
v/s Ratio Prot	c0.16		c0.55		0.40	
v/s Ratio Perm						
v/c Ratio	0.84		0.72		0.54	
Uniform Delay, d1	62.6		10.5		8.0	
Progression Factor	1.00		1.00		1.00	
Incremental Delay, d2	18.1		1.9		0.8	
Delay (s)	80.7		12.4		8.8	
Level of Service	F		B		A	
Approach Delay (s)	80.7		12.4		8.8	
Approach LOS	F		B		A	
Intersection Summary						
HCM 2000 Control Delay		15.9		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.76				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		81.9%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						








NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	11	30	27	11	26	24	1557	52	70	1499	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1723		1770	3522		1770	3489	
Flt Permitted	0.67	0.67	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1188	1193	1583		1459		1770	3522		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	192	14	38	42	17	41	26	1674	56	76	1629	172
RTOR Reduction (vph)	0	0	32	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	102	104	6	0	78	0	26	1729	0	76	1798	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	19.3	19.3	19.3		19.3		4.6	71.0		8.1	74.5	
Effective Green, g (s)	19.3	19.3	19.3		19.3		4.6	71.0		8.1	74.5	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.04	0.63		0.07	0.66	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	203	269		248		71	2209		126	2296	
v/s Ratio Prot							0.01	0.49		c0.04	c0.52	
v/s Ratio Perm	0.09	c0.09	0.00		0.05							
v/c Ratio	0.50	0.51	0.02		0.31		0.37	0.78		0.60	0.78	
Uniform Delay, d1	42.6	42.7	39.1		41.1		52.9	15.5		51.0	13.7	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.0	2.2	0.0		0.7		3.2	1.9		7.9	1.8	
Delay (s)	44.6	44.8	39.1		41.9		56.1	17.3		58.9	15.5	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.9			41.9			17.9			17.2	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		19.8			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		113.2			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		76.4%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	8	0	151	0	1355	0	34	1643	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	12	0	219	0	1441	0	37	1767	0
RTOR Reduction (vph)	0	0	0	0	178	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	53	0	0	1441	0	37	1767	0
Turn Type				Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			44.9		1.7	50.8	
Effective Green, g (s)					14.1			44.9		1.7	50.8	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					304			2118		40	2397	
v/s Ratio Prot					c0.03			0.41		0.02	c0.50	
v/s Ratio Perm												
v/c Ratio					0.17			0.68		0.93	0.74	
Uniform Delay, d1					25.6			10.2		36.6	7.8	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			0.9		112.0	1.2	
Delay (s)					25.8			11.1		148.6	9.0	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			25.8			11.1			11.9	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					12.5			HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio					0.71							
Actuated Cycle Length (s)					75.0			Sum of lost time (s)		18.9		
Intersection Capacity Utilization					63.6%			ICU Level of Service		B		
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Near-Term (2 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	252	42	108	7	61	348	25	778	3	117	1496	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.96	1.00	1.00	0.86	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1517		1853	1512	1770	3539	1354	1770	3515	
Flt Permitted	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1517		1853	1512	1770	3539	1354	1770	3515	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	332	55	142	8	66	378	27	855	3	124	1591	64
RTOR Reduction (vph)	0	0	114	0	0	213	0	0	2	0	2	0
Lane Group Flow (vph)	332	55	28	0	74	165	27	855	1	124	1653	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.8	27.8	27.8		19.7	19.7	2.9	58.0	58.0	15.0	70.1	
Effective Green, g (s)	27.8	27.8	27.8		19.7	19.7	2.9	58.0	58.0	15.0	70.1	
Actuated g/C Ratio	0.20	0.20	0.20		0.14	0.14	0.02	0.41	0.41	0.11	0.50	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	351	370	301		260	212	36	1467	561	189	1761	
v/s Ratio Prot	c0.19	0.03			0.04		0.02	0.24		c0.07	c0.47	
v/s Ratio Perm			0.02			c0.11			0.00			
v/c Ratio	0.95	0.15	0.09		0.28	0.78	0.75	0.58	0.00	0.66	0.94	
Uniform Delay, d1	55.3	46.3	45.8		53.8	58.0	68.1	31.6	24.0	60.0	32.9	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	33.9	0.2	0.1		0.6	16.3	59.8	1.7	0.0	7.9	11.1	
Delay (s)	89.2	46.5	45.9		54.4	74.3	127.9	33.3	24.0	67.9	44.0	
Level of Service	F	D	D		D	E	F	C	C	E	D	
Approach Delay (s)		73.1			71.0			36.2			45.7	
Approach LOS		E			E			D			D	
Intersection Summary												
HCM 2000 Control Delay		50.5								D		
HCM 2000 Volume to Capacity ratio		0.92										
Actuated Cycle Length (s)		139.9				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		80.5%				ICU Level of Service		D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

Near-Term (2 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	290	414	4	50	157	4
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	322	460	6	70	178	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	402	41			76	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	402	41			76	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	40	55			88	
cM capacity (veh/h)	533	1030			1523	
Direction, Lane #						
Volume Total	782	76	183			
Volume Left	322	0	178			
Volume Right	460	70	0			
cSH	1111	1700	1523			
Volume to Capacity	0.70	0.04	0.12			
Queue Length 95th (ft)	155	0	10			
Control Delay (s)	15.5	0.0	7.5			
Lane LOS	C		A			
Approach Delay (s)	15.5	0.0	7.5			
Approach LOS	C					
Intersection Summary						
Average Delay		13.0				
Intersection Capacity Utilization		38.3%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near-Term (2 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕		↕
Volume (vph)	296	4	815	53	0	1628
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1771		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1771		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	375	5	906	59	0	1829
RTOR Reduction (vph)	1	0	0	34	0	0
Lane Group Flow (vph)	379	0	906	25	0	1829
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	843		1520	633		1520
v/s Ratio Prot	c0.21		0.26			c0.52
v/s Ratio Perm				0.02		
v/c Ratio	0.45		0.60	0.04		1.20
Uniform Delay, d1	18.3		23.0	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.6	0.0		98.0
Delay (s)	18.7		23.6	17.4		128.0
Level of Service	B		C	B		F
Approach Delay (s)	18.7		23.2			128.0
Approach LOS	B		C			F

Intersection Summary

HCM 2000 Control Delay	83.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	9.9
Intersection Capacity Utilization	94.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Near-Term (2 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕	↕	↕
Volume (veh/h)	5	7	661	4	16	1512
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	10	14	769	5	18	1662
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1637	387			773	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1637	387			773	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	98			98	
cM capacity (veh/h)	90	612			838	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	24	512	261	18	831	831
Volume Left	10	0	0	18	0	0
Volume Right	14	0	5	0	0	0
cSH	178	1700	1700	838	1700	1700
Volume to Capacity	0.13	0.30	0.15	0.02	0.49	0.49
Queue Length 95th (ft)	11	0	0	2	0	0
Control Delay (s)	28.3	0.0	0.0	9.4	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	28.3	0.0		0.1		
Approach LOS	D					

Intersection Summary

Average Delay	0.3		
Intersection Capacity Utilization	51.8%	ICU Level of Service	A
Analysis Period (min)	15		

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

Near-Term (2 CVN) with Alternative 3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↙	↘	↗	↖	↙	↘
Lane Configurations	↙	↘	↗	↖	↙	↘
Volume (vph)	31	59	605	13	107	1410
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	34	64	688	15	118	1549
RTOR Reduction (vph)	0	46	0	8	0	0
Lane Group Flow (vph)	34	18	688	7	118	1549
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases				2		
Actuated Green, G (s)	11.2	23.1	27.7	27.7	6.8	43.3
Effective Green, g (s)	11.2	18.0	27.7	27.7	6.8	43.3
Actuated g/C Ratio	0.18	0.28	0.43	0.43	0.11	0.68
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	310	446	1536	687	188	2401
v/s Ratio Prot	c0.02	0.01	0.19		0.07	c0.44
v/s Ratio Perm				0.00		
v/c Ratio	0.11	0.04	0.45	0.01	0.63	0.65
Uniform Delay, d1	22.1	16.6	12.7	10.3	27.3	5.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.2	0.0	6.4	0.6
Delay (s)	22.3	16.7	12.9	10.3	33.7	6.5
Level of Service	C	B	B	B	C	A
Approach Delay (s)	18.6		12.8			8.4
Approach LOS	B		B			A

Intersection Summary

HCM 2000 Control Delay	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	63.8	Sum of lost time (s)	18.1
Intersection Capacity Utilization	50.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

Near-Term (2 CVN) with Alternative 3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↙	↘	↗	↖	↙	↘
Lane Configurations		↗	↗			↗
Volume (veh/h)	0	24	595	20	0	1441
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	32	684	23	0	1566
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1479	353			707	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1479	353			707	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	117	643			887	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	32	456	251	783	783
Volume Left	0	0	0	0	0
Volume Right	32	0	23	0	0
cSH	643	1700	1700	1700	1700
Volume to Capacity	0.05	0.27	0.15	0.46	0.46
Queue Length 95th (ft)	4	0	0	0	0
Control Delay (s)	10.9	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.9	0.0		0.0	
Approach LOS	B				

Intersection Summary

Average Delay	0.2				
Intersection Capacity Utilization	43.2%		ICU Level of Service	A	
Analysis Period (min)	15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↕	↕	↰	↱
Volume (vph)	31	27	588	20	24	1416
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	43	38	626	21	26	1556
RTOR Reduction (vph)	0	34	0	8	0	0
Lane Group Flow (vph)	43	4	626	13	26	1556
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	27.7	27.7	1.7	36.9
Effective Green, g (s)	2.6	4.3	27.7	27.7	1.7	36.9
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	99	147	2126	951	65	2832
v/s Ratio Prot	c0.02	0.00	0.18		0.01	c0.44
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.43	0.02	0.29	0.01	0.40	0.55
Uniform Delay, d1	21.0	19.0	4.5	3.7	21.7	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.1	0.1	0.0	4.0	0.2
Delay (s)	24.1	19.1	4.5	3.7	25.7	1.9
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.7		4.5			2.3
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.6		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.67			
Actuated Cycle Length (s)			46.1		Sum of lost time (s)	14.1
Intersection Capacity Utilization			50.1%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↕	↕		↕			↕		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	12	15	88	8	0	185	14	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	12	16	114	10	0	208	16	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	13	16	125	224						
Volume Left (vph)	0	0	114	0						
Volume Right (vph)	0	16	0	16						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.1	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.20						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near-Term (2 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱	↰	↱	↰			
Volume (vph)	11	191	0	0	85	143	13	507	71	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.69	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1292	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	12	217	0	0	98	164	14	557	78	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	129	0	43	0	0	0	0
Lane Group Flow (vph)	12	217	0	0	98	35	14	557	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.5	8.5			8.5	8.5	18.0	18.0	18.0			
Effective Green, g (s)	8.5	8.5			8.5	8.5	18.0	18.0	18.0			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.45	0.45	0.45			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	275	396			396	337	798	1596	714			
v/s Ratio Prot		c0.12			0.05		0.01	c0.16				
v/s Ratio Perm	0.01					0.02		0.02				
v/c Ratio	0.04	0.55			0.25	0.10	0.02	0.35	0.05			
Uniform Delay, d1	12.5	14.0			13.0	12.6	6.1	7.1	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.6			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.5	15.5			13.4	12.8	6.1	7.3	6.2			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.0		7.1			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.1			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.41										
Actuated Cycle Length (s)		39.9			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		42.5%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd









Near-Term (2 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱	↰
Volume (veh/h)	189	351	88	467	0	1542	47
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	756	1404	100	531	0	1713	52
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2205	883	1766		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2205	883	1766		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	0	71		0		
cM capacity (veh/h)	27	289	349		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	2160	100	265	265	1142	623	0
Volume Left	756	100	0	0	0	0	0
Volume Right	1404	0	0	0	0	52	0
cSH	66	349	1700	1700	1700	1700	1700
Volume to Capacity	32.87	0.29	0.16	0.16	0.67	0.37	0.00
Queue Length 95th (ft)	Err	29	0	0	0	0	0
Control Delay (s)	Err	19.4	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C					
Approach Delay (s)	Err	3.1			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			4740.7				
Intersection Capacity Utilization			91.0%		ICU Level of Service		
Analysis Period (min)			15				F









NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	7	70	19	4	7	76	405	58	19	1433	201
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.86		1.00	0.90		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1608		1770	1685		1770	3472		1770	3474	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1608		1770	1685		1770	3472		1770	3474	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	120	9	93	38	8	14	84	445	64	21	1592	223
RTOR Reduction (vph)	0	75	0	0	14	0	0	8	0	0	9	0
Lane Group Flow (vph)	120	27	0	38	8	0	84	501	0	21	1807	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	18.1	18.1		2.7	2.7		5.8	49.7		1.6	45.5	
Effective Green, g (s)	18.1	18.1		2.7	2.7		5.8	49.7		1.6	45.5	
Actuated g/C Ratio	0.20	0.20		0.03	0.03		0.06	0.55		0.02	0.50	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	352	319		52	49		112	1896		31	1737	
v/s Ratio Prot	c0.07	0.02		c0.02	0.00		c0.05	c0.14		0.01	c0.52	
v/s Ratio Perm												
v/c Ratio	0.34	0.09		0.73	0.17		0.75	0.26		0.68	1.04	
Uniform Delay, d1	31.3	29.7		43.8	43.1		41.9	11.0		44.4	22.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.1		40.9	1.7		24.2	0.1		45.6	32.8	
Delay (s)	31.9	29.8		84.7	44.7		66.1	11.0		90.1	55.5	
Level of Service	C	C		F	D		E	B		F	E	
Approach Delay (s)		30.9			70.0			18.8			55.9	
Approach LOS		C			E			B			E	
Intersection Summary												
HCM 2000 Control Delay		46.1										
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		91.0										
Intersection Capacity Utilization		73.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	1382	62	0	462	36	19	41	5	25	27	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5053			5030		1770	1833			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.15	
Satd. Flow (perm)	1770	5053			5030		1305	1833			269	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	67	1570	70	0	491	38	27	59	7	29	32	26
RTOR Reduction (vph)	0	2	0	0	5	0	0	2	0	0	8	0
Lane Group Flow (vph)	67	1638	0	0	524	0	27	64	0	0	79	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1911			2042		253	356			44	
v/s Ratio Prot	c0.04	c0.32			c0.10			c0.03				
v/s Ratio Perm							0.02				c0.29	
v/c Ratio	0.34	0.86			0.26		0.11	0.18			1.79	
Uniform Delay, d1	73.9	51.5			35.4		59.6	60.5			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	5.2			0.3		0.2	0.2			430.9	
Delay (s)	75.0	56.7			35.7		59.8	60.7			505.9	
Level of Service	E	E			D		E	E			F	
Approach Delay (s)		57.4			35.7		60.5				505.9	
Approach LOS		E			D		E				F	
Intersection Summary												
HCM 2000 Control Delay		68.9										
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		69.1%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

Near-Term (2 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	1413	0	516	497	39	0	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3501							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3501							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1588	0	549	529	41	0	0	0	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	1588	0	549	570	0	0	0	0	0	0	4
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3182							609
v/s Ratio Prot		c0.31		c0.16	c0.16							
v/s Ratio Perm												0.00
v/c Ratio		0.83		0.29	0.18							0.01
Uniform Delay, d1		50.6		20.7	0.9							34.9
Progression Factor		0.21		1.00	1.00							1.00
Incremental Delay, d2		2.0		0.1	0.0							0.0
Delay (s)		12.9		20.8	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		12.9			10.7		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		12.1				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.54										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		51.4%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave




















Near-Term (2 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	4	215	0	0	313	41	0	0	0	105	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	5	250	0	0	356	47	0	0	0	159	0	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	402			250			652	662	250	638	638	379
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	402			250			652	662	250	638	638	379
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	59	100	98
cM capacity (veh/h)	1156			1316			372	381	789	388	393	668
Direction, Lane #												
Volume Total	255	402	0	173								
Volume Left	5	0	0	159								
Volume Right	0	47	0	14								
cSH	1156	1316	1700	401								
Volume to Capacity	0.00	0.00	0.00	0.43								
Queue Length 95th (ft)	0	0	0	53								
Control Delay (s)	0.2	0.0	0.0	20.6								
Lane LOS	A			A			C					
Approach Delay (s)	0.2	0.0	0.0	20.6								
Approach LOS				A			C					
Intersection Summary												
Average Delay		4.3										
Intersection Capacity Utilization		32.0%				ICU Level of Service		A				
Analysis Period (min)		15										











NBC Coastal Campus
22: 3rd St & Palm Ave

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	297	13	86	327	25	15	39	69	29	34	14
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	10	381	17	97	367	28	26	68	121	63	74	30
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	10	397	97	396	216	167						
Volume Left (vph)	10	0	97	0	26	63						
Volume Right (vph)	0	17	0	28	121	30						
Hadj (s)	0.53	0.00	0.53	-0.02	-0.28	0.00						
Departure Headway (s)	7.3	6.8	7.2	6.7	6.7	7.2						
Degree Utilization, x	0.02	0.75	0.19	0.73	0.40	0.33						
Capacity (veh/h)	464	512	477	521	470	427						
Control Delay (s)	9.3	26.1	10.7	24.4	14.2	13.7						
Approach Delay (s)	25.6		21.7		14.2	13.7						
Approach LOS	D		C		B	B						
Intersection Summary												
Delay			20.7									
Level of Service			C									
Intersection Capacity Utilization			41.9%		ICU Level of Service		A					
Analysis Period (min)			15									




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	74	425	458	40	53	144
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	76	438	533	47	62	169
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	579				1147	290
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	579				1147	290
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	92				65	76
cM capacity (veh/h)	991				178	707
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	76	438	355	224	232	
Volume Left	76	0	0	0	62	
Volume Right	0	0	0	47	169	
cSH	991	1700	1700	1700	393	
Volume to Capacity	0.08	0.26	0.21	0.13	0.59	
Queue Length 95th (ft)	6	0	0	0	91	
Control Delay (s)	8.9	0.0	0.0	0.0	26.6	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		26.6	
Approach LOS					D	
Intersection Summary						
Average Delay			5.2			
Intersection Capacity Utilization			40.8%		ICU Level of Service	A
Analysis Period (min)			15			











NBC Coastal Campus
24: 7th St & Palm Ave

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	434	30	32	460	4	55	26	23	13	45	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3535			1761			1842	1583
Flt Permitted	0.46	1.00		0.45	1.00			0.79			0.89	1.00
Satd. Flow (perm)	865	3505		829	3535			1435			1665	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	35	517	36	35	505	4	67	32	28	17	59	41
RTOR Reduction (vph)	0	7	0	0	1	0	0	22	0	0	0	32
Lane Group Flow (vph)	35	546	0	35	508	0	0	105	0	0	76	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases	2			6			8			4		
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	14.7	14.7		14.7	14.7			6.5			6.5	6.5
Effective Green, g (s)	14.7	14.7		14.7	14.7			6.5			6.5	6.5
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.21			0.21	0.21
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	418	1694		400	1709			306			356	338
v/s Ratio Prot	c0.16			0.14								
v/s Ratio Perm	0.04			0.04				c0.07			0.05	0.01
v/c Ratio	0.08	0.32		0.09	0.30			0.34			0.21	0.03
Uniform Delay, d1	4.2	4.8		4.2	4.7			10.1			9.8	9.4
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.7			0.3	0.0
Delay (s)	4.3	4.9		4.3	4.8			10.8			10.1	9.5
Level of Service	A	A		A	A			B			B	A
Approach Delay (s)	4.9			4.8				10.8			9.9	
Approach LOS	A			A				B			A	
Intersection Summary												
HCM 2000 Control Delay	5.8			HCM 2000 Level of Service				A				
HCM 2000 Volume to Capacity ratio	0.33											
Actuated Cycle Length (s)	30.4			Sum of lost time (s)				9.2				
Intersection Capacity Utilization	45.3%			ICU Level of Service				A				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	482	9	0	0	7	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	588	11	0	0	10	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)	767					
pX, platoon unblocked						
vC, conflicting volume			599		588	588
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			599		588	588
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			978		472	509
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	588	11	15			
Volume Left	0	0	10			
Volume Right	0	11	4			
cSH	1700	1700	482			
Volume to Capacity	0.35	0.01	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.7			
Lane LOS			B			
Approach Delay (s)	0.0		12.7			
Approach LOS			B			
Intersection Summary						
Average Delay	0.3					
Intersection Capacity Utilization	35.4%			ICU Level of Service		A
Analysis Period (min)	15					

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	43	1709	130	60	874	135	101	93	65	179	82	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5031		1770	4983			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5031		1770	4983			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	46	1818	138	61	883	136	111	102	71	201	92	30
RTOR Reduction (vph)	0	5	0	0	11	0	0	19	0	0	4	0
Lane Group Flow (vph)	46	1951	0	61	1008	0	0	265	0	0	319	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2004		196	1984			649			658	
v/s Ratio Prot	0.03	c0.39		c0.03	0.20			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.23	0.97		0.31	0.51			0.41			0.48	
Uniform Delay, d1	73.0	53.2		73.7	40.8			63.4			64.5	
Progression Factor	1.00	1.00		1.23	0.81			1.00			1.00	
Incremental Delay, d2	0.6	14.3		0.9	0.9			0.4			0.6	
Delay (s)	73.6	67.5		91.1	34.2			63.9			65.0	
Level of Service	E	E		F	C			E			E	
Approach Delay (s)		67.7			37.4			63.9			65.0	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		58.3			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		119.9%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	21	2000	59	51	1292		22	11	36	66	14	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5064		1770	5053			1705		1770	1715	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.61	1.00	
Satd. Flow (perm)	1770	5064		1770	5053			1544		1144	1715	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	21	2041	60	53	1332	59	27	13	43	78	16	18
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	16	0
Lane Group Flow (vph)	21	2100	0	53	1389	0	0	60	0	78	18	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3561		157	3666			190		141	211	
v/s Ratio Prot	0.01	c0.41		c0.03	c0.27						0.01	
v/s Ratio Perm								0.04		c0.07		
v/c Ratio	0.18	0.59		0.34	0.38			0.32		0.55	0.09	
Uniform Delay, d1	79.3	13.5		77.0	9.3			72.0		74.2	69.9	
Progression Factor	1.43	0.10		1.55	0.28			1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3		1.0	0.2			1.0		4.6	0.2	
Delay (s)	113.7	1.7		120.3	2.9			72.9		78.9	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		2.8			7.2			72.9			76.2	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		62.2%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												








NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	1878	206	162	1367	84	133	42	132	159	46	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5010		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5010		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	30	1998	219	167	1409	87	145	46	143	215	62	28
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	119	0	4	0
Lane Group Flow (vph)	30	2210	0	167	1409	50	0	191	24	0	301	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2218		192	2364	736		306	269		575	
v/s Ratio Prot	0.02	c0.44		c0.09	c0.28			c0.11			c0.09	
v/s Ratio Perm						0.03			0.02			
v/c Ratio	0.19	1.00		0.87	0.60	0.07		0.62	0.09		0.52	
Uniform Delay, d1	76.0	50.0		78.9	35.6	26.6		69.3	62.9		68.0	
Progression Factor	1.02	0.99		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	16.7		31.6	1.1	0.2		9.3	0.7		3.4	
Delay (s)	78.0	66.1		110.5	36.8	26.8		78.6	63.6		71.4	
Level of Service	E	E		F	D	C		E	E		E	
Approach Delay (s)		66.2			43.6			72.1			71.4	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		58.8			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		104.8%			ICU Level of Service				G			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	2009	52	177	1675		41	9		25	11	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5066		1770	5078			1680			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.82	
Satd. Flow (perm)	1770	5066		1770	5078			1510			1487	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.95	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	11	2232	58	186	1763		18	48	11	99	31	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	79	0	0	11	0
Lane Group Flow (vph)	11	2288	0	186	1780	0	0	79	0	0	48	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.4			17.4	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.4			17.4	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2413		234	3043			310			305	
v/s Ratio Prot	0.01	c0.45		c0.11	0.35							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.69	0.95		0.79	0.59			0.26			0.16	
Uniform Delay, d1	41.8	21.2		35.6	10.5			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	80.1	8.9		16.8	0.3			0.4			0.2	
Delay (s)	121.9	30.1		52.4	10.7			28.6			27.8	
Level of Service	F	C		D	B			C			C	
Approach Delay (s)		30.5			14.7			28.6			27.8	
Approach LOS		C			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		23.5			HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		84.6			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		71.4%			ICU Level of Service				C			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	196	1946	28	340	1684	576	68	184	553	610	248	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	206	2048	29	366	1811	619	72	196	588	663	270	257
RTOR Reduction (vph)	0	1	0	0	0	86	0	26	282	0	2	127
Lane Group Flow (vph)	206	2076	0	366	1811	533	72	382	94	663	294	104
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.3	38.3	11.8	41.4	41.4
Effective Green, g (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.3	38.3	11.8	41.4	41.4
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1201		519	2318	721	100	407	375	264	471	406
v/s Ratio Prot	0.06	c0.41		c0.21	c0.36		0.04	c0.23		c0.19	c0.17	
v/s Ratio Perm					0.34			0.06				0.07
v/c Ratio	0.81	1.73		0.71	0.78	0.74	0.72	0.94	0.25	2.51	0.62	0.26
Uniform Delay, d1	69.9	58.5		48.2	35.2	34.2	71.1	56.4	46.0	70.8	49.1	43.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	16.9	331.5		4.3	1.8	4.0	21.9	29.4	0.4	691.3	2.6	0.3
Delay (s)	86.8	390.0		52.6	37.0	38.2	93.0	85.8	46.4	762.0	51.7	44.2
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		362.6			39.3			69.1			446.0	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		214.4			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.23										
Actuated Cycle Length (s)		153.3			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		128.0%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	↔
Volume (vph)	0	527	889	0	456	1717
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	592	946	0	501	1887
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	592	946	0	501	1884
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.17	c0.27		0.28	c0.68
v/s Ratio Perm						
v/c Ratio		0.33	1.10		0.76	1.06
Uniform Delay, d1		11.8	30.3		21.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	62.7		4.9	39.5
Delay (s)		11.9	93.0		26.7	54.0
Level of Service		B	F		C	D
Approach Delay (s)		11.9	93.0		48.3	
Approach LOS		B	F		D	
Intersection Summary						
HCM 2000 Control Delay		53.6			HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio		1.15				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		89.3%			ICU Level of Service	E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	976	0	0	547	260	455	3	111	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1616				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1616				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1017	0	0	615	292	489	3	119	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	31	0	0	0	0
Lane Group Flow (vph)	0	1017	0	0	809	0	313	267	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases							2					
Actuated Green, G (s)		19.7			19.7		14.8	14.8				
Effective Green, g (s)		19.7			19.7		14.8	14.8				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)	1640			1561			585	562				
v/s Ratio Prot	c0.29			0.24								
v/s Ratio Perm							c0.19	0.17				
v/c Ratio	0.62			0.52			0.54	0.47				
Uniform Delay, d1	8.6			8.0			11.1	10.8				
Progression Factor	1.00			1.00			1.00	1.00				
Incremental Delay, d2	0.7			0.3			0.9	0.6				
Delay (s)	9.3			8.3			12.0	11.4				
Level of Service	A			A			B	B				
Approach Delay (s)	9.3			8.3			11.8			0.0		
Approach LOS	A			A			B			A		
Intersection Summary												
HCM 2000 Control Delay		9.6				HCM 2000 Level of Service		A				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		42.5				Sum of lost time (s)		8.0				
Intersection Capacity Utilization		49.7%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Near-Term (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	11	9	4	37	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	18	10	4	54	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	78	54	54			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	78	54	54			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	920	1014	1552			
Direction, Lane #						
Volume Total	18	14	54			
Volume Left	0	10	0			
Volume Right	18	0	0			
cSH	1014	1552	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.6				
Intersection Capacity Utilization		17.4%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1415	35	0	3758	554	0	0	478	0	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1705	42	0	4085	602	0	0	598	0	0	13
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4707			1767			3141	6453	629	4994	6173	1703
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4707			1767			3141	6453	629	4994	6173	1703
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	83
cM capacity (veh/h)	22			343			4	0	1358	0	0	78
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	682	682	383	1634	1634	1419	598	13				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	42	0	0	602	598	13				
cSH	1700	1700	1700	1700	1700	1700	1358	78				
Volume to Capacity	0.40	0.40	0.23	0.96	0.96	0.83	0.44	0.17				
Queue Length 95th (ft)	0	0	0	0	0	0	58	14				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	60.4				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	60.4				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				100.1%			ICU Level of Service		G			
Analysis Period (min)				15								

* User Entered Value




















NBC Coastal Campus
2: Pomona Ave & Fourth St

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR						
Lane Configurations	↑↑↑			↑↑↑		↑						
Volume (veh/h)	1276	203	0	3657	0	231						
Sign Control	Free			Free	Stop							
Grade	0%			0%	0%							
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92						
Hourly flow rate (vph)	1450	231	0	4063	0	251						
Pedestrians	20			20	20							
Lane Width (ft)	12.0			12.0	12.0							
Walking Speed (ft/s)	4.0			4.0	4.0							
Percent Blockage	2			2	2							
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume				1701	2960	639						
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol				1701	2960	639						
tC, single (s)				4.1	6.8	6.9						
tC, 2 stage (s)												
tF (s)				2.2	3.5	3.3						
p0 queue free %				100	100	38						
cM capacity (veh/h)				364	11	405						
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1					
Volume Total	580	580	521	1354	1354	1354	251					
Volume Left	0	0	0	0	0	0	0					
Volume Right	0	0	231	0	0	0	251					
cSH	1700	1700	1700	1700	1700	1700	405					
Volume to Capacity	0.34	0.34	0.31	0.80	0.80	0.80	0.62					
Queue Length 95th (ft)	0	0	0	0	0	0	101					
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.3					
Lane LOS							D					
Approach Delay (s)	0.0			0.0			27.3					
Approach LOS							D					
Intersection Summary												
Average Delay				1.1								
Intersection Capacity Utilization				85.5%			ICU Level of Service		E			
Analysis Period (min)				15								



















NBC Coastal Campus
3: Orange Ave & Third St

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1535	1958	344	107	103	0	0	279	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4641		1770	3539			3505	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4641		1770	3539			3505	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1651	2105	370	145	139	0	0	321	15
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1024	3094	0	145	139	0	0	334	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3213		186	872			397	
v/s Ratio Prot				c0.67	0.67		c0.08	0.04			c0.10	
v/s Ratio Perm												
v/c Ratio				0.97	0.96		0.78	0.16			0.84	
Uniform Delay, d1				27.4	26.9		82.6	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				21.2	8.9		18.4	0.1			14.9	
Delay (s)				48.6	35.8		101.0	56.1			97.2	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			39.0			79.0			97.2	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay			45.5	HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio			0.93									
Actuated Cycle Length (s)			189.5	Sum of lost time (s)				16.8				
Intersection Capacity Utilization			201.0%	ICU Level of Service				H				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	586	81	0	0	0	0	199	216	453	1418	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3245	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3245	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	637	88	0	0	0	0	231	235	492	1477	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	22	48	0	0	0
Lane Group Flow (vph)	0	638	59	0	0	0	0	301	95	492	1477	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1172	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.42	
v/s Ratio Perm		0.13	0.04						0.07			
v/c Ratio		0.36	0.11					0.26	0.18	0.70	0.72	
Uniform Delay, d1		41.5	37.7					38.6	37.5	63.3	25.6	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.2	
Delay (s)		41.6	37.8					38.7	37.6	66.3	26.8	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.4			36.7	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.0		HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		201.0%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗		↖	↗
Volume (vph)	225	7	1185	624	0	1119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3315			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3315			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	262	8	1274	671	0	1178
RTOR Reduction (vph)	1	0	54	0	0	0
Lane Group Flow (vph)	269	0	1891	0	0	1178
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	17.3		42.5			42.5
Effective Green, g (s)	17.3		42.5			42.5
Actuated g/C Ratio	0.25		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	399		2044			2073
v/s Ratio Prot	c0.17		c0.57			0.35
v/s Ratio Perm						
v/c Ratio	0.67		0.92			0.57
Uniform Delay, d1	23.3		11.8			7.8
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	4.4		7.7			0.4
Delay (s)	27.7		19.5			8.1
Level of Service	C		B			A
Approach Delay (s)	27.7		19.5			8.1
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			16.2		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.90			
Actuated Cycle Length (s)			68.9		Sum of lost time (s)	12.1
Intersection Capacity Utilization			79.4%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↗	↖	↗	↖	↖	↗	↖
Volume (vph)	49	3	11	8	0	6	21	1406	27	41	1266	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1693	1583		1706		1770	3529		1770	3524	
Frt Permitted	0.74	0.78	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1308	1380	1583		1516		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	57	3	13	16	0	12	25	1674	32	45	1376	41
RTOR Reduction (vph)	0	0	11	0	24	0	0	1	0	0	1	0
Lane Group Flow (vph)	30	30	2	0	4	0	25	1705	0	45	1416	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.4	15.4	15.4		15.4		2.8	65.0		4.0	66.2	
Effective Green, g (s)	15.4	15.4	15.4		15.4		2.8	65.0		4.0	66.2	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	204	215	247		237		50	2328		71	2368	
v/s Ratio Prot							0.01	c0.48		c0.03	0.40	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.15	0.14	0.01		0.02		0.50	0.73		0.63	0.60	
Uniform Delay, d1	35.9	35.8	35.1		35.2		47.2	11.0		46.5	8.9	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		7.7	1.2		17.0	0.4	
Delay (s)	36.2	36.1	35.1		35.2		54.8	12.2		63.6	9.3	
Level of Service	D	D	D		D		D	B		E	A	
Approach Delay (s)		36.0			35.2			12.9			10.9	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.7				HCM 2000 Level of Service			B		
HCM 2000 Volume to Capacity ratio			0.62									
Actuated Cycle Length (s)			98.5				Sum of lost time (s)			14.1		
Intersection Capacity Utilization			56.6%				ICU Level of Service			B		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	24	0	1348	8	444	814	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	36	0	1481	9	453	831	0
RTOR Reduction (vph)	0	0	0	0	33	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1481	4	453	831	0
Turn Type					NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.42		c0.26	0.23	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.89	0.01	0.74	0.28	
Uniform Delay, d1					60.6			35.1	20.4	41.8	2.3	
Progression Factor					1.00			0.35	1.00	1.00	1.00	
Incremental Delay, d2					0.1			5.1	0.0	4.9	0.2	
Delay (s)					60.6			17.4	20.5	46.7	2.6	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			17.4			18.1	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		18.3			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		80.7%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd











Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	43	13	2	58	123	127	1196	6	191	376	288
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.88		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3267	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3267	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	40	66	20	2	66	140	141	1329	7	220	432	331
RTOR Reduction (vph)	0	0	19	0	0	118	0	0	4	0	93	0
Lane Group Flow (vph)	40	66	1	0	68	22	141	1329	3	220	670	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Effective Green, g (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Actuated g/C Ratio	0.06	0.06	0.06		0.16	0.16	0.31	0.46	0.46	0.19	0.34	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	97	102	77		295	239	549	1625	618	341	1117	
v/s Ratio Prot	0.02	c0.04			c0.04		0.08	c0.38		c0.12	0.20	
v/s Ratio Perm			0.00			0.01			0.00			
v/c Ratio	0.41	0.65	0.01		0.23	0.09	0.26	0.82	0.01	0.65	0.60	
Uniform Delay, d1	66.2	67.1	64.8		53.3	52.1	37.5	33.9	21.2	53.9	39.5	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.93	
Incremental Delay, d2	2.8	13.3	0.1		0.4	0.2	0.2	4.7	0.0	4.1	2.3	
Delay (s)	69.1	80.4	64.8		53.7	52.3	37.7	38.7	21.3	55.7	39.0	
Level of Service	E	F	E		D	D	D	D	C	E	D	
Approach Delay (s)		74.3			52.7			38.5			42.7	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			42.6		HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio			0.66									
Actuated Cycle Length (s)			145.0		Sum of lost time (s)				19.4			
Intersection Capacity Utilization			87.3%		ICU Level of Service				E			
Analysis Period (min)			15									
c Critical Lane Group												













NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	41	195	5	53	218	9
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	48	229	6	66	237	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	523	39			72	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	523	39			72	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	78			84	
cM capacity (veh/h)	434	1032			1527	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	278	72	247			
Volume Left	48	0	237			
Volume Right	229	66	0			
cSH	1249	1700	1527			
Volume to Capacity	0.22	0.04	0.16			
Queue Length 95th (ft)	21	0	14			
Control Delay (s)	10.3	0.0	7.5			
Lane LOS	B		A			
Approach Delay (s)	10.3	0.0	7.5			
Approach LOS	B					
Intersection Summary						
Average Delay		7.9				
Intersection Capacity Utilization		29.2%	ICU Level of Service	A		
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			 			 
Volume (vph)	44	3	1341	387	0	351
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1753		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1753		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	59	4	1412	407	0	548
RTOR Reduction (vph)	4	0	0	123	0	0
Lane Group Flow (vph)	59	0	1412	284	0	548
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		29.7	29.7		29.7
Effective Green, g (s)	3.0		29.7	29.7		29.7
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	123		2467	1059		2467
v/s Ratio Prot	c0.03		c0.40			0.15
v/s Ratio Perm				0.19		
v/c Ratio	0.48		0.57	0.27		0.22
Uniform Delay, d1	19.1		3.3	2.4		2.3
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	3.0		0.3	0.1		0.0
Delay (s)	22.0		3.6	2.5		2.4
Level of Service	C		A	A		A
Approach Delay (s)	22.0		3.3			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.6	HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.56			
Actuated Cycle Length (s)			42.6	Sum of lost time (s)		9.9
Intersection Capacity Utilization			49.5%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖↗		↖	↖↗
Volume (veh/h)	0	16	2157	6	6	395
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	28	2319	6	9	581
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2631	1163			2326	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2631	1163			2326	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	85			96	
cM capacity (veh/h)	18	188			210	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	28	1546	780	9	290	290
Volume Left	0	0	0	9	0	0
Volume Right	28	0	6	0	0	0
cSH	188	1700	1700	210	1700	1700
Volume to Capacity	0.15	0.91	0.46	0.04	0.17	0.17
Queue Length 95th (ft)	13	0	0	3	0	0
Control Delay (s)	27.4	0.0	0.0	22.9	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	27.4	0.0		0.3		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			69.8%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖↗	↖	↖	↖↗
Volume (vph)	18	90	2068	13	39	356
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	22	111	2224	14	57	516
RTOR Reduction (vph)	0	4	0	1	0	0
Lane Group Flow (vph)	22	107	2224	13	57	516
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases				2		
Actuated Green, G (s)	15.9	26.0	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.9	20.9	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	262	308	2251	1007	82	2707
v/s Ratio Prot	0.01	c0.07	c0.63		c0.03	0.15
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.35	0.99	0.01	0.70	0.19
Uniform Delay, d1	39.4	37.3	19.1	7.2	50.3	3.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	16.0	0.0	22.5	0.0
Delay (s)	39.5	37.9	35.1	7.2	72.9	3.5
Level of Service	D	D	D	A	E	A
Approach Delay (s)	38.2		35.0			10.4
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay			30.3		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.86			
Actuated Cycle Length (s)			107.2		Sum of lost time (s)	18.1
Intersection Capacity Utilization			73.6%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↖		↖	↖
Volume (veh/h)	0	34	2045	27	0	372
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	55	2153	28	0	503
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2418	1091			2181	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2418	1091			2181	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	74			100	
cM capacity (veh/h)	27	210			240	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	55	1435	746	251	251	
Volume Left	0	0	0	0	0	
Volume Right	55	0	28	0	0	
cSH	210	1700	1700	1700	1700	
Volume to Capacity	0.26	0.84	0.44	0.15	0.15	
Queue Length 95th (ft)	25	0	0	0	0	
Control Delay (s)	28.1	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	28.1	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.6				
Intersection Capacity Utilization		67.4%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖	↖	↖	↖
Volume (vph)	11	7	2071	34	16	348
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	18	11	2157	35	20	430
RTOR Reduction (vph)	0	4	0	8	0	0
Lane Group Flow (vph)	18	7	2157	27	20	430
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.5	59.2	59.2	2.1	68.8
Effective Green, g (s)	1.4	3.5	59.2	59.2	2.1	68.8
Actuated g/C Ratio	0.02	0.05	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	72	2727	1220	48	3170
v/s Ratio Prot	c0.01	0.00	c0.61		c0.01	0.12
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.56	0.10	0.79	0.02	0.42	0.14
Uniform Delay, d1	37.4	35.1	5.2	2.1	36.7	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	20.7	0.6	1.6	0.0	5.8	0.0
Delay (s)	58.1	35.7	6.8	2.1	42.5	0.5
Level of Service	E	D	A	A	D	A
Approach Delay (s)	49.6		6.7			2.4
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		6.5		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.77				
Actuated Cycle Length (s)		76.8		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		70.1%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus Near Term (2 CVN) with Alternative 3 No Hooper
 15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control	Stop			Yield			Stop		Stop	
Volume (vph)	0	3	0	47	2	0	46	3	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	12	0	87	4	0	73	5	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	12	0	91	73	5					
Volume Left (vph)	0	0	87	0	0					
Volume Right (vph)	0	0	0	0	5					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.2	3.2					
Degree Utilization, x	0.01	0.00	0.11	0.08	0.00					
Capacity (veh/h)	829	1121	814	835	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.4%		ICU Level of Service				A	
Analysis Period (min)			15							








NBC Coastal Campus Near Term (2 CVN) with Alternative 3 No Hooper
 16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↑		↑	↑	↑	↑	↑			
Volume (vph)	3	38	0	0	34	233	4	1869	53	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1353	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	4	51	0	0	47	324	4	1988	56	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	23	0	0	0	0
Lane Group Flow (vph)	4	51	0	0	47	268	4	1988	33	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.9	16.9			16.9	16.9	47.7	43.6	43.6			
Effective Green, g (s)	16.9	16.9			16.9	16.9	47.7	43.6	43.6			
Actuated g/C Ratio	0.23	0.23			0.23	0.23	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	309	426			426	362	1142	2087	933			
v/s Ratio Prot		0.03			0.03		0.00	c0.56				
v/s Ratio Perm	0.00					c0.17			0.02			
v/c Ratio	0.01	0.12			0.11	0.74	0.00	0.95	0.04			
Uniform Delay, d1	22.0	22.6			22.6	26.5	4.7	14.2	6.3			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	8.0	0.0	10.6	0.0			
Delay (s)	22.1	22.7			22.7	34.4	4.7	24.8	6.4			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.7			32.9			24.3			0.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay		25.5						HCM 2000 Level of Service		C		
HCM 2000 Volume to Capacity ratio		0.89										
Actuated Cycle Length (s)		73.9				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		85.7%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near Term (2 CVN) with Alternative 3 No Hooper













Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	0	1663	0	316	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	0	1732	0	400	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1266	200	400		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1266	200	400		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	161	808	1155		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	866	866	267	133	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.51	0.51	0.16	0.08	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			49.3%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	418	2	40	50	8	21	27	1526	11	4	132	182
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	1.00		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1595		1770	1661		1770	3535		1770	3231	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1595		1770	1661		1770	3535		1770	3231	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	475	2	45	161	26	68	28	1606	12	6	191	264
RTOR Reduction (vph)	0	31	0	0	64	0	0	1	0	0	155	0
Lane Group Flow (vph)	475	16	0	161	30	0	28	1617	0	6	300	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	28.8	28.8		5.1	5.1		2.1	40.1		0.9	38.9	
Effective Green, g (s)	28.8	28.8		5.1	5.1		2.1	40.1		0.9	38.9	
Actuated g/C Ratio	0.31	0.31		0.05	0.05		0.02	0.43		0.01	0.41	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	543	489		96	90		39	1511		16	1339	
v/s Ratio Prot	c0.27	0.01		c0.09	0.02		c0.02	c0.46		0.00	0.09	
v/s Ratio Perm												
v/c Ratio	0.87	0.03		1.68	0.33		0.72	1.07		0.38	0.22	
Uniform Delay, d1	30.8	22.7		44.4	42.7		45.6	26.8		46.2	17.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	14.6	0.0		345.6	2.2		47.4	44.6		14.1	0.1	
Delay (s)	45.4	22.8		390.0	44.9		92.9	71.4		60.3	17.8	
Level of Service	D	C		F	D		F	E		E	B	
Approach Delay (s)		43.3			262.8			71.8			18.4	
Approach LOS		D			F			E			B	
Intersection Summary												
HCM 2000 Control Delay			75.0									
HCM 2000 Volume to Capacity ratio			1.04									
Actuated Cycle Length (s)			93.8									
Intersection Capacity Utilization			80.8%									
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	8	216	19	0	1382	18	36	24	2	21	43	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5025			5075		1770	1845			1732	
Flt Permitted	0.95	1.00			1.00		0.66	1.00			0.17	
Satd. Flow (perm)	1770	5025			5075		1229	1845			292	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	9	243	21	0	1519	20	43	29	2	27	56	70
RTOR Reduction (vph)	0	6	0	0	1	0	0	2	0	0	17	0
Lane Group Flow (vph)	9	258	0	0	1538	0	43	29	0	0	136	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1901			2061		238	358			48	
v/s Ratio Prot	c0.01	0.05			c0.30			0.02				
v/s Ratio Perm							c0.03				c0.47	
v/c Ratio	0.05	0.14			0.75		0.18	0.08			2.84	
Uniform Delay, d1	71.5	36.7			45.6		60.5	59.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			2.3		0.4	0.1			882.4	
Delay (s)	71.6	36.8			47.9		60.9	59.4			957.4	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		38.0			47.9			60.3			957.4	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		115.3			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.92										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		65.5%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	233	0	806	1391	9	0	0	0	0	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	284	0	857	1480	10	0	0	0	0	0	19
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	284	0	857	1490	0	0	0	0	0	0	7
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.06		c0.25	c0.42							
v/s Ratio Perm												0.00
v/c Ratio		0.15		0.50	0.46							0.01
Uniform Delay, d1		36.8		30.0	1.3							34.9
Progression Factor		0.40		1.00	1.00							1.00
Incremental Delay, d2		0.2		0.2	0.1							0.0
Delay (s)		15.0		30.2	1.4							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.0			11.9			0.0				35.0
Approach LOS		B			B			A				C
Intersection Summary												
HCM 2000 Control Delay		12.4			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.50										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		60.4%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	15	234	0	0	129	646	0	0	0	108	0	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	18	279	0	0	139	695	0	0	0	119	0	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	833			279			807	1148	279	800	800	486
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	833			279			807	1148	279	800	800	486
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			100			100	100	100	60	100	99
cM capacity (veh/h)	800			1284			291	194	760	298	311	581
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	296	833	0	125								
Volume Left	18	0	0	119								
Volume Right	0	695	0	7								
cSH	800	1284	1700	306								
Volume to Capacity	0.02	0.00	0.00	0.41								
Queue Length 95th (ft)	2	0	0	48								
Control Delay (s)	0.8	0.0	0.0	24.7								
Lane LOS	A			A			C					
Approach Delay (s)	0.8	0.0	0.0	24.7								
Approach LOS				A			C					
Intersection Summary												
Average Delay				2.7								
Intersection Capacity Utilization				59.6%			ICU Level of Service				B	
Analysis Period (min)				15								

NBC Coastal Campus
22: 3rd St & Palm Ave

Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	333	5	27	751	25	12	15	127	12	11	15
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	9	387	6	29	808	27	15	19	157	15	14	19
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	393	29	834	190	48						
Volume Left (vph)	9	0	29	0	15	15						
Volume Right (vph)	0	6	0	27	157	19						
Hadj (s)	0.53	0.02	0.53	0.01	-0.45	-0.14						
Departure Headway (s)	6.6	6.1	6.4	5.9	6.3	7.1						
Degree Utilization, x	0.02	0.67	0.05	1.0	0.33	0.09						
Capacity (veh/h)	532	570	545	624	545	456						
Control Delay (s)	8.6	19.4	8.6	191.8	12.3	10.8						
Approach Delay (s)	19.2		185.6		12.3	10.8						
Approach LOS	C		F		B	B						
Intersection Summary												
Delay				113.6								
Level of Service				F								
Intersection Capacity Utilization				57.4%			ICU Level of Service				B	
Analysis Period (min)				15								

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

NBC Coastal Campus
24: 7th St & Palm Ave

HCM Unsignalized Intersection Capacity Analysis

NBC Coastal Campus
25: Delaware St & Palm Ave

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

	→	↗	↖	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	551	5	0	0	3	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	599	5	0	0	3	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			604		599	599
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			604		599	599
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			973		465	502
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	599	5	10			
Volume Left	0	0	3			
Volume Right	0	5	7			
cSH	1700	1700	489			
Volume to Capacity	0.35	0.00	0.02			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.5			
Lane LOS			B			
Approach Delay (s)	0.0		12.5			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			39.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

	↗	→	↘	↖	←	↖	↗	↑	↗	↘	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑	↘	↗	↑↑↑		↗	↑↑	↘	↗	↑↑	↘
Volume (vph)	22	708	40	25	1928	45	170	38	53	93	47	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5044		1770	5068			3323			3361	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5044		1770	5068			3323			3361	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	26	843	48	27	2119	49	205	46	64	113	57	32
RTOR Reduction (vph)	0	3	0	0	1	0	0	13	0	0	9	0
Lane Group Flow (vph)	26	888	0	27	2167	0	0	302	0	0	193	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2233		118	2159			646			653	
v/s Ratio Prot	0.01	c0.18		c0.02	c0.43			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.18	0.40		0.23	1.00			0.47			0.30	
Uniform Delay, d1	76.8	33.9		79.6	51.6			64.2			62.0	
Progression Factor	1.00	1.00		1.23	0.78			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.8	18.0			0.5			0.3	
Delay (s)	77.3	34.4		99.0	58.5			64.8			62.2	
Level of Service	E	C		F	E			E			E	
Approach Delay (s)		35.7			59.0			64.8			62.2	
Approach LOS		D			E			E			E	
Intersection Summary												
HCM 2000 Control Delay		53.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		75.3%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	3	946	36	21	2107	13	19	5	32	57	11	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5058		1770	5081			1691		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.65	1.00	
Satd. Flow (perm)	1770	5058		1770	5081			1545		1208	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	3	1063	40	24	2394	15	26	7	44	81	16	23
RTOR Reduction (vph)	0	2	0	0	0	0	0	27	0	0	19	0
Lane Group Flow (vph)	3	1101	0	24	2409	0	0	50	0	81	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases						4				8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			257		201	283	
v/s Ratio Prot	0.00	0.22		c0.01	c0.47						0.01	
v/s Ratio Perm								0.03		c0.07		
v/c Ratio	0.08	0.32		0.20	0.65			0.20		0.40	0.07	
Uniform Delay, d1	86.2	11.3		79.5	12.3			64.6		67.0	63.2	
Progression Factor	1.62	0.26		1.42	0.34			1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.2		0.5	0.5			0.4		1.3	0.1	
Delay (s)	140.8	3.2		113.7	4.7			65.0		68.3	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.6			5.8			65.0			66.7	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		74.4%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	4	1018	66	100	1956	54	151	20	94	174	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.85	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1144	74	120	2357	65	170	22	106	232	49	21
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	88	0	3	0
Lane Group Flow (vph)	4	1214	0	120	2357	35	0	192	18	0	299	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.24		c0.07	c0.46			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.10	0.54		0.61	0.87	0.04		0.63	0.07		0.51	
Uniform Delay, d1	86.2	36.8		76.3	36.8	20.2		69.1	62.4		67.7	
Progression Factor	1.19	0.61		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.9		5.6	4.2	0.1		3.9	0.1		0.8	
Delay (s)	103.8	23.5		81.9	41.0	20.3		73.1	62.5		68.4	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.8			42.4			69.3			68.4	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		40.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		91.7%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	15	1292	27	45	2090	13	17	7	51	40	3	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1672			1725	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.77	
Satd. Flow (perm)	1770	5070		1770	5081			1561			1370	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	16	1404	29	52	2430	15	20	8	61	53	4	29
RTOR Reduction (vph)	0	2	0	0	0	0	0	48	0	0	23	0
Lane Group Flow (vph)	16	1431	0	52	2445	0	0	41	0	0	63	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.6		2.8	39.7			15.2			15.2	
Effective Green, g (s)	0.7	37.6		2.8	39.7			15.2			15.2	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2673		69	2829			332			292	
v/s Ratio Prot	0.01	0.28		c0.03	c0.48							
v/s Ratio Perm								0.03			c0.05	
v/c Ratio	0.94	0.54		0.75	0.86			0.12			0.22	
Uniform Delay, d1	35.3	11.1		33.9	13.5			22.7			23.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	188.5	0.2		36.6	3.0			0.2			0.4	
Delay (s)	223.8	11.3		70.5	16.5			22.8			23.5	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		13.7			17.6			22.8			23.5	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		16.5			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		71.3			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		58.0%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	95	1307	31	254	2025	223	78	75	800	244	96	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	110	1520	36	270	2154	237	87	83	889	290	114	95
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	180	0	3	61
Lane Group Flow (vph)	110	1554	0	270	2154	170	87	339	300	290	121	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.4	31.1	31.1	10.4	33.1	33.1
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.4	31.1	31.1	10.4	33.1	33.1
Actuated g/C Ratio	0.05	0.30		0.15	0.40	0.40	0.07	0.27	0.27	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	176	1531		271	2055	639	127	413	401	306	496	427
v/s Ratio Prot	0.03	0.31		c0.15	c0.42		0.05	c0.22		c0.08	0.07	
v/s Ratio Perm						0.11			0.20			0.02
v/c Ratio	0.62	1.01		1.00	1.05	0.27	0.69	0.82	0.75	0.95	0.24	0.06
Uniform Delay, d1	54.1	40.6		49.3	34.7	23.2	52.8	40.1	39.1	52.8	32.1	30.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.8	26.8		53.3	33.9	0.2	14.2	12.3	7.4	37.3	0.3	0.1
Delay (s)	60.9	67.4		102.6	68.6	23.4	67.0	52.4	46.5	90.1	32.3	30.4
Level of Service	E	E		F	E	C	E	D	D	F	C	C
Approach Delay (s)		67.0			68.0			50.9			65.6	
Approach LOS		E			E			D			E	
Intersection Summary												
HCM 2000 Control Delay		64.4			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.99										
Actuated Cycle Length (s)		116.5			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		88.9%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	295	1167	0	161	1336
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	331	1255	0	179	1484
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	331	1255	0	179	1480
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	18
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.35		0.10	c0.53
v/s Ratio Perm						
v/c Ratio		0.12	1.08		0.86	0.97
Uniform Delay, d1		2.5	26.8		34.7	17.3
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	49.1		29.2	15.5
Delay (s)		2.5	75.9		63.8	32.7
Level of Service		A	E		E	C
Approach Delay (s)		2.5	75.9		36.1	
Approach LOS		A	E		D	
Intersection Summary						
HCM 2000 Control Delay		48.1			HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio		1.08				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		69.6%			ICU Level of Service	C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	456	0	0	443	543	829	2	149	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3247		1681	1632				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3247		1681	1632				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	524	0	0	482	590	901	2	162	0	0	0
RTOR Reduction (vph)	0	0	0	0	369	0	0	30	0	0	0	0
Lane Group Flow (vph)	0	524	0	0	703	0	541	494	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		17.4			17.4		21.0	21.0				
Effective Green, g (s)		17.4			17.4		21.0	21.0				
Actuated g/C Ratio		0.37			0.37		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1327			1217		760	738				
v/s Ratio Prot		0.15			c0.22							
v/s Ratio Perm							c0.32	0.30				
v/c Ratio		0.39			0.58		0.71	0.67				
Uniform Delay, d1		10.6			11.6		10.3	10.0				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		3.2	2.3				
Delay (s)		10.8			12.2		13.4	12.3				
Level of Service		B			B		B	B				
Approach Delay (s)		10.8			12.2		12.9				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay		12.2								HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		46.4								Sum of lost time (s)	8.0	
Intersection Capacity Utilization		70.6%								ICU Level of Service	C	
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (veh/h)	0	4	5	612	75	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	16	7	850	183	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1047	183	183			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1047	183	183			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	251	860	1392			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	16	857	183			
Volume Left	0	7	0			
Volume Right	16	0	0			
cSH	860	1392	1700			
Volume to Capacity	0.02	0.00	0.11			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	9.3	0.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.3	0.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			46.2%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↖	↗	↖	↗	↖	↗
Volume (veh/h)	0	4035	18	0	1793	245	0	0	910	0	0	56
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%			0%			0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4203	19	0	1848	253	0	0	1011	0	0	85
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2121			4242			4953	6354	1450	3416	6237	782
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2121			4242			4953	6354	1450	3416	6237	782
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	249			34			0	0	1826	1	0	326
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1681	1681	859	739	739	622	1011	85				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	19	0	0	253	1011	85				
cSH	1700	1700	1700	1700	1700	1700	1826	326				
Volume to Capacity	0.99	0.99	0.51	0.43	0.43	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	90	26				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.4	19.9				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.4	19.9				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				143.3%								H
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3801	131	0	1830	0	190	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3919	135	0	1906	0	232	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4074		4661	1414	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4074		4661	1414	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			40		1	123	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1567	1567	919	635	635	635	232
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	135	0	0	0	232
cSH	1700	1700	1700	1700	1700	1700	123
Volume to Capacity	0.92	0.92	0.54	0.37	0.37	0.37	1.88
Queue Length 95th (ft)	0	0	0	0	0	0	458
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	487.1
Lane LOS							F
Approach Delay (s)	0.0			0.0			487.1
Approach LOS							F
Intersection Summary							
Average Delay			18.2				
Intersection Capacity Utilization			96.8%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	↗
Volume (vph)	0	0	0	980	639	110	103	253		0	0	863
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4636		1770	3539				3526
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4636		1770	3539				3526
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1032	673	116	106	261	0	0	0	890
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	0	2
Lane Group Flow (vph)	0	0	0	516	1293	0	106	261	0	0	0	906
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA				NA
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1432		98	1989				1567
v/s Ratio Prot				c0.34	0.28		c0.06	0.07				c0.26
v/s Ratio Perm												
v/c Ratio				1.10	0.98dl		1.08	0.13				0.58
Uniform Delay, d1				31.1	29.8		42.5	9.3				18.7
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				70.8	8.3		114.7	0.0				0.5
Delay (s)				101.9	38.1		157.2	9.3				19.2
Level of Service				F	D		F	A				B
Approach Delay (s)		0.0			56.2			52.0				19.2
Approach LOS		A			E			D				B
Intersection Summary												
HCM 2000 Control Delay			44.8				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.81									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)				17.2		
Intersection Capacity Utilization		135.8%				ICU Level of Service				H		
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	7	2124	111	0	0	0	0	355	418	762	1103	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.95	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3151	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3151	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2334	122	0	0	0	0	413	486	794	1149	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2342	93	0	0	0	0	616	248	794	1149	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					956	409	865	2022	
v/s Ratio Prot		c0.46						c0.20		c0.23	0.32	
v/s Ratio Perm			0.06						0.18			
v/c Ratio		1.27	0.16					0.64	0.61	0.92	0.57	
Uniform Delay, d1		55.8	37.8					52.8	52.0	63.7	23.8	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		126.9	0.1					1.5	2.5	14.3	0.4	
Delay (s)		182.7	37.9					54.3	54.5	78.0	24.2	
Level of Service		F	D					D	D	E	C	
Approach Delay (s)		175.5		0.0				54.4			46.2	
Approach LOS		F		A				D			D	
Intersection Summary												
HCM 2000 Control Delay		107.6		HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio		0.97										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		135.8%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave













Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑↑
Volume (vph)	181	13	884	704	0	1252
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1582		3256			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1582		3256			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	232	17	993	791	0	1346
RTOR Reduction (vph)	2	0	69	0	0	0
Lane Group Flow (vph)	247	0	1715	0	0	1346
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	296		2460			2540
v/s Ratio Prot	c0.16		c0.53			0.40
v/s Ratio Perm						
v/c Ratio	0.84		0.70			0.53
Uniform Delay, d1	62.6		10.1			8.0
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	18.1		1.7			0.8
Delay (s)	80.7		11.8			8.8
Level of Service	F		B			A
Approach Delay (s)	80.7		11.8			8.8
Approach LOS	F		B			A
Intersection Summary						
HCM 2000 Control Delay		15.6		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.74				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		80.5%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Near Term (2 CVN) with Alternative 3 No Hooper







Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	11	30	27	11	26	24	1503	52	70	1485	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.94		1.00	0.99		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1723		1770	3521		1770	3488	
Flt Permitted	0.67	0.67	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1188	1193	1583		1459		1770	3521		1770	3488	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	192	14	38	42	17	41	26	1616	56	76	1614	172
RTOR Reduction (vph)	0	0	32	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	102	104	6	0	78	0	26	1671	0	76	1783	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	19.3	19.3	19.3		19.3		4.6	71.0		8.1	74.5	
Effective Green, g (s)	19.3	19.3	19.3		19.3		4.6	71.0		8.1	74.5	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.04	0.63		0.07	0.66	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	203	269		248		71	2208		126	2295	
v/s Ratio Prot							0.01	0.47		c0.04	c0.51	
v/s Ratio Perm	0.09	c0.09	0.00		0.05							
v/c Ratio	0.50	0.51	0.02		0.31		0.37	0.76		0.60	0.78	
Uniform Delay, d1	42.6	42.7	39.1		41.1		52.9	15.0		51.0	13.5	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.0	2.2	0.0		0.7		3.2	1.5		7.9	1.7	
Delay (s)	44.6	44.8	39.1		41.9		56.1	16.5		58.9	15.3	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.9			41.9			17.1			17.0	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		19.4										
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		113.2						14.8				
Intersection Capacity Utilization		76.0%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	8	0	151	0	1301	0	34	1629	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	12	0	219	0	1384	0	37	1752	0
RTOR Reduction (vph)	0	0	0	0	178	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	53	0	0	1384	0	37	1752	0
Turn Type				Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			44.9		1.7	50.8	
Effective Green, g (s)					14.1			44.9		1.7	50.8	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					304			2118		40	2397	
v/s Ratio Prot					c0.03			0.39		0.02	c0.50	
v/s Ratio Perm												
v/c Ratio					0.17			0.65		0.93	0.73	
Uniform Delay, d1					25.6			9.9		36.6	7.7	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			0.7		112.0	1.2	
Delay (s)					25.8			10.7		148.6	8.9	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			25.8			10.7			11.8	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					12.3							
HCM 2000 Volume to Capacity ratio					0.71							
Actuated Cycle Length (s)					75.0					18.9		
Intersection Capacity Utilization		63.2%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑	↱		↰	↑	↱	↰	↑	↱	↰	↱
Volume (vph)	252	42	108	7	61	348	25	713	3	117	1482	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.96	1.00	1.00	0.86	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1518		1853	1512	1770	3539	1355	1770	3515	
Flt Permitted	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1518		1853	1512	1770	3539	1355	1770	3515	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	332	55	142	8	66	378	27	784	3	124	1577	64
RTOR Reduction (vph)	0	0	114	0	0	219	0	0	2	0	2	0
Lane Group Flow (vph)	332	55	28	0	74	159	27	784	1	124	1639	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.8	27.8	27.8		19.3	19.3	2.9	58.1	58.1	14.9	70.1	
Effective Green, g (s)	27.8	27.8	27.8		19.3	19.3	2.9	58.1	58.1	14.9	70.1	
Actuated g/C Ratio	0.20	0.20	0.20		0.14	0.14	0.02	0.42	0.42	0.11	0.50	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	352	371	302		256	209	36	1473	564	189	1766	
v/s Ratio Prot	c0.19	0.03			0.04		0.02	0.22		c0.07	c0.47	
v/s Ratio Perm			0.02			c0.11		0.00				
v/c Ratio	0.94	0.15	0.09		0.29	0.76	0.75	0.53	0.00	0.66	0.93	
Uniform Delay, d1	55.1	46.1	45.6		53.9	57.9	67.9	30.5	23.8	59.8	32.4	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	33.3	0.2	0.1		0.6	15.0	59.8	1.4	0.0	7.9	10.0	
Delay (s)	88.4	46.3	45.7		54.6	72.9	127.7	31.9	23.8	67.8	42.4	
Level of Service	F	D	D		D	E	F	C	C	E	D	
Approach Delay (s)		72.6			69.9			35.0			44.2	
Approach LOS		E			E			D			D	
Intersection Summary												
HCM 2000 Control Delay		49.6			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.91										
Actuated Cycle Length (s)		139.5			Sum of lost time (s)			19.4				
Intersection Capacity Utilization		80.1%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰			↱
Volume (veh/h)	290	414	4	50	157	4
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	322	460	6	70	178	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	402	41			76	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	402	41			76	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	40	55			88	
cM capacity (veh/h)	533	1030			1523	
Direction, Lane #						
Volume Total	782	76	183			
Volume Left	322	0	178			
Volume Right	460	70	0			
cSH	1111	1700	1523			
Volume to Capacity	0.70	0.04	0.12			
Queue Length 95th (ft)	155	0	10			
Control Delay (s)	15.5	0.0	7.5			
Lane LOS	C		A			
Approach Delay (s)	15.5	0.0	7.5			
Approach LOS	C					
Intersection Summary						
Average Delay		13.0				
Intersection Capacity Utilization		38.3%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	296	4	750	53	0	1614
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1771		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1771		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	375	5	833	59	0	1813
RTOR Reduction (vph)	1	0	0	34	0	0
Lane Group Flow (vph)	379	0	833	25	0	1813
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	843		1520	633		1520
v/s Ratio Prot	c0.21		0.24			c0.51
v/s Ratio Perm				0.02		
v/c Ratio	0.45		0.55	0.04		1.19
Uniform Delay, d1	18.3		22.3	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.4	0.0		93.5
Delay (s)	18.7		22.8	17.4		123.5
Level of Service	B		C	B		F
Approach Delay (s)	18.7		22.4			123.5
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay			81.4		HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio			0.80			
Actuated Cycle Length (s)			105.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			94.5%		ICU Level of Service	F
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗	↖	↗
Volume (veh/h)	5	7	607	4	16	1499
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	10	14	706	5	18	1647
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1567	355			710	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1567	355			710	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	90	98			98	
cM capacity (veh/h)	100	641			885	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	24	471	240	18	824	824
Volume Left	10	0	0	18	0	0
Volume Right	14	0	5	0	0	0
cSH	197	1700	1700	885	1700	1700
Volume to Capacity	0.12	0.28	0.14	0.02	0.48	0.48
Queue Length 95th (ft)	10	0	0	2	0	0
Control Delay (s)	25.8	0.0	0.0	9.2	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	25.8	0.0		0.1		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			51.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	31	59	551	13	107	1397
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	34	64	626	15	118	1535
RTOR Reduction (vph)	0	47	0	8	0	0
Lane Group Flow (vph)	34	17	626	7	118	1535
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases				2		
Actuated Green, G (s)	9.4	21.7	27.9	27.9	7.2	43.9
Effective Green, g (s)	9.4	16.6	27.9	27.9	7.2	43.9
Actuated g/C Ratio	0.15	0.27	0.45	0.45	0.12	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	265	419	1577	705	203	2481
v/s Ratio Prot	c0.02	0.01	0.18		0.07	c0.43
v/s Ratio Perm				0.00		
v/c Ratio	0.13	0.04	0.40	0.01	0.58	0.62
Uniform Delay, d1	23.0	17.1	11.7	9.7	26.3	4.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.2	0.0	4.2	0.5
Delay (s)	23.3	17.1	11.8	9.7	30.5	5.4
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.3		11.8		7.2	
Approach LOS	B		B		A	

Intersection Summary			
HCM 2000 Control Delay	8.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	62.6	Sum of lost time (s)	18.1
Intersection Capacity Utilization	50.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Near Term (2 CVN) with Alternative 3 No Hooper







Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Volume (veh/h)	0	24	541	20	0	1428
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	32	622	23	0	1552
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None		None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1409	322			645	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1409	322			645	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	129	673			936	





Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	32	415	230	776	776
Volume Left	0	0	0	0	0
Volume Right	32	0	23	0	0
cSH	673	1700	1700	1700	1700
Volume to Capacity	0.05	0.24	0.14	0.46	0.46
Queue Length 95th (ft)	4	0	0	0	0
Control Delay (s)	10.6	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.6	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	42.8%	ICU Level of Service	A
Analysis Period (min)	15		

NBC Coastal Campus Near Term (2 CVN) with Alternative 3 No Hooper
 14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	31	27	534	20	24	1403
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	43	38	568	21	26	1542
RTOR Reduction (vph)	0	34	0	8	0	0
Lane Group Flow (vph)	43	4	568	13	26	1542
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	27.4	27.4	1.7	36.6
Effective Green, g (s)	2.6	4.3	27.4	27.4	1.7	36.6
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	148	2117	947	65	2828
v/s Ratio Prot	c0.02	0.00	0.16		0.01	c0.44
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.43	0.02	0.27	0.01	0.40	0.55
Uniform Delay, d1	20.9	18.8	4.4	3.7	21.6	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.1	0.1	0.0	4.0	0.2
Delay (s)	23.8	18.9	4.5	3.7	25.6	1.9
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.5		4.4			2.2
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.5		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.66			
Actuated Cycle Length (s)			45.8		Sum of lost time (s)	14.1
Intersection Capacity Utilization			49.7%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						




















NBC Coastal Campus Near Term (2 CVN) with Alternative 3 No Hooper
 15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	12	15	88	8	0	185	14	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	12	16	114	10	0	208	16	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	13	16	125	224						
Volume Left (vph)	0	0	114	0						
Volume Right (vph)	0	16	0	16						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.1	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.20						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	191	0	0	85	143	13	453	71	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.69	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1292	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	12	217	0	0	98	164	14	498	78	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	129	0	43	0	0	0	0
Lane Group Flow (vph)	12	217	0	0	98	35	14	498	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.0	18.0	18.0			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.0	18.0	18.0			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.45	0.45	0.45			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	272	393			393	334	800	1600	715			
v/s Ratio Prot		c0.12			0.05		0.01	c0.14				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.55			0.25	0.10	0.02	0.31	0.05			
Uniform Delay, d1	12.5	14.0			13.1	12.7	6.0	6.9	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.7			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.6	15.7			13.4	12.8	6.0	7.1	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.5			13.0		6.9				0.0	
Approach LOS		B			B		A				A	
Intersection Summary												
HCM 2000 Control Delay			10.2		HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio			0.39									
Actuated Cycle Length (s)			39.8		Sum of lost time (s)				13.4			
Intersection Capacity Utilization			41.0%		ICU Level of Service				A			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near Term (2 CVN) with Alternative 3 No Hooper









Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱	↰
Volume (veh/h)	0	0	0	602	0	1576	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	0	0	684	0	1751	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2093	876	1751		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2093	876	1751		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	45	292	354		0		
Direction, Lane #							
Volume Total	0	0	342	342	1167	584	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.20	0.20	0.69	0.34	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			46.9%		ICU Level of Service		
Analysis Period (min)			15		A		

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near Term (2 CVN) with Alternative 3 No Hooper









Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	224	7	70	19	4	7	76	319	58	19	1087	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.86		1.00	0.90		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1608		1770	1685		1770	3457		1770	3446	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1608		1770	1685		1770	3457		1770	3446	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	299	9	93	38	8	14	84	351	64	21	1208	256
RTOR Reduction (vph)	0	70	0	0	14	0	0	11	0	0	15	0
Lane Group Flow (vph)	299	32	0	38	8	0	84	404	0	21	1449	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	23.3	23.3		2.7	2.7		5.7	47.4		1.7	43.4	
Effective Green, g (s)	23.3	23.3		2.7	2.7		5.7	47.4		1.7	43.4	
Actuated g/C Ratio	0.25	0.25		0.03	0.03		0.06	0.50		0.02	0.46	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	438	398		50	48		107	1743		32	1591	
v/s Ratio Prot	c0.17	0.02		c0.02	0.00		c0.05	c0.12		0.01	c0.42	
v/s Ratio Perm												
v/c Ratio	0.68	0.08		0.76	0.18		0.79	0.23		0.66	0.91	
Uniform Delay, d1	32.0	27.1		45.3	44.6		43.5	13.1		45.9	23.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.4	0.1		48.9	1.7		30.5	0.1		39.4	8.2	
Delay (s)	36.4	27.2		94.3	46.3		74.0	13.1		85.2	31.7	
Level of Service	D	C		F	D		E	B		F	C	
Approach Delay (s)		34.0			76.7			23.4			32.5	
Approach LOS		C			E			C			C	
Intersection Summary												
HCM 2000 Control Delay		32.0										
HCM 2000 Volume to Capacity ratio		0.80										
Actuated Cycle Length (s)		94.0						18.9				
Intersection Capacity Utilization		72.6%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	1042	57	0	377	36	18	41	5	25	27	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5046			5019		1770	1833			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.15	
Satd. Flow (perm)	1770	5046			5019		1305	1833			269	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	67	1184	65	0	401	38	26	59	7	29	32	26
RTOR Reduction (vph)	0	3	0	0	6	0	0	2	0	0	8	0
Lane Group Flow (vph)	67	1246	0	0	433	0	26	64	0	0	79	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1909			2038		253	356			44	
v/s Ratio Prot	c0.04	c0.25			c0.09			c0.03				
v/s Ratio Perm							0.02				c0.29	
v/c Ratio	0.34	0.65			0.21		0.10	0.18			1.79	
Uniform Delay, d1	73.9	46.2			34.7		59.6	60.5			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	1.8			0.2		0.2	0.2			430.9	
Delay (s)	75.0	47.9			35.0		59.8	60.7			505.9	
Level of Service	E	D			C		E	E			F	
Approach Delay (s)		49.3			35.0			60.5			505.9	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		67.1										
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		180.0						22.3				
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	1073	0	615	412	39	0	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3494							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3494							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1206	0	654	438	41	0	0	0	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	1206	0	654	479	0	0	0	0	0	0	4
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3175							609
v/s Ratio Prot		c0.24		c0.19	c0.14							
v/s Ratio Perm												0.00
v/c Ratio		0.63		0.34	0.15							0.01
Uniform Delay, d1		45.6		21.5	0.9							34.9
Progression Factor		0.19		1.00	1.00							1.00
Incremental Delay, d2		1.1		0.1	0.0							0.0
Delay (s)		9.9		21.6	0.9							34.9
Level of Service		A		C	A							C
Approach Delay (s)		9.9			12.9		0.0				34.9	
Approach LOS		A			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		11.4										B
HCM 2000 Volume to Capacity ratio		0.49										
Actuated Cycle Length (s)		180.0						22.3				
Intersection Capacity Utilization		47.4%							A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave



















Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	5	214	0	0	308	175	0	0	0	640	0	14
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	6	249	0	0	350	199	0	0	0	970	0	21
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	549			249			731	809	249	710	710	449
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	549			249			731	809	249	710	710	449
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	0	100	97
cM capacity (veh/h)	1021			1317			324	312	790	347	357	610
Direction, Lane #												
Volume Total	255	549	0	991								
Volume Left	6	0	0	970								
Volume Right	0	199	0	21								
cSH	1021	1317	1700	350								
Volume to Capacity	0.01	0.00	0.00	2.83								
Queue Length 95th (ft)	0	0	0	2112								
Control Delay (s)	0.3	0.0	0.0	854.1								
Lane LOS	A			F								
Approach Delay (s)	0.3	0.0	0.0	854.1								
Approach LOS				F								
Intersection Summary												
Average Delay		471.7										
Intersection Capacity Utilization		69.9%								C		
Analysis Period (min)		15										













NBC Coastal Campus
22: 3rd St & Palm Ave

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	831	13	86	456	25	15	39	69	29	34	14
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	10	1065	17	97	512	28	26	68	121	63	74	30
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	10	1082	97	540	216	167						
Volume Left (vph)	10	0	97	0	26	63						
Volume Right (vph)	0	17	0	28	121	30						
Hadj (s)	0.53	0.02	0.53	0.00	-0.28	0.00						
Departure Headway (s)	7.7	7.2	7.6	7.1	7.6	8.1						
Degree Utilization, x	0.02	1.0	0.20	1.0	0.46	0.38						
Capacity (veh/h)	456	510	467	516	451	428						
Control Delay (s)	9.7	544.8	11.4	82.6	16.8	15.9						
Approach Delay (s)	539.7		71.8		16.8	15.9						
Approach LOS	F		F		C	C						
Intersection Summary												
Delay			303.7									
Level of Service			F									
Intersection Capacity Utilization			69.2%		ICU Level of Service		C					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	208	825	558	40	53	173
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	214	851	649	47	62	204
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)	908					
pX, platoon unblocked						
vC, conflicting volume	695				1951	348
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	695				1951	348
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	76				0	69
cM capacity (veh/h)	896				43	648
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	214	851	433	263	266	
Volume Left	214	0	0	0	62	
Volume Right	0	0	0	47	204	
cSH	896	1700	1700	1700	150	
Volume to Capacity	0.24	0.50	0.25	0.15	1.77	
Queue Length 95th (ft)	23	0	0	0	489	
Control Delay (s)	10.3	0.0	0.0	0.0	424.7	
Lane LOS	B				F	
Approach Delay (s)	2.1		0.0		424.7	
Approach LOS					F	
Intersection Summary						
Average Delay			56.8			
Intersection Capacity Utilization			63.7%	ICU Level of Service	B	
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↱	↱	↰	↰↱	↱		↱		↰	↰↱	↱
Volume (vph)	29	828	35	32	559	4	56	25	23	13	40	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3518		1770	3536			1759			1840	1583
Flt Permitted	0.42	1.00		0.23	1.00			0.79			0.91	1.00
Satd. Flow (perm)	778	3518		434	3536			1434			1692	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	35	986	42	35	614	4	68	30	28	17	53	41
RTOR Reduction (vph)	0	4	0	0	0	0	0	21	0	0	0	31
Lane Group Flow (vph)	35	1024	0	35	618	0	0	105	0	0	70	10
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	20.4	20.4		20.4	20.4			9.3			9.3	9.3
Effective Green, g (s)	20.4	20.4		20.4	20.4			9.3			9.3	9.3
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.24			0.24	0.24
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	408	1844		227	1854			342			404	378
v/s Ratio Prot		c0.29			0.17							
v/s Ratio Perm	0.04			0.08				c0.07			0.04	0.01
v/c Ratio	0.09	0.56		0.15	0.33			0.31			0.17	0.03
Uniform Delay, d1	4.6	6.2		4.8	5.3			12.2			11.7	11.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.4		0.3	0.1			0.5			0.2	0.0
Delay (s)	4.7	6.6		5.1	5.4			12.7			12.0	11.4
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)		6.5			5.4			12.7			11.7	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay		6.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.48										
Actuated Cycle Length (s)		38.9			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		46.7%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↱			↰	↱
Volume (veh/h)	876	9	0	0	7	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1068	11	0	0	10	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			1079		1068	1068
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1079		1068	1068
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		96	98
cM capacity (veh/h)			646		245	269
Direction, Lane #						
Volume Total	1068	11	15			
Volume Left	0	0	10			
Volume Right	0	11	4			
cSH	1700	1700	252			
Volume to Capacity	0.63	0.01	0.06			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.0	0.0	20.2			
Lane LOS			C			
Approach Delay (s)	0.0		20.2			
Approach LOS			C			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			56.1%		ICU Level of Service	B
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑↑↑	↔	↔	↑↑↑	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	43	1763	130	60	887	135	101	93	65	179	82	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5033		1770	4985			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5033		1770	4985			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	46	1876	138	61	896	136	111	102	71	201	92	30
RTOR Reduction (vph)	0	5	0	0	11	0	0	19	0	0	4	0
Lane Group Flow (vph)	46	2009	0	61	1021	0	0	265	0	0	319	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2004		196	1985			649			658	
v/s Ratio Prot	0.03	c0.40		c0.03	0.20			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.23	1.00		0.31	0.51			0.41			0.48	
Uniform Delay, d1	73.0	54.1		73.7	41.0			63.4			64.5	
Progression Factor	1.00	1.00		1.22	0.83			1.00			1.00	
Incremental Delay, d2	0.6	20.7		0.9	0.9			0.4			0.6	
Delay (s)	73.6	74.9		91.0	34.8			63.9			65.0	
Level of Service	E	E		F	C			E			E	
Approach Delay (s)		74.8			37.9			63.9			65.0	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		62.4			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		119.9%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑↑↑	↔	↔	↑↑↑	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	21	2054	59	51	1305	57	22	11	36	66	14	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5064		1770	5053			1705		1770	1715	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.61	1.00	
Satd. Flow (perm)	1770	5064		1770	5053			1544		1144	1715	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.83	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	21	2096	60	53	1345	59	27	13	43	78	16	18
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	16	0
Lane Group Flow (vph)	21	2155	0	53	1402	0	0	60	0	78	18	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3561		157	3666			190		141	211	
v/s Ratio Prot	0.01	c0.43		c0.03	c0.28						0.01	
v/s Ratio Perm								0.04		c0.07		
v/c Ratio	0.18	0.61		0.34	0.38			0.32		0.55	0.09	
Uniform Delay, d1	79.3	13.8		77.0	9.4			72.0		74.2	69.9	
Progression Factor	1.43	0.11		1.55	0.28			1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3		1.0	0.2			1.0		4.6	0.2	
Delay (s)	114.1	1.8		120.3	2.9			72.9		78.9	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		2.9			7.1			72.9			76.2	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		62.2%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰		↰↰	
Volume (vph)	28	1932	206	162	1381	84	133	42	132	159	46	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5012		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5012		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	30	2055	219	167	1424	87	145	46	143	215	62	28
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	119	0	4	0
Lane Group Flow (vph)	30	2267	0	167	1424	50	0	191	24	0	301	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2219		192	2364	736		306	269		575	
v/s Ratio Prot	0.02	c0.45		c0.09	c0.28			c0.11			c0.09	
v/s Ratio Perm						0.03			0.02			
v/c Ratio	0.19	1.02		0.87	0.60	0.07		0.62	0.09		0.52	
Uniform Delay, d1	76.0	50.1		78.9	35.8	26.6		69.3	62.9		68.0	
Progression Factor	1.01	1.00		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	23.1		31.6	1.1	0.2		9.3	0.7		3.4	
Delay (s)	77.3	73.5		110.5	36.9	26.8		78.6	63.6		71.4	
Level of Service	E	E		F	D	C		E	E		E	
Approach Delay (s)		73.5			43.7			72.1			71.4	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		62.5			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		105.8%			ICU Level of Service				G			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰						↰↰	
Volume (vph)	10	2063	52	177	1689		17	41	9		25	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900		1900	1900	1900		1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9				5.6			5.6
Lane Util. Factor	1.00	0.91		1.00	0.91				1.00		1.00	
Frt	1.00	1.00		1.00	1.00				0.92		0.97	
Flt Protected	0.95	1.00		0.95	1.00				0.99		0.97	
Satd. Flow (prot)	1770	5066		1770	5078				1680		1757	
Flt Permitted	0.95	1.00		0.95	1.00				0.89		0.82	
Satd. Flow (perm)	1770	5066		1770	5078				1510		1487	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.95	0.85	0.85	0.85	0.85	0.81	0.81
Adj. Flow (vph)	11	2292	58	186	1778	18	48	11	99	31	14	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	79	0	0	11	0
Lane Group Flow (vph)	11	2348	0	186	1795	0	0	79	0	0	48	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7				17.4		17.4	
Effective Green, g (s)	0.8	40.3		11.2	50.7				17.4		17.4	
Actuated g/C Ratio	0.01	0.48		0.13	0.60				0.21		0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9				5.6		5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0				3.0		3.0	
Lane Grp Cap (vph)	16	2413		234	3043				310		305	
v/s Ratio Prot	0.01	c0.46		c0.11	0.35							
v/s Ratio Perm									c0.05		0.03	
v/c Ratio	0.69	0.97		0.79	0.59				0.26		0.16	
Uniform Delay, d1	41.8	21.6		35.6	10.5				28.2		27.6	
Progression Factor	1.00	1.00		1.00	1.00				1.00		1.00	
Incremental Delay, d2	80.1	12.6		16.8	0.3				0.4		0.2	
Delay (s)	121.9	34.2		52.4	10.8				28.6		27.8	
Level of Service	F	C		D	B				C		C	
Approach Delay (s)		34.6			14.7				28.6		27.8	
Approach LOS		C			B				C		C	
Intersection Summary												
HCM 2000 Control Delay		25.7			HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		84.6			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		72.4%			ICU Level of Service				C			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑		↔	↑↑↑	↔	↔	↔	↔	↔↔	↔	↔
Volume (vph)	196	2000	28	340	1698	576	68	184	553	610	248	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	206	2105	29	366	1826	619	72	196	588	663	270	257
RTOR Reduction (vph)	0	1	0	0	0	85	0	26	282	0	2	127
Lane Group Flow (vph)	206	2133	0	366	1826	534	72	382	94	663	294	104
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.3	38.3	11.8	41.4	41.4
Effective Green, g (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.3	38.3	11.8	41.4	41.4
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1201		519	2318	721	100	407	375	264	471	406
v/s Ratio Prot	0.06	c0.42		c0.21	c0.36		0.04	c0.23		c0.19	c0.17	
v/s Ratio Perm					0.34			0.06				0.07
v/c Ratio	0.81	1.78		0.71	0.79	0.74	0.72	0.94	0.25	2.51	0.62	0.26
Uniform Delay, d1	69.9	58.5		48.2	35.4	34.3	71.1	56.4	46.0	70.8	49.1	43.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	16.9	352.7		4.3	1.8	4.1	21.9	29.4	0.4	691.3	2.6	0.3
Delay (s)	86.8	411.2		52.6	37.2	38.4	93.0	85.8	46.4	762.0	51.7	44.2
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		382.6			39.5			69.1			446.0	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		221.8			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.25										
Actuated Cycle Length (s)		153.3			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		129.3%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↔	↔
Volume (vph)	0	527	889	0	456	1730
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	592	946	0	501	1901
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	592	946	0	501	1898
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.17	c0.27		0.28	c0.68
v/s Ratio Perm						
v/c Ratio		0.33	1.10		0.76	1.07
Uniform Delay, d1		11.8	30.3		21.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	62.7		4.9	42.4
Delay (s)		11.9	93.0		26.7	56.9
Level of Service		B	F		C	E
Approach Delay (s)		11.9	93.0		50.6	
Approach LOS		B	F		D	
Intersection Summary						
HCM 2000 Control Delay		55.0			HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio		1.15				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		89.8%			ICU Level of Service	E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	976	0	0	547	260	455	3	111	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1616				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1616				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1017	0	0	615	292	489	3	119	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	31	0	0	0	0
Lane Group Flow (vph)	0	1017	0	0	809	0	313	267	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases						2						
Actuated Green, G (s)		19.7			19.7		14.8	14.8				
Effective Green, g (s)		19.7			19.7		14.8	14.8				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1640			1561		585	562				
v/s Ratio Prot		0.29			0.24							
v/s Ratio Perm							0.19	0.17				
v/c Ratio		0.62			0.52		0.54	0.47				
Uniform Delay, d1		8.6			8.0		11.1	10.8				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.7			0.3		0.9	0.6				
Delay (s)		9.3			8.3		12.0	11.4				
Level of Service		A			A		B	B				
Approach Delay (s)		9.3			8.3		11.8			0.0		
Approach LOS		A			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		9.6			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		42.5			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		49.7%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Near Term (2 CVN) with Alternative 3 No Hooper







Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	11	9	139	577	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	18	10	151	836	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1007	836	836			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1007	836	836			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	95	99			
cM capacity (veh/h)	264	367	798			
Direction, Lane #						
Volume Total	18	161	836			
Volume Left	0	10	0			
Volume Right	18	0	0			
cSH	367	798	1700			
Volume to Capacity	0.05	0.01	0.49			
Queue Length 95th (ft)	4	1	0			
Control Delay (s)	15.3	0.7	0.0			
Lane LOS	C	A				
Approach Delay (s)	15.3	0.7	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		40.4%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near-Term (2 CVN) with Alternative 1 Mitigated

Timing Plan: AM PEAK








Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	46	3	1345	368	0	439
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1754		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1754		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	61	4	1416	387	0	686
RTOR Reduction (vph)	4	0	0	117	0	0
Lane Group Flow (vph)	61	0	1416	270	0	686
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		29.6	29.6		29.6
Effective Green, g (s)	3.0		29.6	29.6		29.6
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	123		2464	1058		2464
v/s Ratio Prot	c0.03		c0.40			0.19
v/s Ratio Perm				0.18		
v/c Ratio	0.50		0.57	0.25		0.28
Uniform Delay, d1	19.0		3.3	2.4		2.4
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	3.2		0.3	0.1		0.1
Delay (s)	22.2		3.6	2.5		2.5
Level of Service	C		A	A		A
Approach Delay (s)	22.2		3.4			2.5
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	3.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	42.5	Sum of lost time (s)	9.9
Intersection Capacity Utilization	49.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near-Term (2 CVN) with Alternative 1 Mitigated

Timing Plan: AM PEAK









Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	26	47	426	1621	0	176	229
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Frt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Adj. Flow (vph)	104	188	444	1689	0	223	290
RTOR Reduction (vph)	0	0	0	0	0	0	213
Lane Group Flow (vph)	104	188	444	1689	0	223	77
Turn Type	Perm	Prot	Prot	NA	Prot	NA	Perm
Protected Phases		4	5	2	1	6	
Permitted Phases	4						6
Actuated Green, G (s)	20.3	20.3	24.9	51.8		21.9	21.9
Effective Green, g (s)	20.3	20.3	24.9	51.8		21.9	21.9
Actuated g/C Ratio	0.24	0.24	0.30	0.62		0.26	0.26
Clearance Time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	432	387	531	2208		933	417
v/s Ratio Prot		c0.12	0.25	c0.48		0.06	
v/s Ratio Perm	0.06						0.05
v/c Ratio	0.24	0.49	0.84	0.76		0.24	0.18
Uniform Delay, d1	25.2	26.9	27.1	11.2		24.0	23.6
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.3	1.0	11.0	1.6		0.1	0.2
Delay (s)	25.5	27.8	38.1	12.9		24.1	23.8
Level of Service	C	C	D	B		C	C
Approach Delay (s)	27.0			18.1		24.0	
Approach LOS	C			B		C	

Intersection Summary			
HCM 2000 Control Delay	20.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	83.0	Sum of lost time (s)	15.9
Intersection Capacity Utilization	70.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near-Term (2 CVN) with Alternative 1 Mitigated









Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	409	2	40	50	8	21	27	1919	11	4	176	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	0.95	0.95		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.97		1.00	0.89		1.00	1.00		1.00	0.97	
Flt Protected	0.95	0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1655		1770	1661		1770	3536		1770	3429	
Flt Permitted	0.95	0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1655		1770	1661		1770	3536		1770	3429	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	465	2	45	161	26	68	28	2020	12	6	255	67
RTOR Reduction (vph)	0	0	0	0	60	0	0	0	0	0	14	0
Lane Group Flow (vph)	260	252	0	161	34	0	28	2032	0	6	308	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	29.1	29.1		14.5	14.5		3.9	80.4		1.0	77.5	
Effective Green, g (s)	29.1	29.1		14.5	14.5		3.9	80.4		1.0	77.5	
Actuated g/C Ratio	0.20	0.20		0.10	0.10		0.03	0.56		0.01	0.54	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	339	334		178	167		47	1975		12	1846	
v/s Ratio Prot	c0.15	0.15		c0.09	0.02		c0.02	c0.57		0.00	0.09	
v/s Ratio Perm												
v/c Ratio	0.77	0.75		0.90	0.20		0.60	1.03		0.50	0.17	
Uniform Delay, d1	54.2	54.0		64.0	59.4		69.2	31.8		71.2	16.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	10.0	9.3		41.1	0.6		18.6	28.0		29.2	0.0	
Delay (s)	64.2	63.4		105.1	60.0		87.9	59.7		100.4	16.9	
Level of Service	E	E		F	E		F	E		F	B	
Approach Delay (s)		63.8			88.5			60.1			18.4	
Approach LOS		E			F			E			B	
Intersection Summary												
HCM 2000 Control Delay		58.7			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.96										
Actuated Cycle Length (s)		143.9			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		81.1%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Near-Term (2 CVN) with Alternative 1 Mitigated

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	259	20	0	1770	18	42	24	2	21	43	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99			1.00		1.00	0.99		1.00	0.92	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5032			5078		1770	1845		1770	1708	
Flt Permitted	0.95	1.00			1.00		0.68	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5032			5078		1260	1845		248	1708	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	9	291	22	0	1945	20	50	29	2	27	56	70
RTOR Reduction (vph)	0	5	0	0	1	0	0	2	0	0	25	0
Lane Group Flow (vph)	9	308	0	0	1964	0	50	29	0	27	101	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1903			2062		245	358		41	284	
v/s Ratio Prot	c0.01	0.06			c0.39			0.02			0.06	
v/s Ratio Perm							c0.04			c0.11		
v/c Ratio	0.05	0.16			0.95		0.20	0.08		0.66	0.36	
Uniform Delay, d1	71.5	37.1			51.8		60.8	59.4		70.2	66.4	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.2			10.3		0.4	0.1		32.2	0.8	
Delay (s)	71.6	37.2			62.0		61.2	59.4		102.4	67.2	
Level of Service	E	D			E		E			F	E	
Approach Delay (s)		38.2			62.0			60.5			73.4	
Approach LOS		D			E			E			E	
Intersection Summary												
HCM 2000 Control Delay		59.6			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		73.0%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 1 Mitigated
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	22	707	40	25	1917	45	171	38	53	93	47	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00		1.00	0.91		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5044		1770	5068		1770	1700		1770	1762	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5044		1770	5068		1770	1700		1770	1762	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	26	842	48	27	2107	49	206	46	64	113	57	32
RTOR Reduction (vph)	0	3	0	0	1	0	0	28	0	0	11	0
Lane Group Flow (vph)	26	887	0	27	2155	0	206	82	0	113	78	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	15.0	86.7		12.0	83.7		25.0	38.0		25.0	38.0	
Effective Green, g (s)	15.0	86.7		12.0	83.7		25.0	38.0		25.0	38.0	
Actuated g/C Ratio	0.08	0.48		0.07	0.47		0.14	0.21		0.14	0.21	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	147	2429		118	2356		245	358		245	371	
v/s Ratio Prot	0.01	c0.18		c0.02	c0.43		c0.12	c0.05		0.06	0.04	
v/s Ratio Perm												
v/c Ratio	0.18	0.37		0.23	0.91		0.84	0.23		0.46	0.21	
Uniform Delay, d1	76.8	29.3		79.6	44.8		75.6	58.8		71.3	58.6	
Progression Factor	1.00	1.00		1.16	0.80		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.4		0.8	5.6		22.1	0.3		1.4	0.3	
Delay (s)	77.3	29.8		92.8	41.3		97.6	59.2		72.7	58.9	
Level of Service	E	C		F	D		F	E		E	E	
Approach Delay (s)		31.1			41.9			84.2			66.6	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		44.2			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		75.1%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 1 Mitigated
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	4	1018	66	100	1945	54	152	20	94	174	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1144	74	120	2343	65	171	22	106	232	49	21
RTOR Reduction (vph)	0	4	0	0	0	27	0	0	95	0	3	0
Lane Group Flow (vph)	4	1214	0	120	2343	38	0	193	11	0	299	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Effective Green, g (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Actuated g/C Ratio	0.02	0.48		0.11	0.57	0.57		0.10	0.10		0.20	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2427		196	2901	903		184	163		682	
v/s Ratio Prot	0.00	0.24		c0.07	c0.46			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.10	0.50		0.61	0.81	0.04		1.05	0.07		0.44	
Uniform Delay, d1	86.2	31.9		76.3	30.8	17.0		80.7	72.9		62.8	
Progression Factor	1.14	0.65		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.7		5.6	2.5	0.1		79.8	0.2		0.5	
Delay (s)	99.7	21.6		81.9	33.3	17.1		160.5	73.0		63.3	
Level of Service	F	C		F	C	B		F	E		E	
Approach Delay (s)		21.8			35.2			129.5			63.3	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		39.9			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		91.5%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 1 Mitigated

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↔↔↔		↔↔	↔↔↔	↔	↔	↔	↔	↔↔	↔	↔
Volume (vph)	95	1305	31	254	2014	223	79	75	800	244	96	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		3433	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		3433	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	110	1517	36	270	2143	237	88	83	889	290	114	95
RTOR Reduction (vph)	0	2	0	0	0	59	0	137	167	0	2	61
Lane Group Flow (vph)	110	1551	0	270	2143	178	88	355	313	290	122	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2			4				8
Actuated Green, G (s)	5.1	46.3		15.2	56.4	56.4	9.3	34.5	34.5	11.8	37.0	37.0
Effective Green, g (s)	5.1	46.3		15.2	56.4	56.4	9.3	34.5	34.5	11.8	37.0	37.0
Actuated g/C Ratio	0.04	0.36		0.12	0.43	0.43	0.07	0.27	0.27	0.09	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	134	1809		402	2211	688	126	412	400	312	498	429
v/s Ratio Prot	0.03	0.31		c0.08	c0.42		0.05	c0.23		c0.08	0.07	
v/s Ratio Perm						0.11		0.21				0.02
v/c Ratio	0.82	0.86		0.67	0.97	0.26	0.70	0.86	0.78	0.93	0.24	0.06
Uniform Delay, d1	61.8	38.6		54.9	35.8	23.3	58.8	45.3	44.1	58.5	35.6	33.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	31.5	4.3		4.4	12.6	0.2	15.6	16.6	9.6	32.7	0.3	0.1
Delay (s)	93.4	42.9		59.2	48.4	23.5	74.4	61.9	53.7	91.2	35.9	33.7
Level of Service	F	D		E	D	C	E	E	D	F	D	C
Approach Delay (s)		46.2			47.3			59.2			67.7	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		50.9			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		129.7			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		88.7%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near-Term (2 CVN) with Alternative 1 Mitigated








Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↔↔	↔		↔↔
Volume (vph)	277	3	849	52	0	1636
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frbp, ped/bikes	1.00		1.00	0.92		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1772		3539	1459		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1772		3539	1459		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	351	4	943	58	0	1838
RTOR Reduction (vph)	1	0	0	28	0	0
Lane Group Flow (vph)	354	0	943	30	0	1838
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		65.1	65.1		65.1
Effective Green, g (s)	50.0		65.1	65.1		65.1
Actuated g/C Ratio	0.40		0.52	0.52		0.52
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	708		1843	759		1843
v/s Ratio Prot	c0.20		0.27			c0.52
v/s Ratio Perm				0.02		
v/c Ratio	0.50		0.51	0.04		1.00
Uniform Delay, d1	28.1		19.6	14.7		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.6		0.2	0.0		20.2
Delay (s)	28.7		19.8	14.7		50.0
Level of Service	C		B	B		D
Approach Delay (s)	28.7		19.5			50.0
Approach LOS	C		B			D
Intersection Summary						
HCM 2000 Control Delay			38.1		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.78			
Actuated Cycle Length (s)			125.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			95.1%		ICU Level of Service	F
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near-Term (2 CVN) with Alternative 1 Mitigated













Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	226	421	105	460	0	1515	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.92	0.90	0.90
Adj. Flow (vph)	246	458	119	523	0	1683	63
RTOR Reduction (vph)	0	0	0	0	0	0	33
Lane Group Flow (vph)	246	458	119	523	0	1683	30
Turn Type	Perm	Prot	Prot	NA	Prot	NA	Perm
Protected Phases		4	5	2	1	6	
Permitted Phases	4						6
Actuated Green, G (s)	34.9	34.9	8.0	67.2		54.2	54.2
Effective Green, g (s)	34.9	34.9	8.0	67.2		54.2	54.2
Actuated g/C Ratio	0.31	0.31	0.07	0.59		0.48	0.48
Clearance Time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	546	488	125	2104		1697	759
v/s Ratio Prot		c0.29	c0.07	0.15		c0.48	
v/s Ratio Perm	0.14						0.02
v/c Ratio	0.45	0.94	0.95	0.25		0.99	0.04
Uniform Delay, d1	31.4	38.0	52.3	10.9		29.2	15.6
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.6	25.8	65.3	0.1		19.8	0.0
Delay (s)	31.9	63.9	117.6	11.0		49.0	15.6
Level of Service	C	E	F	B		D	B
Approach Delay (s)	52.7			30.7		47.8	
Approach LOS	D			C		D	
Intersection Summary							
HCM 2000 Control Delay		45.4		HCM 2000 Level of Service		D	
HCM 2000 Volume to Capacity ratio		0.97					
Actuated Cycle Length (s)		113.0		Sum of lost time (s)		15.9	
Intersection Capacity Utilization		77.0%		ICU Level of Service		D	
Analysis Period (min)		15					
c Critical Lane Group							

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near-Term (2 CVN) with Alternative 1 Mitigated

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	91	7	70	19	4		76	416	58	19	1475	201
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	0.95	0.95		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.88		1.00	0.90		1.00	0.98		1.00	0.98	
Flt Protected	0.95	0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1545		1770	1685		1770	3474		1770	3476	
Flt Permitted	0.95	0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1545		1770	1685		1770	3474		1770	3476	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	121	9	93	38	8	14	84	457	64	21	1639	223
RTOR Reduction (vph)	0	0	0	0	14	0	0	6	0	0	6	0
Lane Group Flow (vph)	109	114	0	38	8	0	84	515	0	21	1856	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	24.4	24.4		4.1	4.1		8.2	83.4		3.3	78.5	
Effective Green, g (s)	24.4	24.4		4.1	4.1		8.2	83.4		3.3	78.5	
Actuated g/C Ratio	0.18	0.18		0.03	0.03		0.06	0.62		0.02	0.59	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	305	281		54	51		108	2160		43	2034	
v/s Ratio Prot	0.06	c0.07		c0.02	0.01		c0.05	0.15		0.01	c0.53	
v/s Ratio Perm												
v/c Ratio	0.36	0.41		0.70	0.17		0.78	0.24		0.49	0.91	
Uniform Delay, d1	48.0	48.4		64.4	63.3		62.1	11.3		64.6	24.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	1.0		34.1	1.5		28.9	0.1		8.5	6.7	
Delay (s)	48.7	49.4		98.5	64.9		90.9	11.3		73.0	31.5	
Level of Service	D	D		F	E		F	B		E	C	
Approach Delay (s)	49.1			86.1			22.4			31.9		
Approach LOS	D			F			C			C		
Intersection Summary												
HCM 2000 Control Delay		32.4		HCM 2000 Level of Service		C						
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		134.1		Sum of lost time (s)		18.9						
Intersection Capacity Utilization		74.8%		ICU Level of Service		D						
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Near-Term (2 CVN) with Alternative 1 Mitigated

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔↔↔			↔↔↔		↔	↔		↔	↔	
Volume (vph)	59	1425	62	0	473	36	20	41	5	25	27	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99			0.99		1.00	0.98		1.00	0.93	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5054			5032		1770	1833		1770	1737	
Flt Permitted	0.95	1.00			1.00		0.72	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5054			5032		1340	1833		248	1737	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	67	1619	70	0	503	38	29	59	7	29	32	26
RTOR Reduction (vph)	0	2	0	0	5	0	0	2	0	0	17	0
Lane Group Flow (vph)	67	1687	0	0	536	0	29	64	0	29	41	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1912			2043		260	356		41	289	
v/s Ratio Prot	c0.04	c0.33			c0.11			c0.03			0.02	
v/s Ratio Perm							0.02			c0.12		
v/c Ratio	0.34	0.88			0.26		0.11	0.18		0.71	0.14	
Uniform Delay, d1	73.9	52.2			35.5		59.7	60.5		70.9	64.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.0	6.3			0.3		0.2	0.2		43.2	0.2	
Delay (s)	75.0	58.5			35.8		59.9	60.7		114.0	64.3	
Level of Service	E	E			D		E	E		F	E	
Approach Delay (s)		59.1			35.8			60.5			80.8	
Approach LOS		E			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		54.9			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			22.3				
Intersection Capacity Utilization		69.4%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)










Near-Term (2 CVN) with Alternative 1 Mitigated

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔↔↔			↔↔↔		↔	↔		↔	↔	
Volume (vph)	43	1751	130	60	884	135	102	93	65	179	82	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9			4.2		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91			1.00		0.91	1.00		1.00	1.00	
Flt	1.00	0.99			1.00		0.98	1.00		0.94	1.00	0.96
Flt Protected	0.95	1.00			0.95		1.00	0.95		1.00	0.95	1.00
Satd. Flow (prot)	1770	5033			1770		4984	1770		1748	1770	1794
Flt Permitted	0.95	1.00			0.95		1.00	0.95		1.00	0.95	1.00
Satd. Flow (perm)	1770	5033			1770		4984	1770		1748	1770	1794
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	46	1863	138	61	893	136	112	102	71	201	92	30
RTOR Reduction (vph)	0	5	0	0	11	0	0	14	0	0	6	0
Lane Group Flow (vph)	46	1996	0	61	1018	0	112	159	0	201	116	0
Turn Type	Prot	NA			Prot		NA	Prot		NA	Prot	NA
Protected Phases	1	6			5		2	7		4	3	8
Permitted Phases												
Actuated Green, G (s)	20.0	78.7			20.0		78.7	25.0		38.0	25.0	38.0
Effective Green, g (s)	20.0	78.7			20.0		78.7	25.0		38.0	25.0	38.0
Actuated g/C Ratio	0.11	0.44			0.11		0.44	0.14		0.21	0.14	0.21
Clearance Time (s)	4.2	4.9			4.2		4.9	4.6		4.6	4.6	4.6
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	196	2200			196		2179	245		369	245	378
v/s Ratio Prot	0.03	c0.40			c0.03		0.20	0.06		c0.09	c0.11	0.06
v/s Ratio Perm												
v/c Ratio	0.23	0.91			0.31		0.47	0.46		0.43	0.82	0.31
Uniform Delay, d1	73.0	47.3			73.7		35.8	71.3		61.6	75.3	59.9
Progression Factor	1.00	1.00			1.17		0.75	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.6	5.9			0.9		0.7	1.4		0.8	19.3	0.5
Delay (s)	73.6	53.2			87.2		27.5	72.6		62.4	94.6	60.3
Level of Service	E	D			F		C	E		E	F	E
Approach Delay (s)		53.6			30.8			66.4			81.7	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		50.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		111.6%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 1 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	1921	206	162	1378	84	134	42	132	159	46	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5011		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5011		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	30	2044	219	167	1421	87	146	46	143	215	62	28
RTOR Reduction (vph)	0	7	0	0	0	35	0	0	131	0	4	0
Lane Group Flow (vph)	30	2256	0	167	1421	52	0	192	12	0	301	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	85.7		20.0	90.1	90.1		15.0	15.0		40.0	
Effective Green, g (s)	16.0	85.7		20.0	90.1	90.1		15.0	15.0		40.0	
Actuated g/C Ratio	0.09	0.48		0.11	0.50	0.50		0.08	0.08		0.22	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2385		196	2545	792		149	131		749	
v/s Ratio Prot	0.02	c0.45		c0.09	c0.28			c0.11			c0.09	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.19	0.95		0.85	0.56	0.07		1.29	0.09		0.40	
Uniform Delay, d1	76.0	44.9		78.5	31.2	23.2		82.5	76.2		59.8	
Progression Factor	0.98	0.86		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	8.2		28.2	0.9	0.2		170.9	1.4		1.6	
Delay (s)	75.1	46.7		106.8	32.0	23.4		253.4	77.6		61.4	
Level of Service	E	D		F	C	C		F	E		E	
Approach Delay (s)		47.0			39.0			178.3			61.4	
Approach LOS		D			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		54.6			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		96.2%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 1 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	196	1989	28	340	1694	576	69	184	553	610	248	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	206	2094	29	366	1822	619	73	196	588	663	270	257
RTOR Reduction (vph)	0	1	0	0	0	86	0	26	155	0	2	132
Lane Group Flow (vph)	206	2122	0	366	1822	533	73	382	221	663	294	99
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	9.8	49.7		19.6	59.5	59.5	10.8	38.3	38.3	23.8	51.3	51.3
Effective Green, g (s)	9.8	49.7		19.6	59.5	59.5	10.8	38.3	38.3	23.8	51.3	51.3
Actuated g/C Ratio	0.06	0.32		0.13	0.39	0.39	0.07	0.25	0.25	0.16	0.33	0.33
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	219	1645		438	1973	614	124	407	375	532	584	503
v/s Ratio Prot	0.06	c0.42		c0.11	c0.36		0.04	c0.23		c0.19	0.17	
v/s Ratio Perm						0.34			0.15			0.07
v/c Ratio	0.94	1.29		0.84	0.92	0.87	0.59	0.94	0.59	1.25	0.50	0.20
Uniform Delay, d1	71.5	51.8		65.3	44.7	43.3	69.1	56.4	50.6	64.8	40.8	36.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	44.3	135.3		12.9	7.8	12.4	7.0	29.4	2.5	125.9	0.7	0.2
Delay (s)	115.8	187.1		78.2	52.6	55.7	76.1	85.8	53.1	190.6	41.5	36.5
Level of Service	F	F		E	D	E	E	F	D	F	D	D
Approach Delay (s)		180.8			56.6			70.6			123.6	
Approach LOS		F			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		109.6			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.12										
Actuated Cycle Length (s)		153.3			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		105.4%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus Mitigated Near Term (2 CVN) with Alternative 1 No Hooper
10: SR-75 (Silver Strand Blvd) & Tulagi Rd Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	46	3	1336	368	0	374
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1754		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1754		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	61	4	1406	387	0	584
RTOR Reduction (vph)	4	0	0	117	0	0
Lane Group Flow (vph)	61	0	1406	270	0	584
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		29.6	29.6		29.6
Effective Green, g (s)	3.0		29.6	29.6		29.6
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	123		2464	1058		2464
v/s Ratio Prot	c0.03		c0.40			0.17
v/s Ratio Perm				0.18		
v/c Ratio	0.50		0.57	0.25		0.24
Uniform Delay, d1	19.0		3.2	2.4		2.3
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	3.2		0.3	0.1		0.0
Delay (s)	22.2		3.6	2.5		2.4
Level of Service	C		A	A		A
Approach Delay (s)	22.2		3.3			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.6		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.56			
Actuated Cycle Length (s)			42.5		Sum of lost time (s)	9.9
Intersection Capacity Utilization			49.3%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus Mitigated Near Term (2 CVN) with Alternative 1 No Hooper
19: 7th St & SR-75 (Silver Strand Blvd) Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↗		↗	↗	↖	↖	↖	↖	↖	↖
Volume (vph)	8	213	19	0	1357	18	35	24		21	43	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99			1.00		1.00	0.99		1.00	0.92	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5024			5075		1770	1845		1770	1708	
Flt Permitted	0.95	1.00			1.00		0.68	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5024			5075		1260	1845		248	1708	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	9	239	21	0	1491	20	42	29	2	27	56	70
RTOR Reduction (vph)	0	6	0	0	1	0	0	2	0	0	25	0
Lane Group Flow (vph)	9	254	0	0	1510	0	42	29	0	27	101	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1900			2061		245	358		41	284	
v/s Ratio Prot	c0.01	0.05			c0.30			0.02			0.06	
v/s Ratio Perm							c0.03			c0.11		
v/c Ratio	0.05	0.13			0.73		0.17	0.08		0.66	0.36	
Uniform Delay, d1	71.5	36.6			45.2		60.4	59.4		70.2	66.4	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1			2.2		0.3	0.1		32.2	0.8	
Delay (s)	71.6	36.8			47.4		60.8	59.4		102.4	67.2	
Level of Service	E	D			D		E	E		F	E	
Approach Delay (s)		37.9			47.4			60.2			73.4	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		48.6			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.51										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		65.0%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

Mitigated Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	234	0	0	129	753	0	0	0	120	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00				1.00	1.00	
Frt		1.00			1.00	0.85				1.00	0.85	
Flt Protected		1.00			1.00	1.00				0.95	1.00	
Satd. Flow (prot)		1857			1863	1583				1770	1583	
Flt Permitted		0.98			1.00	1.00				0.76	1.00	
Satd. Flow (perm)		1825			1863	1583				1410	1583	
Peak-hour factor, PHF	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Adj. Flow (vph)	20	279	0	0	139	810	0	0	0	132	0	7
RTOR Reduction (vph)	0	0	0	0	0	452	0	0	0	0	5	0
Lane Group Flow (vph)	0	299	0	0	139	358	0	0	0	132	2	0
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		4			8		2				6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)		14.2			14.2	14.2				9.9	9.9	
Effective Green, g (s)		14.2			14.2	14.2				9.9	9.9	
Actuated g/C Ratio		0.44			0.44	0.44				0.31	0.31	
Clearance Time (s)		4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)		807			824	700				434	488	
v/s Ratio Prot					0.07						0.00	
v/s Ratio Perm		0.16				c0.23				c0.09		
v/c Ratio		0.37			0.17	0.51				0.30	0.00	
Uniform Delay, d1		6.0			5.4	6.5				8.5	7.7	
Progression Factor		1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2		0.3			0.1	0.6				0.4	0.0	
Delay (s)		6.3			5.5	7.1				8.9	7.7	
Level of Service		A			A	A				A	A	
Approach Delay (s)		6.3			6.9		0.0				8.8	
Approach LOS		A			A		A				A	
Intersection Summary												
HCM 2000 Control Delay		6.9			HCM 2000 Level of Service					A		
HCM 2000 Volume to Capacity ratio		0.43										
Actuated Cycle Length (s)		32.1			Sum of lost time (s)					8.0		
Intersection Capacity Utilization		66.5%			ICU Level of Service					C		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
22: 3rd St & Palm Ave

Mitigated Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	345	5	27	858		25	12	15	127	12	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0			4.0
Lane Util. Factor	1.00	1.00		1.00	1.00				1.00			1.00
Frt	1.00	1.00		1.00	1.00				0.89			0.95
Flt Protected	0.95	1.00		0.95	1.00				1.00			0.98
Satd. Flow (prot)	1770	1859		1770	1855				1650			1736
Flt Permitted	0.17	1.00		0.51	1.00				0.98			0.92
Satd. Flow (perm)	315	1859		946	1855				1615			1614
Peak-hour factor, PHF	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.81	0.80	0.80
Adj. Flow (vph)	9	401	6	29	923		27	15	19	157	15	14
RTOR Reduction (vph)	0	1	0	0	1	0	0	0	128	0	0	16
Lane Group Flow (vph)	9	406	0	29	949	0	0	63	0	0	32	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	32.1	32.1		32.1	32.1			8.9			8.9	
Effective Green, g (s)	32.1	32.1		32.1	32.1			8.9			8.9	
Actuated g/C Ratio	0.66	0.66		0.66	0.66			0.18			0.18	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	206	1217		619	1215			293			293	
v/s Ratio Prot		0.22			c0.51							
v/s Ratio Perm	0.03			0.03				c0.04			0.02	
v/c Ratio	0.04	0.33		0.05	0.78			0.21			0.11	
Uniform Delay, d1	3.0	3.7		3.0	6.0			17.1			16.7	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	0.2		0.0	3.3			0.4			0.2	
Delay (s)	3.1	3.9		3.0	9.3			17.4			16.9	
Level of Service	A	A		A	A			B			B	
Approach Delay (s)		3.9			9.1			17.4			16.9	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay		9.0			HCM 2000 Level of Service					A		
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		49.0			Sum of lost time (s)					8.0		
Intersection Capacity Utilization		63.1%			ICU Level of Service					B		
Analysis Period (min)		15										
c Critical Lane Group												

























NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Mitigated Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱	↕	↕	↰	↱
Volume (veh/h)	240	482	820	154	0	251
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	304	610	1000	188	0	354
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked	0.80				0.80	0.80
vC, conflicting volume	1188				2312	594
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	749				2145	11
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	56				100	59
cM capacity (veh/h)	689				19	859
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	304	610	667	521	354	
Volume Left	304	0	0	0	0	
Volume Right	0	0	0	188	354	
cSH	689	1700	1700	1700	859	
Volume to Capacity	0.44	0.36	0.39	0.31	0.41	
Queue Length 95th (ft)	57	0	0	0	51	
Control Delay (s)	14.3	0.0	0.0	0.0	12.1	
Lane LOS	B				B	
Approach Delay (s)	4.7		0.0		12.1	
Approach LOS					B	
Intersection Summary						
Average Delay			3.5			
Intersection Capacity Utilization			49.8%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Mitigated Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Volume (vph)	22	715	40	25	1983	45	171	38	53	93	47	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.91		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5045		1770	5069		1770	1700		1770	1762	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5045		1770	5069		1770	1700		1770	1762	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	26	851	48	27	2179	49	206	46	64	113	57	32
RTOR Reduction (vph)	0	3	0	0	1	0	0	27	0	0	11	0
Lane Group Flow (vph)	26	896	0	27	2227	0	206	83	0	113	78	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	15.0	88.1		12.0	85.1		23.6	44.8		16.8	38.0	
Effective Green, g (s)	15.0	88.1		12.0	85.1		23.6	44.8		16.8	38.0	
Actuated g/C Ratio	0.08	0.49		0.07	0.47		0.13	0.25		0.09	0.21	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	147	2469		118	2396		232	423		165	371	
v/s Ratio Prot	0.01	c0.18		c0.02	c0.44		c0.12	0.05		0.06	c0.04	
v/s Ratio Perm												
v/c Ratio	0.18	0.36		0.23	0.93		0.89	0.20		0.68	0.21	
Uniform Delay, d1	76.8	28.5		79.6	44.6		76.9	53.4		79.0	58.6	
Progression Factor	1.00	1.00		1.14	0.84		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.4		0.8	6.3		30.8	0.2		11.2	0.3	
Delay (s)	77.3	28.9		91.5	43.7		107.7	53.6		90.2	58.9	
Level of Service	E	C		F	D		F	D		F	E	
Approach Delay (s)		30.3			44.2			88.9			76.4	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay			46.3			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.69									
Actuated Cycle Length (s)			180.0			Sum of lost time (s)				18.3		
Intersection Capacity Utilization			76.4%			ICU Level of Service				D		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Mitigated Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰↰	↰
Volume (vph)	4	1025	66	100	2010	54	152	20	94	174	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1152	74	120	2422	65	171	22	106	232	49	21
RTOR Reduction (vph)	0	4	0	0	0	27	0	0	95	0	3	0
Lane Group Flow (vph)	4	1222	0	120	2422	38	0	193	11	0	299	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Effective Green, g (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Actuated g/C Ratio	0.02	0.48		0.11	0.57	0.57		0.10	0.10		0.20	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2427		196	2901	903		184	163		682	
v/s Ratio Prot	0.00	0.24		c0.07	c0.48			c0.11			c0.09	
v/s Ratio Perm					0.02			0.01				
v/c Ratio	0.10	0.50		0.61	0.83	0.04		1.05	0.07		0.44	
Uniform Delay, d1	86.2	31.9		76.3	31.7	17.0		80.7	72.9		62.8	
Progression Factor	1.12	0.68		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.7		5.6	3.0	0.1		79.8	0.2		0.5	
Delay (s)	97.9	22.3		81.9	34.7	17.1		160.5	73.0		63.3	
Level of Service	F	C		F	C	B		F	E		E	
Approach Delay (s)		22.6			36.4			129.5			63.3	
Approach LOS		C			D			F			E	

Intersection Summary			
HCM 2000 Control Delay	40.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	18.3
Intersection Capacity Utilization	92.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Mitigated Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰↰	↰
Volume (vph)	95	1312	31	254	2080	223	79	75	800	244	96	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		3433	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		3433	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	110	1526	36	270	2213	237	88	83	889	290	114	95
RTOR Reduction (vph)	0	2	0	0	0	59	0	130	130	0	2	61
Lane Group Flow (vph)	110	1560	0	270	2213	178	88	362	350	290	122	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	5.0	47.7		14.3	57.0	57.0	9.3	34.9	34.9	11.3	36.9	36.9
Effective Green, g (s)	5.0	47.7		14.3	57.0	57.0	9.3	34.9	34.9	11.3	36.9	36.9
Actuated g/C Ratio	0.04	0.37		0.11	0.44	0.44	0.07	0.27	0.27	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	131	1858		377	2227	693	126	415	403	298	495	426
v/s Ratio Prot	0.03	0.31		c0.08	c0.44		0.05	c0.23		c0.08	0.07	
v/s Ratio Perm					0.11			0.23				0.02
v/c Ratio	0.84	0.84		0.72	0.99	0.26	0.70	0.87	0.87	0.97	0.25	0.06
Uniform Delay, d1	62.2	37.7		55.9	36.4	23.1	59.0	45.5	45.4	59.2	35.9	33.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	35.2	3.5		6.4	17.5	0.2	15.6	18.0	17.8	44.5	0.3	0.1
Delay (s)	97.4	41.2		62.3	53.9	23.3	74.6	63.5	63.2	103.8	36.1	34.0
Level of Service	F	D		E	D	C	E	E	E	F	D	C
Approach Delay (s)		44.9			52.0			64.3			75.1	
Approach LOS		D			D			E			E	

Intersection Summary				
HCM 2000 Control Delay	54.2	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.96			
Actuated Cycle Length (s)	130.1	Sum of lost time (s)	21.9	
Intersection Capacity Utilization	89.9%	ICU Level of Service	E	
Analysis Period (min)	15			
c Critical Lane Group				

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Mitigated Near Term (2 CVN) with Alternative 1 No Hooper













Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑	↑↑
Volume (vph)	0	295	1166	0	161	1390
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	331	1254	0	179	1544
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	331	1254	0	179	1540
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.35		0.10	c0.55
v/s Ratio Perm						
v/c Ratio		0.12	1.07		0.86	1.00
Uniform Delay, d1		2.5	26.8		34.7	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	48.8		29.2	24.2
Delay (s)		2.5	75.6		63.8	42.2
Level of Service		A	E		E	D
Approach Delay (s)		2.5	75.6		44.4	
Approach LOS		A	E		D	
Intersection Summary						
HCM 2000 Control Delay		52.1			HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio		1.10				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		71.4%			ICU Level of Service	C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Mitigated Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			 			 
Volume (vph)	277	3	771	52	0	1620
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frbp, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1772		3539	1467		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1772		3539	1467		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	351	4	857	58	0	1820
RTOR Reduction (vph)	1	0	0	30	0	0
Lane Group Flow (vph)	354	0	857	28	0	1820
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		55.1	55.1		55.1
Effective Green, g (s)	50.0		55.1	55.1		55.1
Actuated g/C Ratio	0.43		0.48	0.48		0.48
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	770		1695	702		1695
v/s Ratio Prot	c0.20		0.24			c0.51
v/s Ratio Perm				0.02		
v/c Ratio	0.46		0.51	0.04		1.07
Uniform Delay, d1	23.0		20.6	15.9		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.2	0.0		44.7
Delay (s)	23.4		20.8	15.9		74.6
Level of Service	C		C	B		E
Approach Delay (s)	23.4		20.5			74.6
Approach LOS	C		C			E
Intersection Summary						
HCM 2000 Control Delay			52.7	HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio			0.78			
Actuated Cycle Length (s)			115.0	Sum of lost time (s)		9.9
Intersection Capacity Utilization			94.7%	ICU Level of Service		F
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Mitigated Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔↔↔			↔↔↔		↔	↔		↔	↔	
Volume (vph)	59	1017	56	0	371	1900	18	41	5	25	27	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99			0.99		1.00	0.98		1.00	0.93	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5045			5018		1770	1833		1770	1737	
Flt Permitted	0.95	1.00			1.00		0.72	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5045			5018		1340	1833		248	1737	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	67	1156	64	0	395	38	26	59	7	29	32	26
RTOR Reduction (vph)	0	3	0	0	7	0	0	2	0	0	17	0
Lane Group Flow (vph)	67	1217	0	0	426	0	26	64	0	29	41	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1908			2037		260	356		41	289	
v/s Ratio Prot	c0.04	c0.24			c0.08			c0.03			0.02	
v/s Ratio Perm							0.02			c0.12		
v/c Ratio	0.34	0.64			0.21		0.10	0.18		0.71	0.14	
Uniform Delay, d1	73.9	45.8			34.7		59.6	60.5		70.9	64.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.0	1.6			0.2		0.2	0.2		43.2	0.2	
Delay (s)	75.0	47.5			34.9		59.7	60.7		114.0	64.3	
Level of Service	E	D			C		E	E		F	E	
Approach Delay (s)		48.9			34.9			60.5			80.8	
Approach LOS		D			C			E			F	

Intersection Summary				
HCM 2000 Control Delay	47.7	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.49			
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	22.3	
Intersection Capacity Utilization	67.8%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

Mitigated Near Term (2 CVN) with Alternative 1 No Hooper







Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔			↔↔	↔↔		↔↔		↔↔	↔↔	
Volume (vph)	6	214	0	0	308	201	0	0	0	746	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00				1.00	1.00	
Flt		1.00			1.00	0.85				1.00	0.85	
Flt Protected		1.00			1.00	1.00				0.95	1.00	
Satd. Flow (prot)		1860			1863	1583				1770	1583	
Flt Permitted		0.99			1.00	1.00				0.76	1.00	
Satd. Flow (perm)		1842			1863	1583				1410	1583	
Peak-hour factor, PHF	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.92	0.66	0.66
Adj. Flow (vph)	7	249	0	0	350	228	0	0	0	811	0	23
RTOR Reduction (vph)	0	0	0	0	0	170	0	0	0	0	8	0
Lane Group Flow (vph)	0	256	0	0	350	58	0	0	0	811	15	0
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)		21.0			21.0	21.0				53.9	53.9	
Effective Green, g (s)		21.0			21.0	21.0				53.9	53.9	
Actuated g/C Ratio		0.25			0.25	0.25				0.65	0.65	
Clearance Time (s)		4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)		466			471	401				916	1029	
v/s Ratio Prot					c0.19						0.01	
v/s Ratio Perm		0.14				0.04				c0.57		
v/c Ratio		0.55			0.74	0.14				0.89	0.01	
Uniform Delay, d1		28.8			28.5	24.0				12.0	5.1	
Progression Factor		1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2		1.3			6.3	0.2				10.2	0.0	
Delay (s)		28.2			34.7	24.2				22.2	5.1	
Level of Service		C			C	C				C	A	
Approach Delay (s)		28.2			30.6			0.0			21.7	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	25.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	82.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			







NBC Coastal Campus
22: 3rd St & Palm Ave

Mitigated Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	937	13	86	482	25	15	39	69	29	34	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.92			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1770	1859		1770	1849			1711			1784	
Flt Permitted	0.40	1.00		0.09	1.00			0.94			0.58	
Satd. Flow (perm)	754	1859		169	1849			1620			1053	
Peak-hour factor, PHF	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Adj. Flow (vph)	10	1201	17	97	542	28	26	68	121	63	74	30
RTOR Reduction (vph)	0	0	0	0	1	0	0	44	0	0	7	0
Lane Group Flow (vph)	10	1218	0	97	569	0	0	171	0	0	160	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	80.1	80.1		80.1	80.1			18.0			18.0	
Effective Green, g (s)	80.1	80.1		80.1	80.1			18.0			18.0	
Actuated g/C Ratio	0.75	0.75		0.75	0.75			0.17			0.17	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	569	1403		127	1395			274			178	
v/s Ratio Prot		c0.65			0.31							
v/s Ratio Perm	0.01			0.57			0.11				c0.15	
v/c Ratio	0.02	0.87		0.76	0.41		0.62				0.90	
Uniform Delay, d1	3.2	9.2		7.5	4.6		40.9				43.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00				1.00	
Incremental Delay, d2	0.0	5.9		23.4	0.2		4.4				39.1	
Delay (s)	3.2	15.2		31.0	4.8		45.3				82.3	
Level of Service	A	B		C	A		D				F	
Approach Delay (s)		15.1			8.6		45.3				82.3	
Approach LOS		B			A		D				F	
Intersection Summary												
HCM 2000 Control Delay		21.0			HCM 2000 Level of Service		C					
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		106.1			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		74.7%			ICU Level of Service		D					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Mitigated Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	235	904	578	40	0	232
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	242	932	672	47	0	273
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	719				2112	359
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	719				2112	359
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	72				100	57
cM capacity (veh/h)	878				32	637
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	242	932	448	271	273	
Volume Left	242	0	0	0	0	
Volume Right	0	0	0	47	273	
cSH	878	1700	1700	1700	637	
Volume to Capacity	0.28	0.55	0.26	0.16	0.43	
Queue Length 95th (ft)	28	0	0	0	54	
Control Delay (s)	10.7	0.0	0.0	0.0	14.8	
Lane LOS	B				B	
Approach Delay (s)	2.2		0.0		14.8	
Approach LOS					B	
Intersection Summary						
Average Delay			3.1			
Intersection Capacity Utilization			50.9%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Mitigated Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰		↰	↰		↰	↰	
Volume (vph)	43	1816	130	60	901	135	102	93	65	179	82	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.94		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5034		1770	4986		1770	1748		1770	1794	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5034		1770	4986		1770	1748		1770	1794	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	46	1932	138	61	910	136	112	102	71	201	92	30
RTOR Reduction (vph)	0	4	0	0	10	0	0	14	0	0	6	0
Lane Group Flow (vph)	46	2066	0	61	1036	0	112	159	0	201	116	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	20.0	80.4		20.0	80.4		16.7	38.0		23.3	44.6	
Effective Green, g (s)	20.0	80.4		20.0	80.4		16.7	38.0		23.3	44.6	
Actuated g/C Ratio	0.11	0.45		0.11	0.45		0.09	0.21		0.13	0.25	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	2248		196	2227		164	369		229	444	
v/s Ratio Prot	0.03	c0.41		c0.03	0.21		0.06	c0.09		c0.11	0.06	
v/s Ratio Perm												
v/c Ratio	0.23	0.92		0.31	0.47		0.68	0.43		0.88	0.26	
Uniform Delay, d1	73.0	46.7		73.7	34.8		79.1	61.6		77.0	54.4	
Progression Factor	1.00	1.00		1.16	0.76		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	6.6		0.9	0.7		11.1	0.8		29.2	0.3	
Delay (s)	73.6	53.3		86.6	27.3		90.2	62.4		106.1	54.8	
Level of Service	E	D		F	C		F	E		F	D	
Approach Delay (s)		53.8			30.5			73.3			86.7	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		51.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		100.7%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Mitigated Near Term (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰	↰	↰
Volume (vph)	28	1985	206	162	1394	84	134	42	132	159	46	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	0.85	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5014		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5014		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	30	2112	219	167	1437	87	146	46	143	215	62	28
RTOR Reduction (vph)	0	7	0	0	0	34	0	0	131	0	4	0
Lane Group Flow (vph)	30	2324	0	167	1437	53	0	192	12	0	301	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	14.4	87.7		18.0	91.7	91.7		15.0	15.0		40.0	
Effective Green, g (s)	14.4	87.7		18.0	91.7	91.7		15.0	15.0		40.0	
Actuated g/C Ratio	0.08	0.49		0.10	0.51	0.51		0.08	0.08		0.22	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	141	2442		177	2590	806		149	131		749	
v/s Ratio Prot	0.02	c0.46		c0.09	c0.28			c0.11			c0.09	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.21	0.95		0.94	0.55	0.07		1.29	0.09		0.40	
Uniform Delay, d1	77.5	44.1		80.5	30.2	22.4		82.5	76.2		59.8	
Progression Factor	0.96	0.85		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.6	8.6		51.0	0.9	0.2		170.9	0.3		1.6	
Delay (s)	74.8	46.0		131.5	31.1	22.6		253.4	76.5		61.4	
Level of Service	E	D		F	C	C		F	E		E	
Approach Delay (s)		46.3			40.5			177.9			61.4	
Approach LOS		D			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		54.6			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.84										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		95.8%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Mitigated Near Term (2 CVN) with Alternative 1 No Hooper















Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰↱	↰↱↰↱		↰↱	↰↱↰↱	↰↱	↰↱	↰↱	↰↱	↰↱	↰↱	↰↱
Volume (vph)	196	2054	28	340	1710	576	69	184	553	610	248	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	206	2162	29	366	1839	619	73	196	588	663	270	257
RTOR Reduction (vph)	0	1	0	0	0	85	0	26	155	0	2	136
Lane Group Flow (vph)	206	2190	0	366	1839	534	73	382	221	663	294	95
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	10.2	49.7		19.6	59.1	59.1	10.8	38.3	38.3	23.8	51.3	51.3
Effective Green, g (s)	10.2	49.7		19.6	59.1	59.1	10.8	38.3	38.3	23.8	51.3	51.3
Actuated g/C Ratio	0.07	0.32		0.13	0.39	0.39	0.07	0.25	0.25	0.16	0.33	0.33
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	228	1645		438	1960	610	124	407	375	532	584	503
v/s Ratio Prot	0.06	c0.43		c0.11	c0.36		0.04	c0.23		c0.19	0.17	
v/s Ratio Perm						0.34		0.15				0.06
v/c Ratio	0.90	1.33		0.84	0.94	0.88	0.59	0.94	0.59	1.25	0.50	0.19
Uniform Delay, d1	71.1	51.8		65.3	45.3	43.7	69.1	56.4	50.6	64.8	40.8	36.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	34.6	153.4		12.9	9.3	13.3	7.0	29.4	2.5	125.9	0.7	0.2
Delay (s)	105.6	205.2		78.2	54.6	57.0	76.1	85.8	53.1	190.6	41.5	36.4
Level of Service	F	F		E	D	E	E	F	D	F	D	D
Approach Delay (s)		196.7			58.2			70.6			123.6	
Approach LOS		F			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		116.0			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.13										
Actuated Cycle Length (s)		153.3			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		106.6%			ICU Level of Service				G			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp













Mitigated Near Term (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		 	 		 	 
Volume (vph)	0	527	889	0	456	1743
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	592	946	0	501	1915
RTOR Reduction (vph)	0	0	0	0	0	6
Lane Group Flow (vph)	0	592	946	0	501	1909
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		45.4	24.4		35.0	56.0
Effective Green, g (s)		45.4	24.4		35.0	56.0
Actuated g/C Ratio		0.50	0.27		0.39	0.62
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1785	959		688	1734
v/s Ratio Prot		0.17	c0.27		0.28	c0.69
v/s Ratio Perm						
v/c Ratio		0.33	0.99		0.73	1.10
Uniform Delay, d1		13.3	32.6		23.4	17.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	25.5		3.9	54.8
Delay (s)		13.4	58.1		27.3	71.8
Level of Service		B	E		C	E
Approach Delay (s)		13.4	58.1		62.6	
Approach LOS		B	E		E	
Intersection Summary						
HCM 2000 Control Delay		54.1		HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio		1.13				
Actuated Cycle Length (s)		90.0		Sum of lost time (s)		14.2
Intersection Capacity Utilization		90.2%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						











NBC Coastal Campus
4: Orange Ave & Fourth St

Near-Term (2 CVN) with Alternative 3 Mitigated
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	1	586	81	0	0	0	0	199	222	453	1473	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3241	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3241	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	637	88	0	0	0	0	231	241	492	1534	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	24	48	0	0	0
Lane Group Flow (vph)	0	638	59	0	0	0	0	303	97	492	1534	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1170	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.43	
v/s Ratio Perm		0.13	0.04						0.07			
v/c Ratio		0.36	0.11					0.26	0.19	0.70	0.74	
Uniform Delay, d1		41.5	37.7					38.6	37.5	63.3	26.4	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.5	
Delay (s)		41.6	37.8					38.7	37.7	66.3	27.9	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.4			37.2	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay			38.3							D		
HCM 2000 Volume to Capacity ratio			0.61									
Actuated Cycle Length (s)			171.6							14.4		
Intersection Capacity Utilization			201.0%							H		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd








Near-Term (2 CVN) with Alternative 3 Mitigated
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	44	3	1348	387	0	405
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frbp, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1753		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1753		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	59	4	1419	407	0	633
RTOR Reduction (vph)	4	0	0	123	0	0
Lane Group Flow (vph)	59	0	1419	284	0	633
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		29.7	29.7		29.7
Effective Green, g (s)	3.0		29.7	29.7		29.7
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	123		2467	1059		2467
v/s Ratio Prot	c0.03		c0.40			0.18
v/s Ratio Perm				0.19		
v/c Ratio	0.48		0.58	0.27		0.26
Uniform Delay, d1	19.1		3.3	2.4		2.4
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	3.0		0.3	0.1		0.1
Delay (s)	22.0		3.6	2.5		2.4
Level of Service	C		A	A		A
Approach Delay (s)	22.0		3.4			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.6		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.57			
Actuated Cycle Length (s)			42.6		Sum of lost time (s)	9.9
Intersection Capacity Utilization			49.7%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near-Term (2 CVN) with Alternative 3 Mitigated




















Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	21	40	355	1648	0	179	191
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.96	0.96	0.92	0.79	0.79
Adj. Flow (vph)	23	43	370	1717	0	227	242
RTOR Reduction (vph)	0	0	0	0	0	0	164
Lane Group Flow (vph)	23	43	370	1717	0	227	78
Turn Type	Perm	Prot	Prot	NA	Prot	NA	Perm
Protected Phases		4	5	2	1	6	
Permitted Phases	4						6
Actuated Green, G (s)	13.2	13.2	23.4	53.3		24.9	24.9
Effective Green, g (s)	13.2	13.2	23.4	53.3		24.9	24.9
Actuated g/C Ratio	0.17	0.17	0.30	0.69		0.32	0.32
Clearance Time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	301	269	535	2437		1138	509
v/s Ratio Prot		c0.03	0.21	c0.49		0.06	
v/s Ratio Perm	0.01						0.05
v/c Ratio	0.08	0.16	0.69	0.70		0.20	0.15
Uniform Delay, d1	27.0	27.4	23.8	7.3		19.0	18.7
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	0.3	3.8	0.9		0.1	0.1
Delay (s)	27.1	27.7	27.7	8.2		19.1	18.9
Level of Service	C	C	C	A		B	B
Approach Delay (s)	27.5			11.7		19.0	
Approach LOS	C			B		B	
Intersection Summary							
HCM 2000 Control Delay		13.4			HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.64					
Actuated Cycle Length (s)		77.4			Sum of lost time (s)		15.9
Intersection Capacity Utilization		71.3%			ICU Level of Service		C
Analysis Period (min)		15					
c Critical Lane Group							

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near-Term (2 CVN) with Alternative 3 Mitigated

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	408	2	40	50	8	21	27	1875	11	4	171	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	0.95	0.95		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.97		1.00	0.89		1.00	1.00		1.00	0.97	
Flt Protected	0.95	0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1655		1770	1661		1770	3536		1770	3426	
Flt Permitted	0.95	0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1655		1770	1661		1770	3536		1770	3426	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	464	2	45	161	26	68	28	1974	12	6	248	67
RTOR Reduction (vph)	0	0	0	0	62	0	0	0	0	0	15	0
Lane Group Flow (vph)	260	251	0	161	32	0	28	1986	0	6	300	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	26.3	26.3		12.5	12.5		3.8	72.8		1.0	70.0	
Effective Green, g (s)	26.3	26.3		12.5	12.5		3.8	72.8		1.0	70.0	
Actuated g/C Ratio	0.20	0.20		0.10	0.10		0.03	0.55		0.01	0.53	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	336	331		168	157		51	1957		13	1823	
v/s Ratio Prot	c0.15	0.15		c0.09	0.02		c0.02	c0.56		0.00	0.09	
v/s Ratio Perm												
v/c Ratio	0.77	0.76		0.96	0.21		0.55	1.01		0.46	0.16	
Uniform Delay, d1	49.8	49.6		59.2	54.9		63.0	29.4		65.0	15.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	10.6	9.6		56.5	0.7		11.5	24.0		23.8	0.0	
Delay (s)	60.4	59.2		115.7	55.6		74.6	53.4		88.8	15.8	
Level of Service	E	E		F	E		E	D		F	B	
Approach Delay (s)		59.8			93.6			53.7			17.2	
Approach LOS		E			F			D			B	
Intersection Summary												
HCM 2000 Control Delay			54.2			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.96									
Actuated Cycle Length (s)			131.5			Sum of lost time (s)				18.9		
Intersection Capacity Utilization			79.8%			ICU Level of Service				D		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 3 Mitigated
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	22	702	40	25	1874	45	170	38	53	93	47	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00		1.00	0.91		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5044		1770	5068		1770	1700		1770	1762	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5044		1770	5068		1770	1700		1770	1762	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	26	836	48	27	2059	49	205	46	64	113	57	32
RTOR Reduction (vph)	0	3	0	0	1	0	0	28	0	0	11	0
Lane Group Flow (vph)	26	881	0	27	2107	0	205	82	0	113	78	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	15.0	86.7		12.0	83.7		25.0	38.0		25.0	38.0	
Effective Green, g (s)	15.0	86.7		12.0	83.7		25.0	38.0		25.0	38.0	
Actuated g/C Ratio	0.08	0.48		0.07	0.47		0.14	0.21		0.14	0.21	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	147	2429		118	2356		245	358		245	371	
v/s Ratio Prot	0.01	c0.17		c0.02	c0.42		c0.12	c0.05		0.06	0.04	
v/s Ratio Perm												
v/c Ratio	0.18	0.36		0.23	0.89		0.84	0.23		0.46	0.21	
Uniform Delay, d1	76.8	29.3		79.6	44.1		75.5	58.8		71.3	58.6	
Progression Factor	1.00	1.00		1.16	0.77		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.4		0.8	4.7		21.3	0.3		1.4	0.3	
Delay (s)	77.3	29.7		93.4	38.7		96.8	59.2		72.7	58.9	
Level of Service	E	C		F	D		F	E		E	E	
Approach Delay (s)		31.1			39.4			83.6			66.6	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		42.7			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		74.3%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 3 Mitigated
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	4	1012	66	100	1901	54	151	20	94	174	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1137	74	120	2290	65	170	22	106	232	49	21
RTOR Reduction (vph)	0	4	0	0	0	27	0	0	95	0	3	0
Lane Group Flow (vph)	4	1207	0	120	2290	38	0	192	11	0	299	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Effective Green, g (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Actuated g/C Ratio	0.02	0.48		0.11	0.57	0.57		0.10	0.10		0.20	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2427		196	2901	903		184	163		682	
v/s Ratio Prot	0.00	0.24		c0.07	c0.45			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.10	0.50		0.61	0.79	0.04		1.04	0.07		0.44	
Uniform Delay, d1	86.2	31.8		76.3	30.2	17.0		80.7	72.9		62.8	
Progression Factor	1.14	0.66		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.7		5.6	2.3	0.1		78.3	0.2		0.5	
Delay (s)	99.3	21.6		81.9	32.5	17.1		159.0	73.0		63.3	
Level of Service	F	C		F	C	B		F	E		E	
Approach Delay (s)		21.8			34.5			128.4			63.3	
Approach LOS		C			C			F			E	
Intersection Summary												
HCM 2000 Control Delay		39.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		90.6%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 3 Mitigated
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	95	1301	31	254	1971	223	78	75	800	244	96	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		3433	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		3433	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	110	1513	36	270	2097	237	87	83	889	290	114	95
RTOR Reduction (vph)	0	2	0	0	0	59	0	137	167	0	2	61
Lane Group Flow (vph)	110	1547	0	270	2097	178	87	355	313	290	122	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	5.1	46.3		15.2	56.4	56.4	9.2	34.5	34.5	11.8	37.1	37.1
Effective Green, g (s)	5.1	46.3		15.2	56.4	56.4	9.2	34.5	34.5	11.8	37.1	37.1
Actuated g/C Ratio	0.04	0.36		0.12	0.43	0.43	0.07	0.27	0.27	0.09	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	134	1809		402	2211	688	125	412	400	312	500	430
v/s Ratio Prot	0.03	0.31		c0.08	c0.41		0.05	c0.23		c0.08	c0.07	
v/s Ratio Perm					0.11			0.21				0.02
v/c Ratio	0.82	0.86		0.67	0.95	0.26	0.70	0.86	0.78	0.93	0.24	0.06
Uniform Delay, d1	61.8	38.6		54.9	35.3	23.3	58.9	45.3	44.1	58.5	35.5	33.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	31.5	4.2		4.4	9.6	0.2	15.5	16.6	9.6	32.7	0.3	0.1
Delay (s)	93.4	42.8		59.2	44.8	23.5	74.4	61.9	53.7	91.2	35.8	33.7
Level of Service	F	D		E	D	C	E	E	D	F	D	C
Approach Delay (s)		46.1			44.4			59.2			67.6	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		49.6			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.92										
Actuated Cycle Length (s)		129.7			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		87.8%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Near-Term (2 CVN) with Alternative 3 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔	↔				↔	↔	↔	↔	↔
Volume (vph)	7	2124	111		0	0	0	355	472	762	1116	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Flrpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flrpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Flt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3124	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3124	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2334	122	0	0	0	0	413	549	794	1162	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2342	93	0	0	0	0	654	273	794	1162	0
Confl. Peds. (#/hr)				20				20				
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					947	409	865	2022	
v/s Ratio Prot		c0.46						c0.21		c0.23	0.33	
v/s Ratio Perm			0.06						0.20			
v/c Ratio		1.27	0.16					0.69	0.67	0.92	0.57	
Uniform Delay, d1		55.8	37.8					53.7	53.2	63.7	23.9	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		126.9	0.1					2.2	4.1	14.3	0.4	
Delay (s)		182.7	37.9					55.9	57.3	78.0	24.3	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		175.5		0.0				56.4			46.1	
Approach LOS		F		A				E			D	
Intersection Summary												
HCM 2000 Control Delay		107.2			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.98										
Actuated Cycle Length (s)		175.0			Sum of lost time (s)			14.4				
Intersection Capacity Utilization		136.0%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Near-Term (2 CVN) with Alternative 3 Mitigated

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	296	4	815	53	0	1628
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.92		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1771		3539	1459		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1771		3539	1459		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	375	5	906	59	0	1829
RTOR Reduction (vph)	1	0	0	28	0	0
Lane Group Flow (vph)	379	0	906	31	0	1829
Confl. Peds. (#/hr)	20	20			20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		65.1	65.1		65.1
Effective Green, g (s)	50.0		65.1	65.1		65.1
Actuated g/C Ratio	0.40		0.52	0.52		0.52
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	708		1843	759		1843
v/s Ratio Prot	c0.21		0.26			c0.52
v/s Ratio Perm				0.02		
v/c Ratio	0.54		0.49	0.04		0.99
Uniform Delay, d1	28.6		19.3	14.7		29.7
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.8		0.2	0.0		19.1
Delay (s)	29.4		19.5	14.7		48.8
Level of Service	C		B	B		D
Approach Delay (s)	29.4		19.2			48.8
Approach LOS	C		B			D

Intersection Summary			
HCM 2000 Control Delay	37.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	9.9
Intersection Capacity Utilization	94.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Near-Term (2 CVN) with Alternative 3 Mitigated





















Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↖	↖	↖	↗	↖	↗	↗
Volume (vph)	189	351	88	467	0	1542	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Frt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.92	0.90	0.90
Adj. Flow (vph)	205	382	100	531	0	1713	52
RTOR Reduction (vph)	0	0	0	0	0	0	25
Lane Group Flow (vph)	205	382	100	531	0	1713	27
Turn Type	Perm	Prot	Prot	NA	Prot	NA	Perm
Protected Phases		4	5	2	1	6	
Permitted Phases	4						6
Actuated Green, G (s)	30.2	30.2	7.0	67.3		55.3	55.3
Effective Green, g (s)	30.2	30.2	7.0	67.3		55.3	55.3
Actuated g/C Ratio	0.28	0.28	0.06	0.62		0.51	0.51
Clearance Time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	493	441	114	2197		1805	807
v/s Ratio Prot		c0.24	c0.06	0.15		c0.48	
v/s Ratio Perm	0.12						0.02
v/c Ratio	0.42	0.87	0.88	0.24		0.95	0.03
Uniform Delay, d1	31.9	37.2	50.3	9.2		25.2	13.2
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.6	16.2	47.9	0.1		11.3	0.0
Delay (s)	32.5	53.3	98.1	9.2		36.5	13.2
Level of Service	C	D	F	A		D	B
Approach Delay (s)	46.1			23.3		35.8	
Approach LOS	D			C		D	

Intersection Summary			
HCM 2000 Control Delay	35.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	108.4	Sum of lost time (s)	15.9
Intersection Capacity Utilization	73.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			





















NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Near-Term (2 CVN) with Alternative 3 Mitigated
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	7	70	19	4	7	76	405	58	19	1433	201
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	0.95	0.95		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.88		1.00	0.90		1.00	0.98		1.00	0.98	
Flt Protected	0.95	0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1545		1770	1685		1770	3472		1770	3474	
Flt Permitted	0.95	0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1545		1770	1685		1770	3472		1770	3474	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	120	9	93	38	8	14	84	445	64	21	1592	223
RTOR Reduction (vph)	0	0	0	0	14	0	0	6	0	0	7	0
Lane Group Flow (vph)	108	114	0	38	8	0	84	503	0	21	1808	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	19.8	19.8		4.0	4.0		7.7	76.6		2.1	71.0	
Effective Green, g (s)	19.8	19.8		4.0	4.0		7.7	76.6		2.1	71.0	
Actuated g/C Ratio	0.16	0.16		0.03	0.03		0.06	0.63		0.02	0.58	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	274	251		58	55		112	2190		30	2031	
v/s Ratio Prot	0.06	c0.07		c0.02	0.01		c0.05	0.14		0.01	c0.52	
v/s Ratio Perm												
v/c Ratio	0.39	0.45		0.66	0.15		0.75	0.23		0.70	0.89	
Uniform Delay, d1	45.4	45.9		58.0	57.1		55.9	9.7		59.3	21.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.9	1.3		23.6	1.3		24.2	0.1		52.7	5.4	
Delay (s)	46.4	47.2		81.6	58.4		80.1	9.7		112.1	27.2	
Level of Service	D	D		F	E		F	A		F	C	
Approach Delay (s)		46.8			73.1			19.7			28.2	
Approach LOS		D			E			B			C	
Intersection Summary												
HCM 2000 Control Delay	28.8			HCM 2000 Level of Service				C				
HCM 2000 Volume to Capacity ratio	0.79											
Actuated Cycle Length (s)	121.4			Sum of lost time (s)				18.9				
Intersection Capacity Utilization	73.6%			ICU Level of Service				D				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 3 Mitigated
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	43	1709	130	60	874	135	101	93	65	179	82	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.94		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5031		1770	4983		1770	1748		1770	1794	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5031		1770	4983		1770	1748		1770	1794	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	46	1818	138	61	883	136	111	102	71	201	92	30
RTOR Reduction (vph)	0	5	0	0	11	0	0	14	0	0	6	0
Lane Group Flow (vph)	46	1951	0	61	1008	0	111	159	0	201	116	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	20.0	78.7		20.0	78.7		25.0	38.0		25.0	38.0	
Effective Green, g (s)	20.0	78.7		20.0	78.7		25.0	38.0		25.0	38.0	
Actuated g/C Ratio	0.11	0.44		0.11	0.44		0.14	0.21		0.14	0.21	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	2199		196	2178		245	369		245	378	
v/s Ratio Prot	0.03	c0.39		c0.03	0.20		0.06	c0.09		c0.11	0.06	
v/s Ratio Perm												
v/c Ratio	0.23	0.89		0.31	0.46		0.45	0.43		0.82	0.31	
Uniform Delay, d1	73.0	46.6		73.7	35.7		71.2	61.6		75.3	59.9	
Progression Factor	1.00	1.00		1.17	0.74		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	4.8		0.9	0.7		1.3	0.8		19.3	0.5	
Delay (s)	73.6	51.3		87.2	27.1		72.5	62.4		94.6	60.3	
Level of Service	E	D		F	C		E	E		F	E	
Approach Delay (s)		51.9			30.5			66.4			81.7	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay	49.3			HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio	0.70											
Actuated Cycle Length (s)	180.0			Sum of lost time (s)				18.3				
Intersection Capacity Utilization	111.6%			ICU Level of Service				H				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 3 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	1878	206	162	1367	84	133	42	132	159	46	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5010		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5010		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	30	1998	219	167	1409	87	145	46	143	215	62	28
RTOR Reduction (vph)	0	7	0	0	0	35	0	0	131	0	4	0
Lane Group Flow (vph)	30	2210	0	167	1409	52	0	191	12	0	301	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	85.7		20.0	90.1	90.1		15.0	15.0		40.0	
Effective Green, g (s)	16.0	85.7		20.0	90.1	90.1		15.0	15.0		40.0	
Actuated g/C Ratio	0.09	0.48		0.11	0.50	0.50		0.08	0.08		0.22	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2385		196	2545	792		149	131		749	
v/s Ratio Prot	0.02	c0.44		c0.09	c0.28			c0.11			c0.09	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.19	0.93		0.85	0.55	0.07		1.28	0.09		0.40	
Uniform Delay, d1	76.0	44.2		78.5	31.1	23.2		82.5	76.2		59.8	
Progression Factor	0.98	0.84		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	6.7		28.2	0.9	0.2		168.3	1.4		1.6	
Delay (s)	75.3	43.8		106.8	31.9	23.4		250.8	77.6		61.4	
Level of Service	E	D		F	C	C		F	E		E	
Approach Delay (s)		44.2			39.0			176.6			61.4	
Approach LOS		D			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		53.2			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		95.4%			ICU Level of Service				F			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Near-Term (2 CVN) with Alternative 3 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	196	1946	28	340	1684	576	68	184	553	610	248	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	206	2048	29	366	1811	619	72	196	588	663	270	257
RTOR Reduction (vph)	0	1	0	0	0	86	0	25	154	0	2	134
Lane Group Flow (vph)	206	2076	0	366	1811	533	72	383	222	663	294	97
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	10.0	49.7		19.6	59.3	59.3	10.8	38.4	38.4	23.8	51.4	51.4
Effective Green, g (s)	10.0	49.7		19.6	59.3	59.3	10.8	38.4	38.4	23.8	51.4	51.4
Actuated g/C Ratio	0.07	0.32		0.13	0.39	0.39	0.07	0.25	0.25	0.16	0.34	0.34
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	223	1644		438	1965	611	124	408	376	532	585	503
v/s Ratio Prot	0.06	c0.41		c0.11	c0.36		0.04	c0.23		c0.19	0.17	
v/s Ratio Perm						0.34			0.15			0.06
v/c Ratio	0.92	1.26		0.84	0.92	0.87	0.58	0.94	0.59	1.25	0.50	0.19
Uniform Delay, d1	71.3	51.9		65.3	44.8	43.6	69.1	56.3	50.6	64.8	40.8	36.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	39.6	123.4		12.9	7.7	13.0	6.8	29.0	2.4	125.9	0.7	0.2
Delay (s)	110.9	175.2		78.3	52.5	56.6	75.9	85.3	52.9	190.7	41.5	36.5
Level of Service	F	F		E	D	E	E	F	D	F	D	D
Approach Delay (s)		169.4			56.8			70.3			123.6	
Approach LOS		F			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		105.7			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.11										
Actuated Cycle Length (s)		153.4			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		104.5%			ICU Level of Service				G			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Mitigated Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	1	586	81	0	0	0	0	199	216	453	1418	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3245	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3245	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	637	88	0	0	0	0	231	235	492	1477	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	22	48	0	0	0
Lane Group Flow (vph)	0	638	59	0	0	0	0	301	95	492	1477	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4					2				
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1172	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.42	
v/s Ratio Perm		0.13	0.04						0.07			
v/c Ratio		0.36	0.11					0.26	0.18	0.70	0.72	
Uniform Delay, d1		41.5	37.7					38.6	37.5	63.3	25.6	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.2	
Delay (s)		41.6	37.8					38.7	37.6	66.3	26.8	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.4			36.7	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay			38.0									
HCM 2000 Volume to Capacity ratio			0.59									
Actuated Cycle Length (s)			171.6							14.4		
Intersection Capacity Utilization			201.0%									
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Mitigated Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑	↑		↑↑
Volume (vph)	44	3	1341	387	0	351
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frbp, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1753		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1753		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	59	4	1412	407	0	548
RTOR Reduction (vph)	4	0	0	123	0	0
Lane Group Flow (vph)	59	0	1412	284	0	548
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		29.7	29.7		29.7
Effective Green, g (s)	3.0		29.7	29.7		29.7
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	123		2467	1059		2467
v/s Ratio Prot	c0.03		c0.40			0.15
v/s Ratio Perm				0.19		
v/c Ratio	0.48		0.57	0.27		0.22
Uniform Delay, d1	19.1		3.3	2.4		2.3
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	3.0		0.3	0.1		0.0
Delay (s)	22.0		3.6	2.5		2.4
Level of Service	C		A	A		A
Approach Delay (s)	22.0		3.3			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.6			
HCM 2000 Volume to Capacity ratio			0.56			
Actuated Cycle Length (s)			42.6			9.9
Intersection Capacity Utilization			49.5%			A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Mitigated Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰		↰	↰	
Volume (vph)	8	216	19	0	1382	18	36	24	2	21	43	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99			1.00		1.00	0.99		1.00	0.92	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5025			5075		1770	1845		1770	1708	
Flt Permitted	0.95	1.00			1.00		0.68	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5025			5075		1260	1845		248	1708	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	9	243	21	0	1519	20	43	29	2	27	56	70
RTOR Reduction (vph)	0	6	0	0	1	0	0	2	0	0	25	0
Lane Group Flow (vph)	9	258	0	0	1538	0	43	29	0	27	101	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1901			2061		245	358		41	284	
v/s Ratio Prot	c0.01	0.05			c0.30			0.02			0.06	
v/s Ratio Perm							c0.03			c0.11		
v/c Ratio	0.05	0.14			0.75		0.18	0.08		0.66	0.36	
Uniform Delay, d1	71.5	36.7			45.6		60.5	59.4		70.2	66.4	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1			2.3		0.3	0.1		32.2	0.8	
Delay (s)	71.6	36.8			47.9		60.8	59.4		102.4	67.2	
Level of Service	E	D			D		E	E		F	E	
Approach Delay (s)		38.0			47.9			60.2			73.4	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		48.9			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.51										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		65.5%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave







Mitigated Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰			↰	↰		↰↰		↰	↰	
Volume (vph)	15	234	0	0	129	646	0	0	0	108	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00				1.00	1.00	
Flt		1.00			1.00	0.85				1.00	0.85	
Flt Protected		1.00			1.00	1.00				0.95	1.00	
Satd. Flow (prot)		1857			1863	1583				1770	1583	
Flt Permitted		0.98			1.00	1.00				0.76	1.00	
Satd. Flow (perm)		1828			1863	1583				1410	1583	
Peak-hour factor, PHF	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Adj. Flow (vph)	18	279	0	0	139	695	0	0	0	119	0	7
RTOR Reduction (vph)	0	0	0	0	0	401	0	0	0	0	5	0
Lane Group Flow (vph)	0	297	0	0	139	294	0	0	0	119	2	0
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)		12.9			12.9	12.9				9.6	9.6	
Effective Green, g (s)		12.9			12.9	12.9				9.6	9.6	
Actuated g/C Ratio		0.42			0.42	0.42				0.31	0.31	
Clearance Time (s)		4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)		773			787	669				443	498	
v/s Ratio Prot					0.07						0.00	
v/s Ratio Perm		0.16				c0.19				c0.08		
v/c Ratio		0.38			0.18	0.44				0.27	0.00	
Uniform Delay, d1		6.1			5.5	6.2				7.8	7.2	
Progression Factor		1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2		0.3			0.1	0.5				0.3	0.0	
Delay (s)		6.4			5.6	6.7				8.2	7.2	
Level of Service		A			A	A				A	A	
Approach Delay (s)		6.4			6.5			0.0			8.1	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay		6.6			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.37										
Actuated Cycle Length (s)		30.5			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		59.8%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												







NBC Coastal Campus
22: 3rd St & Palm Ave

Mitigated Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	333	5	27	751	25	12	15	127	12	11	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.89			0.95	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.98	
Satd. Flow (prot)	1770	1858		1770	1854			1650			1736	
Flt Permitted	0.20	1.00		0.51	1.00			0.98			0.90	
Satd. Flow (perm)	381	1858		959	1854			1617			1590	
Peak-hour factor, PHF	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Adj. Flow (vph)	9	387	6	29	808	27	15	19	157	15	14	19
RTOR Reduction (vph)	0	1	0	0	2	0	0	124	0	0	15	0
Lane Group Flow (vph)	9	392	0	29	833	0	0	67	0	0	33	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	25.4	25.4		25.4	25.4			8.9			8.9	
Effective Green, g (s)	25.4	25.4		25.4	25.4			8.9			8.9	
Actuated g/C Ratio	0.60	0.60		0.60	0.60			0.21			0.21	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	228	1115		575	1113			340			334	
v/s Ratio Prot		0.21			c0.45							
v/s Ratio Perm	0.02			0.03				c0.04			0.02	
v/c Ratio	0.04	0.35		0.05	0.75			0.20			0.10	
Uniform Delay, d1	3.5	4.3		3.5	6.1			13.8			13.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	0.2		0.0	2.8			0.3			0.1	
Delay (s)	3.5	4.5		3.5	8.9			14.0			13.6	
Level of Service	A	A		A	A			B			B	
Approach Delay (s)		4.5			8.8			14.0			13.6	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay		8.4			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		42.3			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		57.4%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Mitigated Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	238	473	739	154	0	224
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	301	599	901	188	0	315
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked	0.84				0.84	0.84
vC, conflicting volume	1089				2196	545
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	716				2039	65
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	59				100	62
cM capacity (veh/h)	737				24	825
Direction, Lane #						
Volume Total	301	599	601	488	315	
Volume Left	301	0	0	0	0	
Volume Right	0	0	0	188	315	
cSH	737	1700	1700	1700	825	
Volume to Capacity	0.41	0.35	0.35	0.29	0.38	
Queue Length 95th (ft)	50	0	0	0	45	
Control Delay (s)	13.2	0.0	0.0	0.0	12.0	
Lane LOS	B				B	
Approach Delay (s)	4.4		0.0		12.0	
Approach LOS					B	
Intersection Summary						
Average Delay			3.4			
Intersection Capacity Utilization			45.9%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Mitigated Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	22	708	40	25	1928	45	170	38	53	93	47	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00		1.00	0.91		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5044		1770	5068		1770	1700		1770	1762	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5044		1770	5068		1770	1700		1770	1762	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	26	843	48	27	2119	49	205	46	64	113	57	32
RTOR Reduction (vph)	0	3	0	0	1	0	0	27	0	0	11	0
Lane Group Flow (vph)	26	888	0	27	2167	0	205	83	0	113	78	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	15.0	88.1		12.0	85.1		23.6	44.8		16.8	38.0	
Effective Green, g (s)	15.0	88.1		12.0	85.1		23.6	44.8		16.8	38.0	
Actuated g/C Ratio	0.08	0.49		0.07	0.47		0.13	0.25		0.09	0.21	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	147	2468		118	2396		232	423		165	371	
v/s Ratio Prot	0.01	c0.18		c0.02	c0.43		c0.12	0.05		0.06	c0.04	
v/s Ratio Perm												
v/c Ratio	0.18	0.36		0.23	0.90		0.88	0.20		0.68	0.21	
Uniform Delay, d1	76.8	28.5		79.6	43.7		76.9	53.4		79.0	58.6	
Progression Factor	1.00	1.00		1.16	0.81		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.4		0.8	5.0		30.2	0.2		11.2	0.3	
Delay (s)	77.3	28.9		92.9	40.4		107.0	53.6		90.2	58.9	
Level of Service	E	C		F	D		F	D		F	E	
Approach Delay (s)		30.3			41.0			88.4			76.4	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		44.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		75.3%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Mitigated Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	4	1018	66	100	1956	54	151	20	94	174	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1144	74	120	2357	65	170	22	106	232	49	21
RTOR Reduction (vph)	0	4	0	0	0	27	0	0	95	0	3	0
Lane Group Flow (vph)	4	1214	0	120	2357	38	0	192	11	0	299	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Effective Green, g (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Actuated g/C Ratio	0.02	0.48		0.11	0.57	0.57		0.10	0.10		0.20	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2427		196	2901	903		184	163		682	
v/s Ratio Prot	0.00	0.24		c0.07	c0.46			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.10	0.50		0.61	0.81	0.04		1.04	0.07		0.44	
Uniform Delay, d1	86.2	31.9		76.3	30.9	17.0		80.7	72.9		62.8	
Progression Factor	1.13	0.68		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.7		5.6	2.6	0.1		78.3	0.2		0.5	
Delay (s)	98.2	22.4		81.9	33.5	17.1		159.0	73.0		63.3	
Level of Service	F	C		F	C	B		F	E		E	
Approach Delay (s)		22.6			35.4			128.4			63.3	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		40.1			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		91.7%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Mitigated Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↔↔↔	↔	↔↔	↔↔↔	↔	↔↔	↔	↔	↔↔	↔	↔
Volume (vph)	95	1307	31	254	2025	223	78	75	800	244	96	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		3433	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		3433	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	110	1520	36	270	2154	237	87	83	889	290	114	95
RTOR Reduction (vph)	0	2	0	0	0	59	0	137	166	0	2	61
Lane Group Flow (vph)	110	1554	0	270	2154	178	87	355	314	290	122	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	5.0	46.8		15.2	57.0	57.0	9.3	34.5	34.5	11.3	36.5	36.5
Effective Green, g (s)	5.0	46.8		15.2	57.0	57.0	9.3	34.5	34.5	11.3	36.5	36.5
Actuated g/C Ratio	0.04	0.36		0.12	0.44	0.44	0.07	0.27	0.27	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	132	1828		402	2234	695	126	412	400	299	491	423
v/s Ratio Prot	0.03	0.31		c0.08	c0.42		0.05	c0.23		c0.08	0.07	
v/s Ratio Perm					0.11			0.21			0.02	
v/c Ratio	0.83	0.85		0.67	0.96	0.26	0.69	0.86	0.79	0.97	0.25	0.06
Uniform Delay, d1	61.9	38.2		54.9	35.4	23.0	58.8	45.3	44.2	59.0	36.0	34.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	34.1	4.0		4.4	11.7	0.2	15.1	16.6	9.7	43.3	0.3	0.1
Delay (s)	96.1	42.2		59.2	47.1	23.2	73.9	61.9	53.9	102.3	36.3	34.1
Level of Service	F	D		E	D	C	E	E	D	F	D	C
Approach Delay (s)		45.8			46.2			59.3			74.3	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		50.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		129.7			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		88.9%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Mitigated Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔↔	↔					↔↔	↔	↔↔	↔	↔
Volume (vph)	7	2124	111	0	0	0	0	355	418	762	1103	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frbp, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.95	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3151	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3151	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2334	122	0	0	0	0	413	486	794	1149	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2342	93	0	0	0	0	616	248	794	1149	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					956	409	865	2022	
v/s Ratio Prot		c0.46						c0.20		c0.23	0.32	
v/s Ratio Perm			0.06						0.18			
v/c Ratio		1.27	0.16					0.64	0.61	0.92	0.57	
Uniform Delay, d1		55.8	37.8					52.8	52.0	63.7	23.8	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		126.9	0.1					1.5	2.5	14.3	0.4	
Delay (s)		182.7	37.9					54.3	54.5	78.0	24.2	
Level of Service		F	D					D	D	E	C	
Approach Delay (s)		175.5		0.0				54.4			46.2	
Approach LOS		F		A				D			D	
Intersection Summary												
HCM 2000 Control Delay		107.6			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.97										
Actuated Cycle Length (s)		175.0			Sum of lost time (s)			14.4				
Intersection Capacity Utilization		135.8%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus Mitigated Near Term (2 CVN) with Alternative 3 No Hooper
10: SR-75 (Silver Strand Blvd) & Tulagi Rd Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	296	4	750	53	0	1614
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1771		3539	1467		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1771		3539	1467		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	375	5	833	59	0	1813
RTOR Reduction (vph)	1	0	0	31	0	0
Lane Group Flow (vph)	379	0	833	28	0	1813
Confl. Peds. (#/hr)	20	20			20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		55.1	55.1		55.1
Effective Green, g (s)	50.0		55.1	55.1		55.1
Actuated g/C Ratio	0.43		0.48	0.48		0.48
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	770		1695	702		1695
v/s Ratio Prot	c0.21		0.24			c0.51
v/s Ratio Perm				0.02		
v/c Ratio	0.49		0.49	0.04		1.07
Uniform Delay, d1	23.4		20.4	15.9		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.5		0.2	0.0		43.2
Delay (s)	23.9		20.6	15.9		73.1
Level of Service	C		C	B		E
Approach Delay (s)	23.9		20.3			73.1
Approach LOS	C		C			E
Intersection Summary						
HCM 2000 Control Delay			51.8		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.79			
Actuated Cycle Length (s)			115.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			94.5%		ICU Level of Service	F
Analysis Period (min)			15			
c Critical Lane Group						













NBC Coastal Campus Mitigated Near Term (2 CVN) with Alternative 3 No Hooper
19: 7th St & SR-75 (Silver Strand Blvd) Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↗	↖	↗	↗	↖	↖	↖	↖	↖	↖
Volume (vph)	59	1042	57	0	377	36	18	41	5	25	27	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99			0.99		1.00	0.98		1.00	0.93	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5046			5019		1770	1833		1770	1737	
Flt Permitted	0.95	1.00			1.00		0.72	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5046			5019		1340	1833		248	1737	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	67	1184	65	0	401	38	26	59	7	29	32	26
RTOR Reduction (vph)	0	3	0	0	6	0	0	2	0	0	17	0
Lane Group Flow (vph)	67	1246	0	0	433	0	26	64	0	29	41	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1909			2038		260	356		41	289	
v/s Ratio Prot	c0.04	c0.25			c0.09			c0.03			0.02	
v/s Ratio Perm							0.02			c0.12		
v/c Ratio	0.34	0.65			0.21		0.10	0.18		0.71	0.14	
Uniform Delay, d1	73.9	46.2			34.7		59.6	60.5		70.9	64.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.0	1.8			0.2		0.2	0.2		43.2	0.2	
Delay (s)	75.0	47.9			35.0		59.7	60.7		114.0	64.3	
Level of Service	E	D			C		E	E		F	E	
Approach Delay (s)		49.3			35.0			60.5			80.8	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		48.0								HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio		0.50										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				22.3			
Intersection Capacity Utilization		67.8%			ICU Level of Service				C			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

Mitigated Near Term (2 CVN) with Alternative 3 No Hooper


















Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	214	0	0	308	175	0	0	0	640	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00				1.00	1.00	
Frt		1.00			1.00	0.85				1.00	0.85	
Flt Protected		1.00			1.00	1.00				0.95	1.00	
Satd. Flow (prot)		1861			1863	1583				1770	1583	
Flt Permitted		0.99			1.00	1.00				0.76	1.00	
Satd. Flow (perm)		1846			1863	1583				1410	1583	
Peak-hour factor, PHF	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.92	0.66	0.66
Adj. Flow (vph)	6	249	0	0	350	199	0	0	0	696	0	21
RTOR Reduction (vph)	0	0	0	0	0	141	0	0	0	0	9	0
Lane Group Flow (vph)	0	255	0	0	350	58	0	0	0	696	12	0
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		4			8		2				6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)		20.3			20.3	20.3				41.2	41.2	
Effective Green, g (s)		20.3			20.3	20.3				41.2	41.2	
Actuated g/C Ratio		0.29			0.29	0.29				0.59	0.59	
Clearance Time (s)		4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)		539			544	462				835	938	
v/s Ratio Prot					c0.19						0.01	
v/s Ratio Perm		0.14				0.04				c0.49		
v/c Ratio		0.47			0.64	0.13				0.83	0.01	
Uniform Delay, d1		20.2			21.4	18.1				11.4	5.8	
Progression Factor		1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2		0.7			2.6	0.1				7.2	0.0	
Delay (s)		20.9			24.1	18.2				18.6	5.8	
Level of Service		C			C	B				B	A	
Approach Delay (s)		20.9			21.9		0.0				18.2	
Approach LOS		C			C		A				B	
Intersection Summary												
HCM 2000 Control Delay			20.0		HCM 2000 Level of Service					B		
HCM 2000 Volume to Capacity ratio			0.77									
Actuated Cycle Length (s)			69.5		Sum of lost time (s)					8.0		
Intersection Capacity Utilization			58.3%		ICU Level of Service					B		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
22: 3rd St & Palm Ave

Mitigated Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	831	13	86	456	25	15	39	69	29	34	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.92			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1770	1858		1770	1848			1711			1784	
Flt Permitted	0.41	1.00		0.11	1.00			0.96			0.73	
Satd. Flow (perm)	759	1858		202	1848			1650			1320	
Peak-hour factor, PHF	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Adj. Flow (vph)	10	1065	17	97	512	28	26	68	121	63	74	30
RTOR Reduction (vph)	0	1	0	0	2	0	0	43	0	0	7	0
Lane Group Flow (vph)	10	1081	0	97	538	0	0	172	0	0	160	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	52.6	52.6		52.6	52.6			16.0			16.0	
Effective Green, g (s)	52.6	52.6		52.6	52.6			16.0			16.0	
Actuated g/C Ratio	0.69	0.69		0.69	0.69			0.21			0.21	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	521	1275		138	1268			344			275	
v/s Ratio Prot		c0.58			0.29							
v/s Ratio Perm	0.01			0.48				0.10			c0.12	
v/c Ratio	0.02	0.85		0.70	0.42			0.50			0.58	
Uniform Delay, d1	3.8	9.0		7.3	5.3			26.8			27.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	5.4		15.0	0.2			1.1			3.1	
Delay (s)	3.8	14.4		22.3	5.5			27.9			30.4	
Level of Service	A	B		C	A			C			C	
Approach Delay (s)		14.3			8.1			27.9			30.4	
Approach LOS		B			A			C			C	
Intersection Summary												
HCM 2000 Control Delay			15.1		HCM 2000 Level of Service						B	
HCM 2000 Volume to Capacity ratio			0.79									
Actuated Cycle Length (s)			76.6		Sum of lost time (s)						8.0	
Intersection Capacity Utilization			69.2%		ICU Level of Service						C	
Analysis Period (min)			15									
c Critical Lane Group												



























NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Mitigated Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱	↕	↕	↰	↱
Volume (veh/h)	208	825	558	40	0	236
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	214	851	649	47	0	278
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	695				1951	348
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	695				1951	348
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	76				100	57
cM capacity (veh/h)	896				43	648
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	214	851	433	263	278	
Volume Left	214	0	0	0	0	
Volume Right	0	0	0	47	278	
cSH	896	1700	1700	1700	648	
Volume to Capacity	0.24	0.50	0.25	0.15	0.43	
Queue Length 95th (ft)	23	0	0	0	54	
Control Delay (s)	10.3	0.0	0.0	0.0	14.6	
Lane LOS	B				B	
Approach Delay (s)	2.1		0.0		14.6	
Approach LOS					B	
Intersection Summary						
Average Delay			3.1			
Intersection Capacity Utilization			46.8%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Mitigated Near Term (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  						  	
Volume (vph)	43	1763	130	60	887	135	101	93	65	179	82	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.94		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5033		1770	4985		1770	1748		1770	1794	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5033		1770	4985		1770	1748		1770	1794	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	46	1876	138	61	896	136	111	102	71	201	92	30
RTOR Reduction (vph)	0	4	0	0	11	0	0	14	0	0	6	0
Lane Group Flow (vph)	46	2010	0	61	1021	0	111	159	0	201	116	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	20.0	80.4		20.0	80.4		16.6	38.0		23.3	44.7	
Effective Green, g (s)	20.0	80.4		20.0	80.4		16.6	38.0		23.3	44.7	
Actuated g/C Ratio	0.11	0.45		0.11	0.45		0.09	0.21		0.13	0.25	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	2248		196	2226		163	369		229	445	
v/s Ratio Prot	0.03	c0.40		c0.03	0.20		0.06	c0.09		c0.11	0.06	
v/s Ratio Perm												
v/c Ratio	0.23	0.89		0.31	0.46		0.68	0.43		0.88	0.26	
Uniform Delay, d1	73.0	45.9		73.7	34.7		79.1	61.6		77.0	54.4	
Progression Factor	1.00	1.00		1.16	0.75		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	5.0		0.9	0.6		11.1	0.8		29.2	0.3	
Delay (s)	73.6	50.9		86.6	26.7		90.2	62.4		106.1	54.7	
Level of Service	E	D		F	C		F	E		F	D	
Approach Delay (s)		51.4			30.1			73.3			86.7	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay			49.9			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.71									
Actuated Cycle Length (s)			180.0			Sum of lost time (s)				18.3		
Intersection Capacity Utilization			100.7%			ICU Level of Service				G		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Mitigated Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰↰	↰
Volume (vph)	28	1932	206	162	1381	84	133	42	132	159	46	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5012		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5012		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	30	2055	219	167	1424	87	145	46	143	215	62	28
RTOR Reduction (vph)	0	7	0	0	0	35	0	0	131	0	4	0
Lane Group Flow (vph)	30	2267	0	167	1424	52	0	191	12	0	301	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	87.7		18.0	90.1	90.1		15.0	15.0		40.0	
Effective Green, g (s)	16.0	87.7		18.0	90.1	90.1		15.0	15.0		40.0	
Actuated g/C Ratio	0.09	0.49		0.10	0.50	0.50		0.08	0.08		0.22	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2441		177	2545	792		149	131		749	
v/s Ratio Prot	0.02	c0.45		c0.09	0.28			c0.11			c0.09	
v/s Ratio Perm					0.03			0.01				
v/c Ratio	0.19	0.93		0.94	0.56	0.07		1.28	0.09		0.40	
Uniform Delay, d1	76.0	43.2		80.5	31.2	23.2		82.5	76.2		59.8	
Progression Factor	0.98	0.84		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	6.6		51.0	0.9	0.2		168.3	0.3		1.6	
Delay (s)	74.9	42.9		131.5	32.1	23.4		250.8	76.5		61.4	
Level of Service	E	D		F	C	C		F	E		E	
Approach Delay (s)		43.3			41.5			176.2			61.4	
Approach LOS		D			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		53.5			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		94.7%			ICU Level of Service				F			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)












Mitigated Near Term (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰↰	↰
Volume (vph)	196	2000	28	340	1698	576	68	184	553	610	248	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	206	2105	29	366	1826	619	72	196	588	663	270	257
RTOR Reduction (vph)	0	1	0	0	0	85	0	26	155	0	2	136
Lane Group Flow (vph)	206	2133	0	366	1826	534	72	382	221	663	294	95
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	10.2	49.7		19.6	59.1	59.1	10.8	38.3	38.3	23.8	51.3	51.3
Effective Green, g (s)	10.2	49.7		19.6	59.1	59.1	10.8	38.3	38.3	23.8	51.3	51.3
Actuated g/C Ratio	0.07	0.32		0.13	0.39	0.39	0.07	0.25	0.25	0.16	0.33	0.33
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	228	1645		438	1960	610	124	407	375	532	584	503
v/s Ratio Prot	0.06	c0.42		c0.11	c0.36		0.04	c0.23		c0.19	0.17	
v/s Ratio Perm					0.34			0.15				0.06
v/c Ratio	0.90	1.30		0.84	0.93	0.87	0.58	0.94	0.59	1.25	0.50	0.19
Uniform Delay, d1	71.1	51.8		65.3	45.2	43.7	69.1	56.4	50.6	64.8	40.8	36.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	34.6	138.2		12.9	8.7	13.2	6.8	29.4	2.5	125.9	0.7	0.2
Delay (s)	105.6	190.0		78.2	53.8	56.9	75.8	85.8	53.1	190.6	41.5	36.4
Level of Service	F	F		E	D	E	E	F	D	F	D	D
Approach Delay (s)		182.6			57.7			70.6			123.6	
Approach LOS		F			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		110.7			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.12										
Actuated Cycle Length (s)		153.3			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		105.6%			ICU Level of Service				G			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
1: Glorietta Blvd & Fourth St






Horizon Year (1 CVN)
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1313	35	0	3287	535	0	0	479	0	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1582	42	0	3573	582	0	0	599	0	0	13
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4174			1644			2847	5797	588	4431	5528	1522
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4174			1644			2847	5797	588	4431	5528	1522
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	55	100	100	87
cM capacity (veh/h)	37			383			6	0	1337	0	0	104
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	633	633	359	1429	1429	1296	599	13				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	42	0	0	582	599	13				
cSH	1700	1700	1700	1700	1700	1700	1337	104				
Volume to Capacity	0.37	0.37	0.21	0.84	0.84	0.76	0.45	0.13				
Queue Length 95th (ft)	0	0	0	0	0	0	59	11				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.9	44.7				
Lane LOS							A	E				
Approach Delay (s)	0.0			0.0			9.9	44.7				
Approach LOS							A	E				
Intersection Summary												
Average Delay				1.0								
Intersection Capacity Utilization				90.6%	ICU Level of Service			E				
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Horizon Year (1 CVN)
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑↑			↑↑↑↑		↑	
Volume (veh/h)	1174	204	0	3186	0	234	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1334	232	0	3540	0	254	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1586	2670		601	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1586	2670		601	
tC, single (s)			4.1	6.8		6.9	
tC, 2 stage (s)							
tF (s)			2.2	3.5		3.3	
p0 queue free %			100	100		41	
cM capacity (veh/h)			403	17		429	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	534	534	499	1180	1180	1180	254
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	232	0	0	0	254
cSH	1700	1700	1700	1700	1700	1700	429
Volume to Capacity	0.31	0.31	0.29	0.69	0.69	0.69	0.59
Queue Length 95th (ft)	0	0	0	0	0	0	93
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	24.9
Lane LOS							C
Approach Delay (s)	0.0			0.0			24.9
Approach LOS							C
Intersection Summary							
Average Delay				1.2			
Intersection Capacity Utilization				76.4%	ICU Level of Service		D
Analysis Period (min)				15			

NBC Coastal Campus
3: Orange Ave & Third St

Horizon Year (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↩↩↩	↩↩↩		↩	↩↩			↩↩	
Volume (vph)	0	0	0	1562	1545	251	41	94	0	0	260	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4641		1770	3539			3522	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4641		1770	3539			3522	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1680	1661	270	55	127	0	0	299	7
RTOR Reduction (vph)	0	0	0	0	6	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	890	2715	0	55	127	0	0	305	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.5	131.5		15.5	41.9			21.2	
Effective Green, g (s)				131.5	131.5		15.5	41.9			21.2	
Actuated g/C Ratio				0.71	0.71		0.08	0.23			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1081	3298		148	801			403	
v/s Ratio Prot				0.58	c0.58		c0.03	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.82	0.82		0.37	0.16			0.76	
Uniform Delay, d1				18.7	18.6		80.1	57.4			79.4	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				5.2	1.8		1.6	0.1			7.9	
Delay (s)				23.8	20.4		81.7	57.5			87.3	
Level of Service				C	C		F	E			F	
Approach Delay (s)		0.0			21.3			64.8			87.3	
Approach LOS		A			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		28.1		HCM 2000 Level of Service					C			
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		185.0		Sum of lost time (s)					16.8			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (1 CVN)
Timing Plan: AM PEAK







Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↩↩↩	↩					↩↩	↩	↩↩	↩↩	↩↩
Volume (vph)	0	503	52	0	0	0	0	127	217	437	1444	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.93	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3167	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3167	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	0	547	57	0	0	0	0	148	236	475	1504	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	66	66	0	0	0
Lane Group Flow (vph)	0	547	28	0	0	0	0	198	54	475	1504	0
Turn Type	NA	Perm					NA	Perm	Prot	NA		
Protected Phases	4						2			1	6	
Permitted Phases		4						2				
Actuated Green, G (s)	60.0	60.0					62.2	62.2	35.0	100.0		
Effective Green, g (s)	60.0	60.0					62.2	62.2	35.0	100.0		
Actuated g/C Ratio	0.35	0.35					0.36	0.36	0.20	0.58		
Clearance Time (s)	5.6	5.6					4.6	4.6	4.2	6.0		
Vehicle Extension (s)	3.0	3.0					3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)	1777	553					1147	522	700	2062		
v/s Ratio Prot	c0.11						0.06		0.14	c0.42		
v/s Ratio Perm		0.02						0.04				
v/c Ratio	0.31	0.05					0.17	0.10	0.68	0.73		
Uniform Delay, d1	40.7	36.9					37.2	36.2	63.1	26.0		
Progression Factor	1.00	1.00					1.00	1.00	1.00	1.00		
Incremental Delay, d2	0.1	0.0					0.1	0.1	2.6	1.3		
Delay (s)	40.8	37.0					37.3	36.3	65.7	27.3		
Level of Service	D	D					D	D	E	C		
Approach Delay (s)	40.4			0.0			37.0			36.5		
Approach LOS	D			A			D			D		
Intersection Summary												
HCM 2000 Control Delay		37.4		HCM 2000 Level of Service					D			
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)					14.4			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Horizon Year (1 CVN)

Timing Plan: AM PEAK








Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	253	8	1294	704	0	1286
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3309			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3309			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	294	9	1391	757	0	1354
RTOR Reduction (vph)	1	0	59	0	0	0
Lane Group Flow (vph)	302	0	2089	0	0	1354
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	19.9		44.7			44.7
Effective Green, g (s)	19.9		44.7			44.7
Actuated g/C Ratio	0.27		0.61			0.61
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	429		2006			2039
v/s Ratio Prot	c0.19		c0.63			0.40
v/s Ratio Perm						
v/c Ratio	0.70		1.04			0.66
Uniform Delay, d1	24.2		14.5			9.6
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	5.2		31.8			0.8
Delay (s)	29.4		46.3			10.4
Level of Service	C		D			B
Approach Delay (s)	29.4		46.3			10.4
Approach LOS	C		D			B
Intersection Summary						
HCM 2000 Control Delay			32.2		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.98			
Actuated Cycle Length (s)			73.7		Sum of lost time (s)	12.1
Intersection Capacity Utilization			85.8%		ICU Level of Service	E
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Horizon Year (1 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	3	12	9	0	7	23	1544	30	46	1451	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1692	1583		1705		1770	3529		1770	3524	
Frt Permitted	0.74	0.77	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1303	1358	1583		1508		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	64	3	14	18	0	14	27	1838	36	50	1577	47
RTOR Reduction (vph)	0	0	12	0	27	0	0	1	0	0	1	0
Lane Group Flow (vph)	33	34	2	0	5	0	27	1873	0	50	1623	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	16.2	16.2	16.2		16.2		3.0	69.9		4.1	71.0	
Effective Green, g (s)	16.2	16.2	16.2		16.2		3.0	69.9		4.1	71.0	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.67		0.04	0.68	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	210	245		234		50	2365		69	2398	
v/s Ratio Prot							0.02	c0.53		c0.03	0.46	
v/s Ratio Perm	c0.03	0.03	0.00		0.00							
v/c Ratio	0.16	0.16	0.01		0.02		0.54	0.79		0.72	0.68	
Uniform Delay, d1	38.2	38.2	37.3		37.3		50.0	12.1		49.5	9.9	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4	0.0		0.0		11.4	1.9		31.2	0.8	
Delay (s)	38.6	38.5	37.3		37.4		61.3	14.0		80.7	10.6	
Level of Service	D	D	D		D		E	B		F	B	
Approach Delay (s)		38.3			37.4			14.7			12.7	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			14.5		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.68									
Actuated Cycle Length (s)			104.3		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			61.9%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Horizon Year (1 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	27	0	1480	9	499	943	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	41	0	1626	10	509	962	0
RTOR Reduction (vph)	0	0	0	0	37	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	4	0	0	1626	5	509	962	0
Turn Type					NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.46		c0.29	0.27	
v/s Ratio Perm								0.00				
v/c Ratio					0.03			0.98	0.01	0.83	0.32	
Uniform Delay, d1					60.6			37.7	20.5	43.7	2.4	
Progression Factor					1.00			0.40	1.00	1.00	1.00	
Incremental Delay, d2					0.1			11.4	0.0	9.6	0.3	
Delay (s)					60.7			26.5	20.5	53.3	2.7	
Level of Service					E			C	C	D	A	
Approach Delay (s)		0.0			60.7			26.5			20.2	
Approach LOS		A			E			C			C	
Intersection Summary												
HCM 2000 Control Delay		24.0			HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio		0.86										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		87.4%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd











Horizon Year (1 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	59	17	2	76	151	160	1290	7	340	286	364
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.98	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3188	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3188	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	55	91	26	2	86	172	178	1433	8	391	329	418
RTOR Reduction (vph)	0	0	24	0	0	145	0	0	4	0	160	0
Lane Group Flow (vph)	55	91	2	0	88	27	178	1433	4	391	587	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1046	
v/s Ratio Prot	0.03	c0.05			c0.05		0.10	c0.40		c0.22	0.18	
v/s Ratio Perm			0.00			0.02			0.00			
v/c Ratio	0.45	0.71	0.02		0.30	0.11	0.32	0.91	0.01	1.15	0.56	
Uniform Delay, d1	64.9	66.1	62.9		53.9	52.3	38.3	37.5	22.3	58.5	40.1	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.91	
Incremental Delay, d2	2.6	17.0	0.1		0.6	0.2	0.3	9.3	0.0	94.2	2.1	
Delay (s)	67.5	83.0	63.0		54.4	52.5	38.7	46.8	22.4	150.4	38.6	
Level of Service	E	F	E		D	D	D	D	C	F	D	
Approach Delay (s)		75.0			53.1			45.8			77.0	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		59.1			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		90.2%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												











NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Horizon Year (1 CVN)
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	27	232	5	102	381	10
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	32	273	6	128	414	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked	0.98					
vC, conflicting volume	909	70			134	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	897	70			134	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	85	73			71	
cM capacity (veh/h)	217	993			1451	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	305	134	425			
Volume Left	32	0	414			
Volume Right	273	128	0			
cSH	1108	1700	1451			
Volume to Capacity	0.27	0.08	0.29			
Queue Length 95th (ft)	28	0	30			
Control Delay (s)	11.5	0.0	8.3			
Lane LOS	B		A			
Approach Delay (s)	11.5	0.0	8.3			
Approach LOS	B					
Intersection Summary						
Average Delay		8.1				
Intersection Capacity Utilization		38.3%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (1 CVN)
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	30	4	1470	478	0	257
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.98		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.98		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1729		3539	1519		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1729		3539	1519		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	40	5	1547	503	0	402
RTOR Reduction (vph)	5	0	0	135	0	0
Lane Group Flow (vph)	40	0	1547	368	0	402
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	2.0		32.5	32.5		32.5
Effective Green, g (s)	2.0		32.5	32.5		32.5
Actuated g/C Ratio	0.05		0.73	0.73		0.73
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	77		2590	1111		2590
v/s Ratio Prot	c0.02		c0.44			0.11
v/s Ratio Perm				0.24		
v/c Ratio	0.52		0.60	0.33		0.16
Uniform Delay, d1	20.7		2.8	2.1		1.8
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	6.3		0.4	0.2		0.0
Delay (s)	27.0		3.2	2.3		1.8
Level of Service	C		A	A		A
Approach Delay (s)	27.0		3.0			1.8
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.2		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.59				
Actuated Cycle Length (s)		44.4		Sum of lost time (s)	9.9	
Intersection Capacity Utilization		53.1%		ICU Level of Service	A	
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Horizon Year (1 CVN)

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖↗		↖	↖↗
Volume (veh/h)	0	18	2430	7	7	289
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	31	2613	8	10	425
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2850	1310			2620	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2850	1310			2620	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	79			94	
cM capacity (veh/h)	13	149			161	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	31	1742	878	10	212	212
Volume Left	0	0	0	10	0	0
Volume Right	31	0	8	0	0	0
cSH	149	1700	1700	161	1700	1700
Volume to Capacity	0.21	1.02	0.52	0.06	0.13	0.13
Queue Length 95th (ft)	19	0	0	5	0	0
Control Delay (s)	35.3	0.0	0.0	28.9	0.0	0.0
Lane LOS	E			D		
Approach Delay (s)	35.3	0.0		0.7		
Approach LOS	E					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		77.4%		ICU Level of Service	D	
Analysis Period (min)		15				

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

Horizon Year (1 CVN)

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖↗	↖	↖	↖↗
Volume (vph)	20	101	2329	14	44	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	25	125	2504	15	64	355
RTOR Reduction (vph)	0	2	0	1	0	0
Lane Group Flow (vph)	25	123	2504	14	64	355
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	16.4	26.5	68.2	68.2	5.0	82.0
Effective Green, g (s)	16.4	21.4	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.20	0.63	0.63	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	269	314	2241	1002	82	2694
v/s Ratio Prot	0.01	c0.08	c0.71		c0.04	0.10
v/s Ratio Perm				0.01		
v/c Ratio	0.09	0.39	1.12	0.01	0.78	0.13
Uniform Delay, d1	39.3	37.5	19.8	7.3	50.8	3.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.8	59.6	0.0	37.0	0.0
Delay (s)	39.4	38.3	79.3	7.3	87.8	3.4
Level of Service	D	D	E	A	F	A
Approach Delay (s)	38.5		78.9			16.3
Approach LOS	D		E			B
Intersection Summary						
HCM 2000 Control Delay		68.5		HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio		0.97				
Actuated Cycle Length (s)		107.7		Sum of lost time (s)	18.1	
Intersection Capacity Utilization		81.5%		ICU Level of Service	D	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Horizon Year (1 CVN)
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↖↗			↖↗
Volume (veh/h)	0	38	2303	30	0	263
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	61	2424	32	0	355
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2618	1228			2456	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2618	1228			2456	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	64			100	
cM capacity (veh/h)	20	170			187	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	61	1616	840	178	178	
Volume Left	0	0	0	0	0	
Volume Right	61	0	32	0	0	
cSH	170	1700	1700	1700	1700	
Volume to Capacity	0.36	0.95	0.49	0.10	0.10	
Queue Length 95th (ft)	38	0	0	0	0	
Control Delay (s)	37.7	0.0	0.0	0.0	0.0	
Lane LOS	E					
Approach Delay (s)	37.7	0.0		0.0		
Approach LOS	E					
Intersection Summary						
Average Delay		0.8				
Intersection Capacity Utilization		74.6%		ICU Level of Service	D	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Horizon Year (1 CVN)
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖↗	↖	↖	↖↗
Volume (vph)	12	8	2333	38	18	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	19	13	2430	40	22	291
RTOR Reduction (vph)	0	2	0	10	0	0
Lane Group Flow (vph)	19	11	2430	30	22	291
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.5	4.6	58.8	58.8	3.1	69.4
Effective Green, g (s)	1.5	4.6	58.8	58.8	3.1	69.4
Actuated g/C Ratio	0.02	0.06	0.76	0.76	0.04	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	34	93	2685	1201	70	3169
v/s Ratio Prot	c0.01	0.00	c0.69		c0.01	0.08
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.56	0.12	0.91	0.03	0.31	0.09
Uniform Delay, d1	37.7	34.5	7.2	2.3	36.2	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	18.4	0.6	4.8	0.0	2.6	0.0
Delay (s)	56.1	35.1	12.0	2.3	38.7	0.5
Level of Service	E	D	B	A	D	A
Approach Delay (s)	47.6		11.9			3.2
Approach LOS	D		B			A
Intersection Summary						
HCM 2000 Control Delay		11.3		HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio		0.87				
Actuated Cycle Length (s)		77.5		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		77.3%		ICU Level of Service	D	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (1 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	3	0	53	2	0	51	3	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	12	0	98	4	0	81	5	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	12	0	102	81	5					
Volume Left (vph)	0	0	98	0	0					
Volume Right (vph)	0	0	0	0	5					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.2	3.2					
Degree Utilization, x	0.01	0.00	0.12	0.09	0.00					
Capacity (veh/h)	822	1121	809	828	1121					
Control Delay (s)	7.3	6.2	7.9	7.6	6.2					
Approach Delay (s)	7.3		7.9	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.7							
Level of Service			A							
Intersection Capacity Utilization			19.7%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (1 CVN)

Timing Plan: AM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑			↑	↑	↑	↑	↑			
Volume (vph)	3	43	0	0	38	262	4	2106	59	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.72	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1346	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	4	57	0	0	53	364	4	2240	63	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	54	0	0	27	0	0	0
Lane Group Flow (vph)	4	57	0	0	53	310	4	2240	36	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	18.5	18.5			18.5	18.5	47.7	43.6	43.6			
Effective Green, g (s)	18.5	18.5			18.5	18.5	47.7	43.6	43.6			
Actuated g/C Ratio	0.25	0.25			0.25	0.25	0.63	0.58	0.58			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	329	456			456	387	1118	2043	914			
v/s Ratio Prot		0.03			0.03		0.00	c0.63				
v/s Ratio Perm	0.00					c0.20			0.02			
v/c Ratio	0.01	0.12			0.12	0.80	0.00	1.10	0.04			
Uniform Delay, d1	21.6	22.2			22.1	26.8	5.1	15.9	6.9			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	11.3	0.0	51.8	0.0			
Delay (s)	21.6	22.3			22.3	38.0	5.1	67.7	6.9			
Level of Service	C	C			C	D	A	E	A			
Approach Delay (s)		22.3				36.0		66.0			0.0	
Approach LOS		C				D		E			A	
Intersection Summary												
HCM 2000 Control Delay		60.5				HCM 2000 Level of Service		E				
HCM 2000 Volume to Capacity ratio		1.01										
Actuated Cycle Length (s)		75.5				Sum of lost time (s)		13.4				
Intersection Capacity Utilization		94.0%				ICU Level of Service		F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (1 CVN)

Timing Plan: AM PEAK






















							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	0	1874	0	200	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	0	1952	0	253	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1229	127	253		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1229	127	253		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	170	900	1309		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	976	976	169	84	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.57	0.57	0.10	0.05	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			55.1%		ICU Level of Service		B
Analysis Period (min)			15				

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (1 CVN)

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	456	2	45	50	8	21	30	1735		4	147	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	1.00		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1594		1770	1661		1770	3536		1770	3402	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1594		1770	1661		1770	3536		1770	3402	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	518	2	51	161	26	68	32	1826	12	6	213	74
RTOR Reduction (vph)	0	34	0	0	64	0	0	1	0	0	32	0
Lane Group Flow (vph)	518	19	0	161	30	0	32	1837	0	6	255	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	31.2	31.2		5.0	5.0		3.2	40.0		1.0	37.8	
Effective Green, g (s)	31.2	31.2		5.0	5.0		3.2	40.0		1.0	37.8	
Actuated g/C Ratio	0.32	0.32		0.05	0.05		0.03	0.42		0.01	0.39	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	574	517		92	86		58	1471		18	1338	
v/s Ratio Prot	c0.29	0.01		c0.09	0.02		c0.02	c0.52		0.00	0.07	
v/s Ratio Perm												
v/c Ratio	0.90	0.04		1.75	0.34		0.55	1.25		0.33	0.19	
Uniform Delay, d1	31.0	22.2		45.5	44.0		45.7	28.0		47.2	19.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	17.4	0.0		378.2	2.4		10.9	117.9		10.6	0.1	
Delay (s)	48.4	22.2		423.8	46.4		56.6	146.0		57.8	19.2	
Level of Service	D	C		F	D		E	F		E	B	
Approach Delay (s)		46.0			284.7			144.4			20.0	
Approach LOS		D			F			F			B	
Intersection Summary												
HCM 2000 Control Delay			125.4				HCM 2000 Level of Service			F		
HCM 2000 Volume to Capacity ratio			1.14									
Actuated Cycle Length (s)			96.1			Sum of lost time (s)		18.9				
Intersection Capacity Utilization			88.7%			ICU Level of Service		E				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (1 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	9	215	20	0	1570	20	44	27	1900	23	48	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Frt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5022			5076		1770	1846			1732	
Flt Permitted	0.95	1.00			1.00		0.65	1.00			0.14	
Satd. Flow (perm)	1770	5022			5076		1210	1846			250	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	
Adj. Flow (vph)	10	242	22	0	1725	22	52	32	2	30	62	78
RTOR Reduction (vph)	0	6	0	0	1	0	0	2	0	0	17	0
Lane Group Flow (vph)	10	258	0	0	1746	0	52	32	0	0	153	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1899			2061		235	358			41	
v/s Ratio Prot	c0.01	0.05			c0.34			0.02				
v/s Ratio Perm							c0.04				c0.61	
v/c Ratio	0.05	0.14			0.85		0.22	0.09			3.74	
Uniform Delay, d1	71.5	36.7			48.4		61.0	59.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			4.1		0.5	0.1			1290.2	
Delay (s)	71.6	36.8			52.5		61.5	59.6			1365.2	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		38.1			52.5			60.7			1365.2	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		149.1			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.15										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		69.2%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

Horizon Year (1 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	232	0	457	1580	10	0	0	0	0	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	283	0	486	1681	11	0	0	0	0	0	20
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	283	0	486	1692	0	0	0	0	0	0	8
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.06		0.14	c0.48							
v/s Ratio Perm												0.00
v/c Ratio		0.15		0.28	0.53							0.01
Uniform Delay, d1		36.8		26.2	1.4							34.9
Progression Factor		0.41		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.1	0.2							0.0
Delay (s)		15.2		26.3	1.6							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.2			7.1		0.0					35.0
Approach LOS		B			A		A					C
Intersection Summary												
HCM 2000 Control Delay		8.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.54										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		65.7%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

Horizon Year (1 CVN)

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	10	238	0	0	131	107	0	0	0	49	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	12	283	0	0	141	115	0	0	0	54	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	256			283			511	563	283	506	506	198
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	256			283			511	563	283	506	506	198
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1309			1279			467	431	756	474	465	843
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	295	256	0	59								
Volume Left	12	0	0	54								
Volume Right	0	115	0	5								
cSH	1309	1279	1700	494								
Volume to Capacity	0.01	0.00	0.00	0.12								
Queue Length 95th (ft)	1	0	0	10								
Control Delay (s)	0.4	0.0	0.0	13.3								
Lane LOS	A			A	B							
Approach Delay (s)	0.4	0.0	0.0	13.3								
Approach LOS				A	B							
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				30.6%						ICU Level of Service		A
Analysis Period (min)				15								

NBC Coastal Campus

22: 3rd St & Palm Ave

Horizon Year (1 CVN)

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations	↕	↕		↕	↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	278	5	27	214	25	12	15	129	12	11	15
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	9	323	6	29	230	27	15	19	159	15	14	19
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	329	29	257	193	48						
Volume Left (vph)	9	0	29	0	15	15						
Volume Right (vph)	0	6	0	27	159	19						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.1	5.5	6.1	5.5	5.1	5.7						
Degree Utilization, x	0.02	0.51	0.05	0.40	0.27	0.08						
Capacity (veh/h)	573	629	560	623	628	539						
Control Delay (s)	8.0	12.9	8.2	10.9	10.1	9.2						
Approach Delay (s)	12.7		10.6		10.1	9.2						
Approach LOS	B		B		B	A						
Intersection Summary												
Delay				11.3								
Level of Service				B								
Intersection Capacity Utilization				38.1%						ICU Level of Service		A
Analysis Period (min)				15								

HCM Unsignalized Intersection Capacity Analysis
KHA

Synchro 8 Report
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HCM Signalized Intersection Capacity Analysis
KHA
Synchro 8 Report
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NBC Coastal Campus
25: Delaware St & Palm Ave

Horizon Year (1 CVN)
Timing Plan: AM PEAK

	→	↗	↖	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗			↖	
Volume (veh/h)	514	5	0	0	3	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	559	5	0	0	3	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			564		559	559
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			564		559	559
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1007		490	529
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	559	5	10			
Volume Left	0	0	3			
Volume Right	0	5	7			
cSH	1700	1700	515			
Volume to Capacity	0.33	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.1			
Lane LOS			B			
Approach Delay (s)	0.0		12.1			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			37.1%		ICU Level of Service	A
Analysis Period (min)			15			









NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (1 CVN)
Timing Plan: AM PEAK

	↗	→	↘	↖	←	↖	↗	↑	↗	↘	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑	↘	↖	↑↑↑			↖			↑↑	
Volume (vph)	24	732	40	27	1710		185	42	58	102	52	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5045		1770	5064			3323			3363	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5045		1770	5064			3323			3363	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	29	871	48	30	1879	55	223	51	70	124	63	34
RTOR Reduction (vph)	0	3	0	0	2	0	0	13	0	0	8	0
Lane Group Flow (vph)	29	916	0	30	1932	0	0	331	0	0	213	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2121		157	2017			646			653	
v/s Ratio Prot	0.02	c0.18		c0.02	c0.38			c0.10			c0.06	
v/s Ratio Perm												
v/c Ratio	0.15	0.43		0.19	0.96			0.51			0.33	
Uniform Delay, d1	72.3	36.9		76.0	52.7			64.9			62.4	
Progression Factor	1.00	1.00		1.27	0.68			1.00			1.00	
Incremental Delay, d2	0.4	0.6		0.5	10.8			0.7			0.3	
Delay (s)	72.7	37.6		97.1	46.4			65.6			62.6	
Level of Service	E	D		F	D			E			E	
Approach Delay (s)		38.6			47.2			65.6			62.6	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		47.6			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		71.2%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Horizon Year (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	995	40	23	1908	14	21	5	35	63	12	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5056		1770	5080			1690		1770	1699	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.63	1.00	
Satd. Flow (perm)	1770	5056		1770	5080			1535		1182	1699	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	3	1118	45	26	2168	16	29	7	48	90	17	24
RTOR Reduction (vph)	0	2	0	0	0	0	0	27	0	0	20	0
Lane Group Flow (vph)	3	1161	0	26	2184	0	0	57	0	90	21	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3474		118	3716			255		197	283	
v/s Ratio Prot	0.00	0.23		c0.01	c0.43						0.01	
v/s Ratio Perm								0.04		c0.08		
v/c Ratio	0.08	0.33		0.22	0.59			0.22		0.46	0.07	
Uniform Delay, d1	86.2	11.4		79.6	11.4			64.9		67.7	63.3	
Progression Factor	1.60	0.27		1.38	0.36			1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.2		0.6	0.5			0.4		1.7	0.1	
Delay (s)	139.1	3.3		110.3	4.6			65.4		69.3	63.4	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.7			5.8			65.4			67.5	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		70.6%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	1076	72	110	1744	59	165	22	104	192	41	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.85	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5037		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5037		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1209	81	133	2101	71	185	25	117	256	55	23
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	97	0	3	0
Lane Group Flow (vph)	4	1286	0	133	2101	41	0	210	20	0	331	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.26		c0.08	c0.41			c0.12			c0.10	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.10	0.58		0.68	0.78	0.05		0.68	0.07		0.57	
Uniform Delay, d1	86.2	37.5		76.9	33.6	20.3		69.9	62.5		68.4	
Progression Factor	1.18	0.61		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	1.1		9.0	2.3	0.1		6.2	0.1		1.4	
Delay (s)	103.1	24.1		85.9	35.9	20.4		76.1	62.6		69.7	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		24.3			38.3			71.3			69.7	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		39.1			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		87.6%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Horizon Year (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	16	1379	29	50	1892	14	18	8	56	44	3	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5069		1770	5080			1673			1724	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.79	
Satd. Flow (perm)	1770	5069		1770	5080			1563			1402	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	17	1499	32	58	2200	16	21	10	67	58	4	32
RTOR Reduction (vph)	0	2	0	0	0	0	0	53	0	0	25	0
Lane Group Flow (vph)	17	1529	0	58	2216	0	0	45	0	0	69	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	1.5	37.4		2.8	38.7			15.3			15.3	
Effective Green, g (s)	1.5	37.4		2.8	38.7			15.3			15.3	
Actuated g/C Ratio	0.02	0.53		0.04	0.54			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	37	2662		69	2761			335			301	
v/s Ratio Prot	0.01	0.30		c0.03	c0.44							
v/s Ratio Perm								0.03			c0.05	
v/c Ratio	0.46	0.57		0.84	0.80			0.14			0.23	
Uniform Delay, d1	34.4	11.5		34.0	13.2			22.6			23.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	8.8	0.3		57.0	1.8			0.2			0.4	
Delay (s)	43.2	11.8		91.0	14.9			22.8			23.5	
Level of Service	D	B		F	B			C			C	
Approach Delay (s)		12.1			16.9			22.8			23.5	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		15.3			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		71.2			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		60.0%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	105	1395	34	280	1824	246	84	83	884	269	106	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	122	1622	40	298	1940	262	93	92	982	320	126	105
RTOR Reduction (vph)	0	2	0	0	0	69	0	147	173	0	3	65
Lane Group Flow (vph)	122	1660	0	298	1940	193	93	397	357	320	134	29
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.1		17.9	47.0	47.0	8.5	35.4	35.4	10.3	37.2	37.2
Effective Green, g (s)	6.0	35.1		17.9	47.0	47.0	8.5	35.4	35.4	10.3	37.2	37.2
Actuated g/C Ratio	0.05	0.29		0.15	0.39	0.39	0.07	0.29	0.29	0.09	0.31	0.31
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	170	1474		262	1981	616	124	454	441	293	539	463
v/s Ratio Prot	0.04	c0.33		c0.17	0.38		0.05	c0.26		c0.09	0.08	
v/s Ratio Perm						0.12			0.24			0.02
v/c Ratio	0.72	1.13		1.14	0.98	0.31	0.75	0.87	0.81	1.09	0.25	0.06
Uniform Delay, d1	56.5	42.8		51.4	36.3	25.6	55.0	40.5	39.5	55.1	31.2	29.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.5	66.1		97.8	15.4	0.3	22.2	16.9	10.5	79.5	0.2	0.1
Delay (s)	69.9	108.9		149.1	51.7	25.9	77.2	57.3	50.0	134.6	31.5	29.5
Level of Service	E	F		F	D	C	E	E	D	F	C	C
Approach Delay (s)		106.2			60.6			55.6			91.0	
Approach LOS		F			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		76.0			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		1.03										
Actuated Cycle Length (s)		120.6			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		91.7%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	326	1196	0	178	1157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.90	0.90	
Adj. Flow (vph)	0	366	1286	0	198	1286
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	0	366	1286	0	198	1282
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.10	c0.36		0.11	c0.46
v/s Ratio Perm						
v/c Ratio		0.14	1.10		0.96	0.84
Uniform Delay, d1		2.5	26.8		35.1	15.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	58.9		49.7	4.2
Delay (s)		2.5	85.7		84.8	19.2
Level of Service		A	F		F	B
Approach Delay (s)		2.5	85.7		27.9	
Approach LOS		A	F		C	
Intersection Summary						
HCM 2000 Control Delay		48.6		HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio		1.00				
Actuated Cycle Length (s)		80.0		Sum of lost time (s)		14.2
Intersection Capacity Utilization		64.2%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Horizon Year (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↖↗		↖	↗				
Volume (vph)	0	504	0	0	483	600	830	2	165	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3245		1681	1627				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3245		1681	1627				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	579	0	0	525	652	902	2	179	0	0	0
RTOR Reduction (vph)	0	0	0	0	400	0	0	34	0	0	0	0
Lane Group Flow (vph)	0	579	0	0	777	0	550	499	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		18.4			18.4		21.3	21.3				
Effective Green, g (s)		18.4			18.4		21.3	21.3				
Actuated g/C Ratio		0.39			0.39		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1365			1251		750	726				
v/s Ratio Prot		0.16			c0.24							
v/s Ratio Perm							c0.33	0.31				
v/c Ratio		0.42			0.62		0.73	0.69				
Uniform Delay, d1		10.8			11.8		10.9	10.5				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			1.0		3.7	2.7				
Delay (s)		11.0			12.8		14.6	13.3				
Level of Service		B			B		B	B				
Approach Delay (s)		11.0			12.8		13.9				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay		12.9							HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		47.7							Sum of lost time (s)		8.0	
Intersection Capacity Utilization		74.1%							ICU Level of Service		D	
Analysis Period (min)		15										
c Critical Lane Group												





















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Horizon Year (1 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔			↔	↔	
Volume (veh/h)	0	4	5	67	14	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	16	7	93	34	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	141	34	34			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	141	34	34			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	848	1039	1577			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	16	100	34			
Volume Left	0	7	0			
Volume Right	16	0	0			
cSH	1039	1577	1700			
Volume to Capacity	0.02	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.5	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		1.3				
Intersection Capacity Utilization		17.6%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Horizon Year (1 CVN)
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Volume (veh/h)	0	3552	18	0	1684	241	0	0	908	0	0	56
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	3700	19	0	1736	248	0	0	1009	0	0	85
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2005			3739			4413	5734	1283	3134	5619	743
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2005			3739			4413	5734	1283	3134	5619	743
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	42	100	100	75
cM capacity (veh/h)	277			55			0	0	1726	2	0	346
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1480	1480	759	694	694	596	1009	85				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	19	0	0	248	1009	85				
cSH	1700	1700	1700	1700	1700	1700	1726	346				
Volume to Capacity	0.87	0.87	0.45	0.41	0.41	0.35	0.58	0.25				
Queue Length 95th (ft)	0	0	0	0	0	0	101	24				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	10.0	18.8				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			10.0	18.8				
Approach LOS							A	C				
Intersection Summary												
Average Delay			1.7									
Intersection Capacity Utilization			133.9%		ICU Level of Service				H			
Analysis Period (min)			15									

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Horizon Year (1 CVN)
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3315	132	0	1722	0	202	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3418	136	0	1794	0	246	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			3574		4123	1247	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			3574		4123	1247	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			65		2	159	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1367	1367	820	598	598	598	246
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	136	0	0	0	246
cSH	1700	1700	1700	1700	1700	1700	159
Volume to Capacity	0.80	0.80	0.48	0.35	0.35	0.35	1.55
Queue Length 95th (ft)	0	0	0	0	0	0	412
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	325.8
Lane LOS							F
Approach Delay (s)	0.0			0.0			325.8
Approach LOS							F
Intersection Summary							
Average Delay			14.3				
Intersection Capacity Utilization			88.2%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Horizon Year (1 CVN)
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	
Volume (vph)	0	0	0	987	540		71	245		0	0	771
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4635		1770	3539				3527
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4635		1770	3539				3527
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1039	568	92	73	253	0	0	0	795
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	0	0	0	2
Lane Group Flow (vph)	0	0	0	519	1170	0	73	253	0	0	0	808
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA				NA
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.9	27.9		3.9	49.6				40.1
Effective Green, g (s)				27.9	27.9		3.9	49.6				40.1
Actuated g/C Ratio				0.31	0.31		0.04	0.56				0.45
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				476	1451		77	1970				1587
v/s Ratio Prot				c0.34	0.25		c0.04	0.07				c0.23
v/s Ratio Perm												
v/c Ratio				1.09	0.96d1		0.95	0.13				0.51
Uniform Delay, d1				30.6	28.1		42.5	9.4				17.5
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				68.0	3.4		84.0	0.0				0.3
Delay (s)				98.6	31.5		126.5	9.5				17.7
Level of Service				F	C		F	A				B
Approach Delay (s)		0.0			52.0			35.7				17.7
Approach LOS		A			D			D				B
Intersection Summary												
HCM 2000 Control Delay			40.3				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.76									
Actuated Cycle Length (s)			89.1			Sum of lost time (s)				17.2		
Intersection Capacity Utilization		134.1%				ICU Level of Service				H		
Analysis Period (min)			15									
d1 Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	0	1710	45	0	0	0	0	324	440	676	1103	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3116	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3116	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	0	1879	49	0	0	0	0	377	512	704	1149	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	9	29	0	0	0
Lane Group Flow (vph)	0	1879	20	0	0	0	0	604	247	704	1149	0
Confl. Peds. (#/hr)				20					20			
Turn Type	NA	Perm					NA	Perm	Prot	NA		
Protected Phases	4	4					2		1	6		
Permitted Phases			4					2				
Actuated Green, G (s)		63.4	63.4					56.2	56.2	41.0	100.0	
Effective Green, g (s)		63.4	63.4					56.2	56.2	41.0	100.0	
Actuated g/C Ratio		0.36	0.36					0.32	0.32	0.23	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1842	573					1000	433	804	2022	
v/s Ratio Prot		c0.37						c0.19		c0.21	0.32	
v/s Ratio Perm			0.01						0.18			
v/c Ratio		1.02	0.04					0.60	0.57	0.88	0.57	
Uniform Delay, d1		55.8	36.0					50.0	49.4	64.5	23.8	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		26.2	0.0					1.0	1.8	10.5	0.4	
Delay (s)		82.0	36.1					51.1	51.2	75.1	24.2	
Level of Service		F	D					D	D	E	C	
Approach Delay (s)		80.8			0.0			51.1			43.5	
Approach LOS		F			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		60.4										
HCM 2000 Volume to Capacity ratio		0.84										
Actuated Cycle Length (s)		175.0							14.4			
Intersection Capacity Utilization		134.1%							H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Horizon Year (1 CVN)
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑↑
Volume (vph)	203	14	1007	804	0	1379
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3255			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3255			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	260	18	1131	903	0	1483
RTOR Reduction (vph)	2	0	69	0	0	0
Lane Group Flow (vph)	276	0	1965	0	0	1483
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	296		2459			2540
v/s Ratio Prot	c0.17		c0.60			0.44
v/s Ratio Perm						
v/c Ratio	0.93		0.80			0.58
Uniform Delay, d1	64.0		12.1			8.5
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	35.0		2.8			1.0
Delay (s)	99.0		14.9			9.5
Level of Service	F		B			A
Approach Delay (s)	99.0		14.9			9.5
Approach LOS	F		B			A
Intersection Summary						
HCM 2000 Control Delay		19.0				B
HCM 2000 Volume to Capacity ratio		0.84				
Actuated Cycle Length (s)		160.0				12.1
Intersection Capacity Utilization		87.1%				E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Horizon Year (1 CVN)

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	168	12	34	30	12	29	27	1715	58	79	1641	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1724		1770	3522		1770	3487	
Flt Permitted	0.65	0.65	1.00		0.81		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1153	1158	1583		1422		1770	3522		1770	3487	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	215	15	44	47	19	45	29	1844	62	86	1784	193
RTOR Reduction (vph)	0	0	36	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	114	116	8	0	89	0	29	1905	0	86	1974	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	19.7	19.7	19.7		19.7		4.7	70.9		8.1	74.3	
Effective Green, g (s)	19.7	19.7	19.7		19.7		4.7	70.9		8.1	74.3	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.04	0.62		0.07	0.65	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	200	200	274		246		73	2200		126	2282	
v/s Ratio Prot	0.10	c0.10	0.00		0.06		0.02	0.54		c0.05	c0.57	
v/s Ratio Perm	0.57	0.58	0.03		0.36		0.40	0.87		0.68	0.87	
v/c Ratio	0.17	0.17	0.17		0.17		0.04	0.62		0.07	0.65	
Uniform Delay, d1	43.0	43.1	38.9		41.3		53.0	17.4		51.4	15.6	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.7	4.0	0.0		0.9		3.5	3.9		14.2	3.7	
Delay (s)	46.7	47.1	39.0		42.3		56.5	21.3		65.6	19.3	
Level of Service	D	D	D		D		E	C		E	B	
Approach Delay (s)		45.7			42.3			21.8			21.2	
Approach LOS		D			D			C			C	
Intersection Summary												
HCM 2000 Control Delay		23.5			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		113.5			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		80.9%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Horizon Year (1 CVN)

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	0	0	9	0	169	0	1488	0	38	1803	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	13	0	245	0	1583	0	41	1939	0
RTOR Reduction (vph)	0	0	0	0	198	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	60	0	0	1583	0	41	1939	0
Turn Type				Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					14.0			42.2		2.8	49.2	
Effective Green, g (s)					14.0			42.2		2.8	49.2	
Actuated g/C Ratio					0.19			0.58		0.04	0.67	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					309			2037		67	2375	
v/s Ratio Prot					c0.04			0.45		0.02	c0.55	
v/s Ratio Perm												
v/c Ratio					0.19			0.78		0.61	0.82	
Uniform Delay, d1					24.9			11.9		34.7	8.8	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			1.9		15.4	2.3	
Delay (s)					25.2			13.9		50.1	11.0	
Level of Service					C			B		D	B	
Approach Delay (s)		0.0			25.2			13.9			11.9	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					13.6			HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio					0.79							
Actuated Cycle Length (s)					73.3			Sum of lost time (s)		18.9		
Intersection Capacity Utilization					69.2%			ICU Level of Service		C		
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Horizon Year (1 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	341	59	139	8	81	493	33	668	3	163	1596	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1514		1854	1509	1770	3539	1343	1770	3511	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1514		1854	1509	1770	3539	1343	1770	3511	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	449	78	183	9	88	536	36	734	3	173	1698	82
RTOR Reduction (vph)	0	0	149	0	0	200	0	0	2	0	2	0
Lane Group Flow (vph)	449	78	34	0	97	336	36	734	1	173	1778	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.6	27.6	27.6		27.6	27.6	4.0	54.6	54.6	18.9	69.5	
Effective Green, g (s)	27.6	27.6	27.6		27.6	27.6	4.0	54.6	54.6	18.9	69.5	
Actuated g/C Ratio	0.19	0.19	0.19		0.19	0.19	0.03	0.37	0.37	0.13	0.47	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	329	347	282		345	281	47	1304	495	225	1647	
v/s Ratio Prot	c0.25	0.04			0.05		0.02	0.21		c0.10	c0.51	
v/s Ratio Perm			0.02			c0.22			0.00			
v/c Ratio	1.36	0.22	0.12		0.28	1.20	0.77	0.56	0.00	0.77	1.08	
Uniform Delay, d1	60.2	51.2	50.2		51.7	60.2	71.6	37.2	29.5	62.5	39.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	182.5	0.3	0.2		0.4	117.2	52.3	1.8	0.0	14.6	47.0	
Delay (s)	242.8	51.5	50.3		52.2	177.5	123.9	39.0	29.5	77.1	86.3	
Level of Service	F	D	D		D	F	F	D	C	E	F	
Approach Delay (s)		172.2			158.3			42.9			85.5	
Approach LOS		F			F			D			F	
Intersection Summary												
HCM 2000 Control Delay		103.9			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.16										
Actuated Cycle Length (s)		148.1			Sum of lost time (s)			19.4				
Intersection Capacity Utilization		88.7%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

Horizon Year (1 CVN)

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	368	578	4	43	210	4
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	409	642	6	61	239	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked	0.99					
vC, conflicting volume	518	36			66	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	506	36			66	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	7	38			84	
cM capacity (veh/h)	439	1037			1536	
Direction, Lane #						
Volume Total	1051	66	243			
Volume Left	409	0	239			
Volume Right	642	61	0			
cSH	791	1700	1536			
Volume to Capacity	1.33	0.04	0.16			
Queue Length 95th (ft)	1049	0	14			
Control Delay (s)	174.4	0.0	7.7			
Lane LOS	F		A			
Approach Delay (s)	174.4	0.0	7.7			
Approach LOS	F					
Intersection Summary						
Average Delay		136.1				
Intersection Capacity Utilization		45.8%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (1 CVN)

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	371	8	710	46	0	1745
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	470	10	789	51	0	1961
RTOR Reduction (vph)	1	0	0	29	0	0
Lane Group Flow (vph)	479	0	789	22	0	1961
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.27		0.22			c0.55
v/s Ratio Perm				0.01		
v/c Ratio	0.57		0.52	0.03		1.29
Uniform Delay, d1	19.8		22.0	17.3		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.9		0.3	0.0		135.6
Delay (s)	20.7		22.3	17.4		165.6
Level of Service	C		C	B		F
Approach Delay (s)	20.7		22.0			165.6
Approach LOS	C		C			F
Intersection Summary						
HCM 2000 Control Delay		107.6		HCM 2000 Level of Service		F
HCM 2000 Volume to Capacity ratio		0.91				
Actuated Cycle Length (s)		105.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		98.2%		ICU Level of Service		F
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Horizon Year (1 CVN)

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗	↖	↗
Volume (veh/h)	5	8	536	4	18	1670
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	10	16	623	5	20	1835
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1583	314			628	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1583	314			628	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	90	98			98	
cM capacity (veh/h)	97	682			950	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	416	212	20	918	918
Volume Left	10	0	0	20	0	0
Volume Right	16	0	5	0	0	0
cSH	206	1700	1700	950	1700	1700
Volume to Capacity	0.13	0.24	0.12	0.02	0.54	0.54
Queue Length 95th (ft)	11	0	0	2	0	0
Control Delay (s)	25.0	0.0	0.0	8.9	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	25.0	0.0		0.1		
Approach LOS	C					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			56.2%		ICU Level of Service	B
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Horizon Year (1 CVN)
Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↙	↘	↗	↖	↙	↘
Lane Configurations	↙	↘	↗	↖	↙	↘
Volume (vph)	35	66	473	14	120	1555
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	38	72	538	16	132	1709
RTOR Reduction (vph)	0	49	0	10	0	0
Lane Group Flow (vph)	38	23	538	6	132	1709
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	11.4	25.2	26.0	26.0	8.7	43.5
Effective Green, g (s)	11.4	20.1	26.0	26.0	8.7	43.5
Actuated g/C Ratio	0.18	0.31	0.40	0.40	0.14	0.68
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	314	495	1433	641	239	2397
v/s Ratio Prot	c0.02	0.01	0.15		0.07	c0.48
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.05	0.38	0.01	0.55	0.71
Uniform Delay, d1	22.2	15.4	13.4	11.4	25.9	6.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.2	0.0	2.7	1.0
Delay (s)	22.4	15.4	13.6	11.4	28.7	7.5
Level of Service	C	B	B	B	C	A
Approach Delay (s)	17.8		13.5			9.0
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay		10.4		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.70				
Actuated Cycle Length (s)		64.2		Sum of lost time (s)	18.1	
Intersection Capacity Utilization		54.9%		ICU Level of Service		A
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Horizon Year (1 CVN)
Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↙	↘	↗	↖	↙	↘
Lane Configurations		↗	↗			↗
Volume (veh/h)	0	27	462	22	0	1590
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	36	531	25	0	1728
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1408	278			556	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1408	278			556	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	130	719			1010	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	36	354	202	864	864	
Volume Left	0	0	0	0	0	
Volume Right	36	0	25	0	0	
cSH	719	1700	1700	1700	1700	
Volume to Capacity	0.05	0.21	0.12	0.51	0.51	
Queue Length 95th (ft)	4	0	0	0	0	
Control Delay (s)	10.3	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.3	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay		0.2				
Intersection Capacity Utilization		47.3%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Horizon Year (1 CVN)

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	35	30	454	22	27	1562
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	49	42	483	23	30	1716
RTOR Reduction (vph)	0	36	0	10	0	0
Lane Group Flow (vph)	49	6	483	13	30	1716
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	4.2	7.0	28.7	28.7	2.8	39.0
Effective Green, g (s)	4.2	7.0	28.7	28.7	2.8	39.0
Actuated g/C Ratio	0.08	0.14	0.58	0.58	0.06	0.78
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	149	222	2039	912	99	2771
v/s Ratio Prot	c0.03	0.00	0.14		0.02	c0.48
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.33	0.03	0.24	0.01	0.30	0.62
Uniform Delay, d1	21.5	18.5	5.2	4.5	22.6	2.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	0.0	0.1	0.0	1.7	0.4
Delay (s)	22.8	18.5	5.2	4.5	24.3	2.7
Level of Service	C	B	A	A	C	A
Approach Delay (s)	20.8		5.2			3.1
Approach LOS	C		A			A

Intersection Summary

HCM 2000 Control Delay	4.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	49.8	Sum of lost time (s)	14.1
Intersection Capacity Utilization	54.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (1 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	13	17	98	9	0	208	15	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	14	18	127	12	0	234	17	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	14	18	139	251						
Volume Left (vph)	0	0	127	0						
Volume Right (vph)	0	18	0	17						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.1	3.2	4.1	3.2						
Degree Utilization, x	0.02	0.02	0.16	0.22						
Capacity (veh/h)	867	1121	860	1122						
Control Delay (s)	7.1	6.3	7.9	7.1						
Approach Delay (s)	6.6		7.9	7.1						
Approach LOS	A		A	A						

Intersection Summary

Delay	7.3		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

NBC Coastal Campus

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (1 CVN)

Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱	↰	↱	↰			
Volume (vph)	12	215	0	0	95	160	14	363	80	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.69	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1279	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	14	244	0	0	109	184	15	399	88	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	135	0	53	0	0	0	0
Lane Group Flow (vph)	14	244	0	0	109	49	15	399	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	10.7	10.7			10.7	10.7	16.2	16.2	16.2			
Effective Green, g (s)	10.7	10.7			10.7	10.7	16.2	16.2	16.2			
Actuated g/C Ratio	0.27	0.27			0.27	0.27	0.40	0.40	0.40			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	339	494			494	420	711	1422	636			
v/s Ratio Prot		c0.13			0.06		0.01	c0.11				
v/s Ratio Perm	0.01					0.03			0.02			
v/c Ratio	0.04	0.49			0.22	0.12	0.02	0.28	0.06			
Uniform Delay, d1	11.0	12.5			11.5	11.2	7.3	8.1	7.4			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	0.8			0.2	0.1	0.0	0.1	0.0			
Delay (s)	11.0	13.3			11.8	11.3	7.3	8.2	7.4			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		13.2			11.5		8.1			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.3			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.37										
Actuated Cycle Length (s)		40.3			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		42.0%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (1 CVN)

Timing Plan: PM PEAK

							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	0	530	0	1756	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	0	0	602	0	1951	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2252	976	1951		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2252	976	1951		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	35	251	296		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	301	301	1301	650	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.18	0.18	0.77	0.38	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			51.9%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (1 CVN)

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	101	7	79	19	4	7	85	363	58	19	1242	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.86		1.00	0.90		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1605		1770	1685		1770	3466		1770	3458	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1605		1770	1685		1770	3466		1770	3458	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	135	9	105	38	8	14	93	399	64	21	1380	249
RTOR Reduction (vph)	0	84	0	0	14	0	0	9	0	0	12	0
Lane Group Flow (vph)	135	30	0	38	8	0	93	454	0	21	1617	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	18.4	18.4		2.7	2.7		5.8	48.4		1.6	44.2	
Effective Green, g (s)	18.4	18.4		2.7	2.7		5.8	48.4		1.6	44.2	
Actuated g/C Ratio	0.20	0.20		0.03	0.03		0.06	0.54		0.02	0.49	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	361	328		53	50		114	1863		31	1698	
v/s Ratio Prot	c0.08	0.02		c0.02	0.00		c0.05	c0.13		0.01	c0.47	
v/s Ratio Perm												
v/c Ratio	0.37	0.09		0.72	0.17		0.82	0.24		0.68	0.95	
Uniform Delay, d1	30.8	29.0		43.3	42.6		41.6	11.1		43.9	21.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.1		36.9	1.6		34.4	0.1		45.6	12.4	
Delay (s)	31.5	29.2		80.2	44.2		76.0	11.1		89.6	34.3	
Level of Service	C	C		F	D		E	B		F	C	
Approach Delay (s)		30.4			67.0			22.0			35.0	
Approach LOS		C			E			C			C	
Intersection Summary												
HCM 2000 Control Delay		32.4										
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		90.0										
Intersection Capacity Utilization		70.4%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (1 CVN)

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	66	1190	67	0	406	40	19	46	5	28	30	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6				
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.99			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5045			5016		1770	1836			1759	
Flt Permitted	0.95	1.00			1.00		0.69	1.00			0.12	
Satd. Flow (perm)	1770	5045			5016		1294	1836			217	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	75	1352	76	0	432	43	27	66	7	33	35	28
RTOR Reduction (vph)	0	3	0	0	7	0	0	2	0	0	8	0
Lane Group Flow (vph)	75	1425	0	0	468	0	27	71	0	0	88	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1908			2037		251	357			36	
v/s Ratio Prot	c0.04	c0.28			c0.09		c0.04					
v/s Ratio Perm							0.02				c0.40	
v/c Ratio	0.38	0.75			0.23		0.11	0.20			2.44	
Uniform Delay, d1	74.3	48.5			35.0		59.7	60.7			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.2	2.7			0.3		0.2	0.3			721.7	
Delay (s)	75.5	51.2			35.3		59.8	61.0			796.7	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		52.4			35.3			60.7			796.7	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		81.9										
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		68.2%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

Horizon Year (1 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	1224	0	580	449	44	0	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3492							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3492							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1375	0	617	478	47	0	0	0	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	1375	0	617	525	0	0	0	0	0	0	4
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3173							609
v/s Ratio Prot		c0.27		c0.18	c0.15							
v/s Ratio Perm												0.00
v/c Ratio		0.72		0.32	0.17							0.01
Uniform Delay, d1		47.7		21.2	0.9							34.9
Progression Factor		0.18		1.00	1.00							1.00
Incremental Delay, d2		1.4		0.1	0.0							0.0
Delay (s)		10.0		21.3	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		10.0			11.9		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		11.0				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.51										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		49.4%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave


















Horizon Year (1 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	4	218	0	0	313	42	0	0	0	107	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	5	253	0	0	356	48	0	0	0	162	0	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	403			253			656	666	253	642	642	380
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	403			253			656	666	253	642	642	380
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	58	100	98
cM capacity (veh/h)	1155			1312			370	378	785	386	391	667
Direction, Lane #												
Volume Total	258	403	0	176								
Volume Left	5	0	0	162								
Volume Right	0	48	0	14								
cSH	1155	1312	1700	399								
Volume to Capacity	0.00	0.00	0.00	0.44								
Queue Length 95th (ft)	0	0	0	55								
Control Delay (s)	0.2	0.0	0.0	21.0								
Lane LOS	A			A			C					
Approach Delay (s)	0.2	0.0	0.0	21.0								
Approach LOS				A			C					
Intersection Summary												
Average Delay		4.5										
Intersection Capacity Utilization		32.2%				ICU Level of Service		A				
Analysis Period (min)		15										











NBC Coastal Campus
22: 3rd St & Palm Ave

Horizon Year (1 CVN)
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	301	13	87	327	25	15	40	70	29	34	14
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	10	386	17	98	367	28	26	70	123	63	74	30
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	10	403	98	396	219	167						
Volume Left (vph)	10	0	98	0	26	63						
Volume Right (vph)	0	17	0	28	123	30						
Hadj (s)	0.53	0.01	0.53	-0.02	-0.28	0.00						
Departure Headway (s)	7.4	6.8	7.3	6.7	6.8	7.2						
Degree Utilization, x	0.02	0.76	0.20	0.74	0.41	0.34						
Capacity (veh/h)	463	508	475	519	468	424						
Control Delay (s)	9.3	27.2	10.8	24.8	14.5	13.8						
Approach Delay (s)	26.7		22.1		14.5	13.8						
Approach LOS	D		C		B	B						
Intersection Summary												
Delay			21.2									
Level of Service			C									
Intersection Capacity Utilization			42.0%		ICU Level of Service		A					
Analysis Period (min)			15									




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Horizon Year (1 CVN)
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	75	432	466	41	54	144
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	77	445	542	48	64	169
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)	908					
pX, platoon unblocked						
vC, conflicting volume	590				1166	295
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	590				1166	295
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	92				63	76
cM capacity (veh/h)	982				172	702
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	77	445	361	228	233	
Volume Left	77	0	0	0	64	
Volume Right	0	0	0	48	169	
cSH	982	1700	1700	1700	382	
Volume to Capacity	0.08	0.26	0.21	0.13	0.61	
Queue Length 95th (ft)	6	0	0	0	97	
Control Delay (s)	9.0	0.0	0.0	0.0	28.1	
Lane LOS	A				D	
Approach Delay (s)	1.3	0.0			28.1	
Approach LOS					D	
Intersection Summary						
Average Delay			5.4			
Intersection Capacity Utilization			41.3%	ICU Level of Service		A
Analysis Period (min)			15			










NBC Coastal Campus
24: 7th St & Palm Ave

Horizon Year (1 CVN)
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	441	30	32	468	4	56	26	23	13	43	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3535			1761			1842	1583
Flt Permitted	0.46	1.00		0.44	1.00			0.79			0.89	1.00
Satd. Flow (perm)	858	3505		823	3535			1435			1660	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	35	525	36	35	514	4	68	32	28	17	57	41
RTOR Reduction (vph)	0	7	0	0	1	0	0	22	0	0	0	32
Lane Group Flow (vph)	35	554	0	35	517	0	0	106	0	0	74	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases	2			6			8			4		
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	14.9	14.9		14.9	14.9			6.5			6.5	6.5
Effective Green, g (s)	14.9	14.9		14.9	14.9			6.5			6.5	6.5
Actuated g/C Ratio	0.49	0.49		0.49	0.49			0.21			0.21	0.21
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	417	1706		400	1721			304			352	336
v/s Ratio Prot	c0.16			0.15								
v/s Ratio Perm	0.04			0.04				c0.07			0.04	0.01
v/c Ratio	0.08		0.32	0.09		0.30		0.35			0.21	0.03
Uniform Delay, d1	4.2		4.8	4.2		4.7		10.2			9.9	9.5
Progression Factor	1.00		1.00	1.00		1.00		1.00			1.00	1.00
Incremental Delay, d2	0.1		0.1	0.1		0.1		0.7			0.3	0.0
Delay (s)	4.3		4.9	4.3		4.8		10.9			10.2	9.6
Level of Service	A		A	A		A		B			B	A
Approach Delay (s)	4.9			4.8				10.9			10.0	
Approach LOS	A			A				B			A	
Intersection Summary												
HCM 2000 Control Delay	5.8			HCM 2000 Level of Service				A				
HCM 2000 Volume to Capacity ratio	0.33											
Actuated Cycle Length (s)	30.6			Sum of lost time (s)				9.2				
Intersection Capacity Utilization	45.5%			ICU Level of Service				A				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Horizon Year (1 CVN)
Timing Plan: PM PEAK

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	490	9	0	0	7	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	598	11	0	0	10	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)			767			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			609		598	598
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			609		598	598
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			970		465	503
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	598	11	15			
Volume Left	0	0	10			
Volume Right	0	11	4			
cSH	1700	1700	476			
Volume to Capacity	0.35	0.01	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.8			
Lane LOS			B			
Approach Delay (s)	0.0		12.8			
Approach LOS			B			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			35.8%		ICU Level of Service A	
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	47	1534	141	66	876	149	111	102	71	197	90	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5021		1770	4974			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5021		1770	4974			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	50	1632	150	67	885	151	122	112	78	221	101	33
RTOR Reduction (vph)	0	6	0	0	13	0	0	19	0	0	4	0
Lane Group Flow (vph)	50	1776	0	67	1023	0	0	293	0	0	351	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2000		196	1981			649			658	
v/s Ratio Prot	0.03	c0.35		c0.04	0.21			c0.09			c0.10	
v/s Ratio Perm												
v/c Ratio	0.26	0.89		0.34	0.52			0.45			0.53	
Uniform Delay, d1	73.2	50.4		73.9	41.0			64.0			65.2	
Progression Factor	1.00	1.00		1.22	0.86			1.00			1.00	
Incremental Delay, d2	0.7	5.2		1.0	0.9			0.5			0.8	
Delay (s)	73.9	55.6		91.0	36.0			64.5			66.0	
Level of Service	E	E		F	D			E			E	
Approach Delay (s)		56.1			39.4			64.5			66.0	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		52.7			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		123.0%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Horizon Year (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	23	1856	65	56	1338	63	24	12	40	72	15	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5060		1770	5051			1703		1770	1719	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.59	1.00	
Satd. Flow (perm)	1770	5060		1770	5051			1541		1103	1719	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	23	1894	66	58	1379	65	29	14	48	85	18	19
RTOR Reduction (vph)	0	2	0	0	2	0	0	24	0	0	17	0
Lane Group Flow (vph)	23	1958	0	58	1442	0	0	67	0	85	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.3		16.0	130.3			22.5		22.5	22.5	
Effective Green, g (s)	12.0	126.3		16.0	130.3			22.5		22.5	22.5	
Actuated g/C Ratio	0.07	0.70		0.09	0.72			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3550		157	3656			192		137	214	
v/s Ratio Prot	0.01	c0.39		c0.03	c0.29						0.01	
v/s Ratio Perm								0.04		c0.08		
v/c Ratio	0.19	0.55		0.37	0.39			0.35		0.62	0.10	
Uniform Delay, d1	79.4	13.1		77.2	9.6			72.1		74.7	69.7	
Progression Factor	1.41	0.12		1.54	0.29			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.3		1.2	0.3			1.1		8.4	0.2	
Delay (s)	112.2	2.0		119.9	3.1			73.2		83.1	69.9	
Level of Service	F	A		F	A			E		F	E	
Approach Delay (s)		3.2			7.6			73.2			79.1	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		9.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.54										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		66.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	1725	225	179	1424	93	147	46	146	176	51	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	4997		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	4997		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	32	1835	239	185	1468	96	160	50	159	238	69	31
RTOR Reduction (vph)	0	9	0	0	0	37	0	0	132	0	4	0
Lane Group Flow (vph)	32	2065	0	185	1468	59	0	210	27	0	334	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2212		192	2364	736		305	269		575	
v/s Ratio Prot	0.02	c0.41		c0.10	c0.29			c0.12			c0.10	
v/s Ratio Perm						0.04			0.02			
v/c Ratio	0.20	0.93		0.96	0.62	0.08		0.69	0.10		0.58	
Uniform Delay, d1	76.1	47.6		79.8	36.2	26.7		70.2	63.0		68.7	
Progression Factor	1.02	0.94		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.6	7.8		54.0	1.2	0.2		12.0	0.7		4.2	
Delay (s)	78.0	52.5		133.9	37.5	27.0		82.2	63.8		73.0	
Level of Service	E	D		F	D	C		F	E		E	
Approach Delay (s)		52.8			47.1			74.2			73.0	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		53.9			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		102.3%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Horizon Year (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	1870	57	195	1764	18	45	10	93	27	12	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5063		1770	5078			1680			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.88			0.80	
Satd. Flow (perm)	1770	5063		1770	5078			1503			1451	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.95	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	12	2078	63	205	1857	19	53	12	109	33	15	15
RTOR Reduction (vph)	0	3	0	0	1	0	0	78	0	0	12	0
Lane Group Flow (vph)	12	2138	0	205	1875	0	0	96	0	0	51	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.7			17.7	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.7			17.7	
Actuated g/C Ratio	0.01	0.47		0.13	0.60			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2403		233	3032			313			302	
v/s Ratio Prot	0.01	c0.42		c0.12	0.37							
v/s Ratio Perm								c0.06			0.04	
v/c Ratio	0.75	0.89		0.88	0.62			0.31			0.17	
Uniform Delay, d1	42.0	20.3		36.2	10.9			28.4			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	106.0	4.5		29.1	0.4			0.6			0.3	
Delay (s)	148.0	24.8		65.3	11.3			29.0			27.8	
Level of Service	F	C		E	B			C			C	
Approach Delay (s)		25.5			16.6			29.0			27.8	
Approach LOS		C			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		21.5			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		84.9			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		70.7%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑	↔	↔	↑↑↑	↔	↔	↔	↔	↔↔	↔	↔
Volume (vph)	216	1804	28	376	1774	636	75	203	611	674	274	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	227	1899	29	404	1908	684	80	216	650	733	298	284
RTOR Reduction (vph)	0	1	0	0	0	91	0	25	309	0	2	123
Lane Group Flow (vph)	227	1927	0	404	1908	593	80	425	107	733	324	133
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.6	36.3		45.0	69.7	69.7	8.9	40.0	40.0	11.8	42.9	42.9
Effective Green, g (s)	11.6	36.3		45.0	69.7	69.7	8.9	40.0	40.0	11.8	42.9	42.9
Actuated g/C Ratio	0.07	0.23		0.29	0.45	0.45	0.06	0.26	0.26	0.08	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	256	1188		513	2286	711	101	421	388	261	483	416
v/s Ratio Prot	0.07	c0.38		c0.23	c0.38		0.05	c0.26		c0.21	c0.19	
v/s Ratio Perm						0.37		0.07				0.09
v/c Ratio	0.89	1.62		0.79	0.83	0.83	0.79	1.01	0.28	2.81	0.67	0.32
Uniform Delay, d1	71.0	59.4		50.6	37.6	37.6	72.1	57.5	45.9	71.6	49.8	44.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	28.5	283.9		7.8	2.8	8.3	33.3	46.1	0.4	824.4	3.6	0.4
Delay (s)	99.6	343.3		58.4	40.4	45.9	105.5	103.6	46.3	896.0	53.4	44.9
Level of Service	F	F		E	D	D	F	F	D	F	D	D
Approach Delay (s)		317.6			44.1			78.6			521.4	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		212.7			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.27										
Actuated Cycle Length (s)		155.0			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		131.0%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↔	↔
Volume (vph)	0	575	960	0	504	1833
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	646	1021	0	554	2014
RTOR Reduction (vph)	0	0	0	0	0	2
Lane Group Flow (vph)	0	646	1021	0	554	2012
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.18	c0.29		0.31	c0.72
v/s Ratio Perm						
v/c Ratio		0.36	1.19		0.84	1.13
Uniform Delay, d1		12.0	30.3		22.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	97.1		9.0	67.5
Delay (s)		12.1	127.4		31.7	82.0
Level of Service		B	F		C	F
Approach Delay (s)		12.1	127.4		71.2	
Approach LOS		B	F		E	
Intersection Summary						
HCM 2000 Control Delay		75.7			HCM 2000 Level of Service	
HCM 2000 Volume to Capacity ratio		1.23				E
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	
Intersection Capacity Utilization		94.7%			ICU Level of Service	
Analysis Period (min)		15				F
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Horizon Year (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	1072	0	0	603	287	482	3	123	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1613				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1613				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.25	0.25	0.25	
Adj. Flow (vph)	0	1117	0	0	678	322	518	3	132	0	0	0
RTOR Reduction (vph)	0	0	0	0	96	0	0	22	0	0	0	0
Lane Group Flow (vph)	0	1117	0	0	904	0	337	294	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases						2						
Actuated Green, G (s)		21.1			21.1		15.5	15.5				
Effective Green, g (s)		21.1			21.1		15.5	15.5				
Actuated g/C Ratio		0.47			0.47		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1674			1593		584	560				
v/s Ratio Prot		0.32			0.27							
v/s Ratio Perm							0.20	0.18				
v/c Ratio		0.67			0.57		0.58	0.52				
Uniform Delay, d1		9.0			8.5		11.9	11.6				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		1.0			0.5		1.4	0.9				
Delay (s)		10.1			8.9		13.3	12.5				
Level of Service		B			A		B					
Approach Delay (s)		10.1			8.9		12.9			0.0		
Approach LOS		B			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		10.3			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		44.6			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		53.5%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												





















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Horizon Year (1 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	11	9	4	38	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	18	10	4	55	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	79	55	55			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	79	55	55			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	918	1012	1550			
Direction, Lane #						
Volume Total	18	14	55			
Volume Left	0	10	0			
Volume Right	18	0	0			
cSH	1012	1550	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.6				
Intersection Capacity Utilization		17.4%		ICU Level of Service		
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St






Horizon Year (1 CVN) with Alternative 1
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Volume (veh/h)	0	1311	35	0	3247	535	0	0	479	0	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1580	42	0	3529	582	0	0	599	0	0	13
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4131			1642			2830	5751	588	4387	5482	1507
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4131			1642			2830	5751	588	4387	5482	1507
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	55	100	100	87
cM capacity (veh/h)	38			384			7	0	1336	0	0	106
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	632	632	358	1412	1412	1287	599	13				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	42	0	0	582	599	13				
cSH	1700	1700	1700	1700	1700	1700	1336	106				
Volume to Capacity	0.37	0.37	0.21	0.83	0.83	0.76	0.45	0.13				
Queue Length 95th (ft)	0	0	0	0	0	0	59	10				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.9	43.7				
Lane LOS							A	E				
Approach Delay (s)	0.0			0.0			9.9	43.7				
Approach LOS							A	E				
Intersection Summary												
Average Delay	1.0											
Intersection Capacity Utilization	89.8%			ICU Level of Service			E					
Analysis Period (min)	15											

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Horizon Year (1 CVN) with Alternative 1
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↑	
Volume (veh/h)	1172	204	0	3146	0	232	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1332	232	0	3496	0	252	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1584		2653	600	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1584		2653	600	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	41	
cM capacity (veh/h)			404		18	429	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	533	533	498	1165	1165	1165	252
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	232	0	0	0	252
cSH	1700	1700	1700	1700	1700	1700	429
Volume to Capacity	0.31	0.31	0.29	0.69	0.69	0.69	0.59
Queue Length 95th (ft)	0	0	0	0	0	0	92
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	24.6
Lane LOS							C
Approach Delay (s)	0.0			0.0			24.6
Approach LOS							C
Intersection Summary							
Average Delay			1.2				
Intersection Capacity Utilization			75.7%		ICU Level of Service		D
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Horizon Year (1 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↔↔↔	↔↔↔		↔↔	↔↔			↔↔	
Volume (vph)	0	0	0	1522	1545	251	43	94	0	0	260	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			1.00	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4641		1770	3539			3522	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4641		1770	3539			3522	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1637	1661	270	58	127	0	0	299	7
RTOR Reduction (vph)	0	0	0	0	6	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	884	2678	0	58	127	0	0	305	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.3			21.1	
Effective Green, g (s)				131.2	131.2		20.0	46.3			21.1	
Actuated g/C Ratio				0.69	0.69		0.11	0.24			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1055	3219		187	866			392	
v/s Ratio Prot				c0.58	0.58		c0.03	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.84	0.83		0.31	0.15			0.78	
Uniform Delay, d1				21.2	21.0		78.2	55.9			81.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				5.9	2.0		0.9	0.1			9.4	
Delay (s)				27.1	22.9		79.1	56.0			91.1	
Level of Service				C	C		E	E			F	
Approach Delay (s)		0.0			24.0			63.3			91.1	
Approach LOS		A			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		30.8		HCM 2000 Level of Service					C			
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		189.1		Sum of lost time (s)					16.8			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (1 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔↔	↔					↔↔	↔	↔↔	↔↔	
Volume (vph)	0	503	68	0	0	0	0	129	215	437	1404	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.93	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3170	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3170	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	0	547	74	0	0	0	0	150	234	475	1462	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	66	66	0	0	0
Lane Group Flow (vph)	0	547	45	0	0	0	0	199	53	475	1462	0
Turn Type		NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		60.0	60.0					62.2	62.2	35.0	100.0	
Effective Green, g (s)		60.0	60.0					62.2	62.2	35.0	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.20	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1149	522	700	2062	
v/s Ratio Prot		c0.11						0.06		0.14	c0.41	
v/s Ratio Perm			0.03						0.04			
v/c Ratio		0.31	0.08					0.17	0.10	0.68	0.71	
Uniform Delay, d1		40.7	37.3					37.2	36.2	63.1	25.5	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.1	2.6	1.1	
Delay (s)		40.8	37.4					37.3	36.3	65.7	26.6	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		40.4			0.0			37.0			36.2	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		37.2		HCM 2000 Level of Service					D			
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)					14.4			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Horizon Year (1 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↕	↕
Volume (vph)	253	8	1294	702	0	1269
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Flt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3310			3362
Flt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3310			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	294	9	1391	755	0	1336
RTOR Reduction (vph)	1	0	60	0	0	0
Lane Group Flow (vph)	302	0	2086	0	0	1336
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	19.9		44.5			44.5
Effective Green, g (s)	19.9		44.5			44.5
Actuated g/C Ratio	0.27		0.61			0.61
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	430		2004			2035
v/s Ratio Prot	c0.19		c0.63			0.40
v/s Ratio Perm						
v/c Ratio	0.70		1.04			0.66
Uniform Delay, d1	24.1		14.5			9.5
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	5.1		31.8			0.8
Delay (s)	29.2		46.3			10.3
Level of Service	C		D			B
Approach Delay (s)	29.2		46.3			10.3
Approach LOS	C		D			B
Intersection Summary						
HCM 2000 Control Delay			32.2		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.98			
Actuated Cycle Length (s)			73.5		Sum of lost time (s)	12.1
Intersection Capacity Utilization			85.7%		ICU Level of Service	E
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Horizon Year (1 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↕	↕	↕	↕	↕
Volume (vph)	55	3	12	9	0	7	23	1542	30	46	1434	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Flt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1692	1583		1705		1770	3529		1770	3524	
Flt Permitted	0.74	0.77	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1303	1358	1583		1508		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	64	3	14	18	0	14	27	1836	36	50	1559	47
RTOR Reduction (vph)	0	0	12	0	27	0	0	1	0	0	1	0
Lane Group Flow (vph)	33	34	2	0	5	0	27	1871	0	50	1605	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	16.2	16.2	16.2		16.2		3.0	69.9		4.1	71.0	
Effective Green, g (s)	16.2	16.2	16.2		16.2		3.0	69.9		4.1	71.0	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.67		0.04	0.68	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	210	245		234		50	2365		69	2398	
v/s Ratio Prot							0.02	c0.53		c0.03	0.46	
v/s Ratio Perm	c0.03	0.03	0.00		0.00							
v/c Ratio	0.16	0.16	0.01		0.02		0.54	0.79		0.72	0.67	
Uniform Delay, d1	38.2	38.2	37.3		37.3		50.0	12.1		49.5	9.8	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4	0.0		0.0		11.4	1.9		31.2	0.7	
Delay (s)	38.6	38.5	37.3		37.4		61.3	14.0		80.7	10.5	
Level of Service	D	D	D		D		E	B		F	B	
Approach Delay (s)		38.3			37.4			14.6			12.6	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			14.4							B		
HCM 2000 Volume to Capacity ratio			0.68									
Actuated Cycle Length (s)			104.3				Sum of lost time (s)		14.1			
Intersection Capacity Utilization			61.4%				ICU Level of Service		B			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Horizon Year (1 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	27	0	1478	9	499	926	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	41	0	1624	10	509	945	0
RTOR Reduction (vph)	0	0	0	0	37	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	4	0	0	1624	5	509	945	0
Turn Type					NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.46		c0.29	0.27	
v/s Ratio Perm								0.00				
v/c Ratio					0.03			0.98	0.01	0.83	0.32	
Uniform Delay, d1					60.6			37.7	20.5	43.7	2.4	
Progression Factor					1.00			0.39	1.00	1.00	1.00	
Incremental Delay, d2					0.1			11.6	0.0	9.6	0.3	
Delay (s)					60.7			26.3	20.5	53.3	2.7	
Level of Service					E			C	C	D	A	
Approach Delay (s)		0.0			60.7			26.3			20.4	
Approach LOS		A			E			C			C	
Intersection Summary												
HCM 2000 Control Delay		24.0			HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio		0.86										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		87.3%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Horizon Year (1 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	44	14	2	61	135	137	1313	7	172	489	311
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.88		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3295	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3295	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	42	68	22	2	69	153	152	1459	8	198	562	357
RTOR Reduction (vph)	0	0	21	0	0	129	0	0	4	0	68	0
Lane Group Flow (vph)	42	68	1	0	71	24	152	1459	4	198	851	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Effective Green, g (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Actuated g/C Ratio	0.06	0.06	0.06		0.16	0.16	0.31	0.46	0.46	0.19	0.34	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	97	102	77		295	239	549	1625	618	341	1127	
v/s Ratio Prot	0.02	c0.04			c0.04		0.09	c0.41		c0.11	0.26	
v/s Ratio Perm			0.00			0.02			0.00			
v/c Ratio	0.43	0.67	0.02		0.24	0.10	0.28	0.90	0.01	0.58	0.75	
Uniform Delay, d1	66.3	67.2	64.8		53.4	52.2	37.7	36.1	21.3	53.2	42.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.95	0.93	
Incremental Delay, d2	3.1	15.2	0.1		0.4	0.2	0.3	8.3	0.0	2.5	4.6	
Delay (s)	69.4	82.4	64.9		53.8	52.4	38.0	44.3	21.3	53.2	44.2	
Level of Service	E	F	E		D	D	D	D	C	D	D	
Approach Delay (s)		75.4			52.8			43.6			45.8	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			46.4		HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio			0.69									
Actuated Cycle Length (s)			145.0		Sum of lost time (s)				19.4			
Intersection Capacity Utilization			94.0%		ICU Level of Service				F			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Horizon Year (1 CVN) with Alternative 1
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖			↗
Volume (veh/h)	46	215	5	45	200	10
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	54	253	6	56	217	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	480	34			62	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	480	34			62	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	88	76			86	
cM capacity (veh/h)	468	1039			1540	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	307	62	228			
Volume Left	54	0	217			
Volume Right	253	56	0			
cSH	1261	1700	1540			
Volume to Capacity	0.24	0.04	0.14			
Queue Length 95th (ft)	24	0	12			
Control Delay (s)	10.3	0.0	7.4			
Lane LOS	B		A			
Approach Delay (s)	10.3	0.0	7.4			
Approach LOS	B					
Intersection Summary						
Average Delay		8.1				
Intersection Capacity Utilization		28.3%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (1 CVN) with Alternative 1
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖	↗		↗
Volume (vph)	49	3	1471	421	0	460
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1755		3539	1519		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1755		3539	1519		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	65	4	1548	443	0	719
RTOR Reduction (vph)	4	0	0	131	0	0
Lane Group Flow (vph)	65	0	1548	312	0	719
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.1		30.9	30.9		30.9
Effective Green, g (s)	3.1		30.9	30.9		30.9
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	123		2491	1069		2491
v/s Ratio Prot	c0.04		c0.44			0.20
v/s Ratio Perm				0.21		
v/c Ratio	0.53		0.62	0.29		0.29
Uniform Delay, d1	19.7		3.4	2.4		2.4
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.3		0.5	0.2		0.1
Delay (s)	24.0		3.9	2.6		2.5
Level of Service	C		A	A		A
Approach Delay (s)	24.0		3.6			2.5
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.8		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.61				
Actuated Cycle Length (s)		43.9		Sum of lost time (s)	9.9	
Intersection Capacity Utilization		53.1%		ICU Level of Service	A	
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Horizon Year (1 CVN) with Alternative 1

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (veh/h)	0	18	2374	7	7	509
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	31	2553	8	10	749
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2951	1280			2560	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2951	1280			2560	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	80			94	
cM capacity (veh/h)	11	157			170	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	31	1702	858	10	374	374
Volume Left	0	0	0	10	0	0
Volume Right	31	0	8	0	0	0
cSH	157	1700	1700	170	1700	1700
Volume to Capacity	0.20	1.00	0.50	0.06	0.22	0.22
Queue Length 95th (ft)	18	0	0	5	0	0
Control Delay (s)	33.6	0.0	0.0	27.6	0.0	0.0
Lane LOS	D			D		
Approach Delay (s)	33.6	0.0		0.4		
Approach LOS	D					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		75.8%		ICU Level of Service		D
Analysis Period (min)		15				

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Horizon Year (1 CVN) with Alternative 1

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (vph)	20	101	2273	14	44	465
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	25	125	2444	15	64	674
RTOR Reduction (vph)	0	2	0	1	0	0
Lane Group Flow (vph)	25	123	2444	14	64	674
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	16.4	26.5	68.2	68.2	5.0	82.0
Effective Green, g (s)	16.4	21.4	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.20	0.63	0.63	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	269	314	2241	1002	82	2694
v/s Ratio Prot	0.01	c0.08	c0.69		c0.04	0.19
v/s Ratio Perm				0.01		
v/c Ratio	0.09	0.39	1.09	0.01	0.78	0.25
Uniform Delay, d1	39.3	37.5	19.8	7.3	50.8	3.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.8	48.8	0.0	37.0	0.0
Delay (s)	39.4	38.3	68.6	7.3	87.8	3.8
Level of Service	D	D	E	A	F	A
Approach Delay (s)	38.5		68.2			11.1
Approach LOS	D		E			B
Intersection Summary						
HCM 2000 Control Delay		54.3		HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio		0.94				
Actuated Cycle Length (s)		107.7		Sum of lost time (s)		18.1
Intersection Capacity Utilization		79.9%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Horizon Year (1 CVN) with Alternative 1
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↖↗			↖↗
Volume (veh/h)	0	38	2247	30	0	483
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	61	2365	32	0	653
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2707	1198			2397	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2707	1198			2397	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	66			100	
cM capacity (veh/h)	17	178			197	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	61	1577	820	326	326	
Volume Left	0	0	0	0	0	
Volume Right	61	0	32	0	0	
cSH	178	1700	1700	1700	1700	
Volume to Capacity	0.34	0.93	0.48	0.19	0.19	
Queue Length 95th (ft)	36	0	0	0	0	
Control Delay (s)	35.5	0.0	0.0	0.0	0.0	
Lane LOS	E					
Approach Delay (s)	35.5	0.0		0.0		
Approach LOS	E					
Intersection Summary						
Average Delay		0.7				
Intersection Capacity Utilization		73.1%		ICU Level of Service	D	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Horizon Year (1 CVN) with Alternative 1
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖↗	↖	↖	↖↗
Volume (vph)	12	8	2277	38	18	456
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	19	13	2372	40	22	563
RTOR Reduction (vph)	0	2	0	10	0	0
Lane Group Flow (vph)	19	11	2372	30	22	563
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.5	4.6	58.8	58.8	3.1	69.4
Effective Green, g (s)	1.5	4.6	58.8	58.8	3.1	69.4
Actuated g/C Ratio	0.02	0.06	0.76	0.76	0.04	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	34	93	2685	1201	70	3169
v/s Ratio Prot	c0.01	0.00	c0.67		c0.01	0.16
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.56	0.12	0.88	0.03	0.31	0.18
Uniform Delay, d1	37.7	34.5	6.8	2.3	36.2	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	18.4	0.6	3.8	0.0	2.6	0.0
Delay (s)	56.1	35.1	10.7	2.3	38.7	0.5
Level of Service	E	D	B	A	D	A
Approach Delay (s)	47.6		10.5			2.0
Approach LOS	D		B			A
Intersection Summary						
HCM 2000 Control Delay		9.3		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.85				
Actuated Cycle Length (s)		77.5		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		75.8%		ICU Level of Service	D	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (1 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	3	0	53	2	0	51	3	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	12	0	98	4	0	81	5	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	12	0	102	81	5					
Volume Left (vph)	0	0	98	0	0					
Volume Right (vph)	0	0	0	0	5					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.2	3.2					
Degree Utilization, x	0.01	0.00	0.12	0.09	0.00					
Capacity (veh/h)	822	1121	809	828	1121					
Control Delay (s)	7.3	6.2	7.9	7.6	6.2					
Approach Delay (s)	7.3		7.9	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.7							
Level of Service			A							
Intersection Capacity Utilization			19.7%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (1 CVN) with Alternative 1
Timing Plan: AM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑	↑	↑	↑			
Volume (vph)	3	43	0	0	38	262	4	2050	59	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.72	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1346	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	4	57	0	0	53	364	4	2181	63	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	54	0	0	27	0	0	0
Lane Group Flow (vph)	4	57	0	0	53	310	4	2181	36	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	18.5	18.5			18.5	18.5	47.7	43.6	43.6			
Effective Green, g (s)	18.5	18.5			18.5	18.5	47.7	43.6	43.6			
Actuated g/C Ratio	0.25	0.25			0.25	0.25	0.63	0.58	0.58			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	329	456			456	387	1118	2043	914			
v/s Ratio Prot		0.03			0.03		0.00	c0.62				
v/s Ratio Perm	0.00					c0.20			0.02			
v/c Ratio	0.01	0.12			0.12	0.80	0.00	1.07	0.04			
Uniform Delay, d1	21.6	22.2			22.1	26.8	5.1	15.9	6.9			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	11.3	0.0	40.8	0.0			
Delay (s)	21.6	22.3			22.3	38.0	5.1	56.7	6.9			
Level of Service	C	C			C	D	A	E	A			
Approach Delay (s)		22.3				36.0		55.2			0.0	
Approach LOS		C				D		E			A	
Intersection Summary												
HCM 2000 Control Delay		51.6				HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio		0.99										
Actuated Cycle Length (s)		75.5				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		92.5%				ICU Level of Service			F			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (1 CVN) with Alternative 1

Timing Plan: AM PEAK






















							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	26	47	426	1792	0	191	229
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	104	188	444	1867	0	242	290
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2208	266	532		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2208	266	532		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	74	57		0		
cM capacity (veh/h)	21	732	1032		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	292	444	933	933	161	370	0
Volume Left	104	444	0	0	0	0	0
Volume Right	188	0	0	0	0	290	0
cSH	57	1032	1700	1700	1700	1700	1700
Volume to Capacity	5.10	0.43	0.55	0.55	0.09	0.22	0.00
Queue Length 95th (ft)	Err	55	0	0	0	0	0
Control Delay (s)	Err	11.1	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B					
Approach Delay (s)	Err	2.1			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay		933.2					
Intersection Capacity Utilization		67.2%		ICU Level of Service		C	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (1 CVN) with Alternative 1

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	459	2	45	50	8	21	30	2075	11	4	185	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	1.00		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1594		1770	1661		1770	3536		1770	3424	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1594		1770	1661		1770	3536		1770	3424	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	522	2	51	161	26	68	32	2184	12	6	268	74
RTOR Reduction (vph)	0	34	0	0	64	0	0	1	0	0	23	0
Lane Group Flow (vph)	522	19	0	161	30	0	32	2195	0	6	319	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	31.5	31.5		5.0	5.0		3.3	40.0		1.0	37.7	
Effective Green, g (s)	31.5	31.5		5.0	5.0		3.3	40.0		1.0	37.7	
Actuated g/C Ratio	0.33	0.33		0.05	0.05		0.03	0.41		0.01	0.39	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	578	520		91	86		60	1467		18	1339	
v/s Ratio Prot	c0.29	0.01		c0.09	0.02		c0.02	c0.62		0.00	0.09	
v/s Ratio Perm												
v/c Ratio	0.90	0.04		1.77	0.34		0.53	1.50		0.33	0.24	
Uniform Delay, d1	31.0	22.1		45.7	44.1		45.8	28.2		47.4	19.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	17.4	0.0		386.9	2.4		8.8	227.1		10.6	0.1	
Delay (s)	48.4	22.1		432.6	46.5		54.6	255.3		58.0	19.8	
Level of Service	D	C		F	D		D	F		E	B	
Approach Delay (s)		46.0			290.2			252.4			20.5	
Approach LOS		D			F			F			C	
Intersection Summary												
HCM 2000 Control Delay		196.7						HCM 2000 Level of Service		F		
HCM 2000 Volume to Capacity ratio		1.27										
Actuated Cycle Length (s)		96.4						Sum of lost time (s)		18.9		
Intersection Capacity Utilization		98.2%						ICU Level of Service		F		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (1 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	9	252	20	0	1907	20	47	27	1900	23	48	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5030			5077		1770	1846			1732	
Flt Permitted	0.95	1.00			1.00		0.65	1.00			0.14	
Satd. Flow (perm)	1770	5030			5077		1210	1846			250	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	10	283	22	0	2096	22	56	32	2	30	62	78
RTOR Reduction (vph)	0	5	0	0	1	0	0	2	0	0	17	0
Lane Group Flow (vph)	10	300	0	0	2117	0	56	32	0	0	153	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2061		235	358			41	
v/s Ratio Prot	c0.01	0.06			c0.42			0.02				
v/s Ratio Perm							c0.05				c0.61	
v/c Ratio	0.05	0.16			1.03		0.24	0.09			3.74	
Uniform Delay, d1	71.5	37.0			53.5		61.2	59.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.2			25.5		0.5	0.1			1290.2	
Delay (s)	71.6	37.2			79.0		61.8	59.6			1365.2	
Level of Service	E	D			E		E	E			F	
Approach Delay (s)		38.3			79.0			60.9			1365.2	
Approach LOS		D			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		154.8			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.23										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		75.7%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

Horizon Year (1 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	269	0	457	1917	10	0	0	0	0	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	328	0	486	2039	11	0	0	0	0	0	20
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	328	0	486	2050	0	0	0	0	0	0	8
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.06		0.14	c0.58							
v/s Ratio Perm												0.00
v/c Ratio		0.17		0.28	0.64							0.01
Uniform Delay, d1		37.2		26.2	1.8							34.9
Progression Factor		0.38		1.00	1.00							1.00
Incremental Delay, d2		0.2		0.1	0.4							0.0
Delay (s)		14.3		26.3	2.2							35.0
Level of Service		B		C	A							C
Approach Delay (s)		14.3			6.8		0.0					35.0
Approach LOS		B			A		A					C
Intersection Summary												
HCM 2000 Control Delay		7.9			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		75.0%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

Horizon Year (1 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	10	245	0	0	132	107	0	0	0	49	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	12	292	0	0	142	115	0	0	0	54	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	257			292			520	572	292	515	515	199
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	257			292			520	572	292	515	515	199
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	88	100	99
cM capacity (veh/h)	1308			1270			460	426	748	467	459	842

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	304	257	0	59
Volume Left	12	0	0	54
Volume Right	0	115	0	5
cSH	1308	1270	1700	487
Volume to Capacity	0.01	0.00	0.00	0.12
Queue Length 95th (ft)	1	0	0	10
Control Delay (s)	0.4	0.0	0.0	13.4
Lane LOS	A		A	B
Approach Delay (s)	0.4	0.0	0.0	13.4
Approach LOS			A	B

Intersection Summary

Average Delay	1.5			
Intersection Capacity Utilization	31.0%		ICU Level of Service	A
Analysis Period (min)	15			

NBC Coastal Campus

22: 3rd St & Palm Ave

Horizon Year (1 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	285	5	27	215	25	12	15	129	12	11	15
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	9	331	6	29	231	27	15	19	159	15	14	19
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	337	29	258	193	48						
Volume Left (vph)	9	0	29	0	15	15						
Volume Right (vph)	0	6	0	27	159	19						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.1	5.5	6.1	5.5	5.2	5.8						
Degree Utilization, x	0.02	0.52	0.05	0.40	0.28	0.08						
Capacity (veh/h)	573	629	559	621	625	535						
Control Delay (s)	8.0	13.2	8.2	11.0	10.1	9.2						
Approach Delay (s)	13.0		10.7		10.1	9.2						
Approach LOS	B		B		B	A						











Intersection Summary

Delay	11.4			
Level of Service	B			
Intersection Capacity Utilization	38.5%		ICU Level of Service	A
Analysis Period (min)	15			

NBC Coastal Campus
23: Palm Ave & Rainbow Dr






















Horizon Year (1 CVN) with Alternative 1
Timing Plan: AM PEAK

Horizon Year (1 CVN) with Alternative 1
Timing Plan: AM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	233	435	340	156	18	71
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	295	551	415	190	25	100
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	605				1650	302
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	605				1650	302
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	70				59	86
cM capacity (veh/h)	969				62	694
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	295	551	276	328	125	
Volume Left	295	0	0	0	25	
Volume Right	0	0	0	190	100	
cSH	969	1700	1700	1700	228	
Volume to Capacity	0.30	0.32	0.16	0.19	0.55	
Queue Length 95th (ft)	32	0	0	0	75	
Control Delay (s)	10.3	0.0	0.0	0.0	38.7	
Lane LOS	B				E	
Approach Delay (s)	3.6		0.0		38.7	
Approach LOS					E	
Intersection Summary						
Average Delay			5.0			
Intersection Capacity Utilization			42.7%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Horizon Year (1 CVN) with Alternative 1
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 							
Volume (vph)	17	428	16	27	341	0	67	40	83	2	28	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3520		1770	3539			1723			1857	1583
Flt Permitted	0.50	1.00		0.43	1.00			0.87			0.98	1.00
Satd. Flow (perm)	923	3520		810	3539			1530			1824	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	22	556	21	35	443	0	102	61	126	3	48	48
RTOR Reduction (vph)	0	4	0	0	0	0	0	33	0	0	0	30
Lane Group Flow (vph)	22	573	0	35	443	0	0	256	0	0	51	18
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.6	13.6		13.6	13.6			13.4			13.4	13.4
Effective Green, g (s)	13.6	13.6		13.6	13.6			13.4			13.4	13.4
Actuated g/C Ratio	0.38	0.38		0.38	0.38			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	346	1322		304	1329			566			675	585
v/s Ratio Prot		c0.16			0.13							
v/s Ratio Perm	0.02			0.04				c0.17			0.03	0.01
v/c Ratio	0.06	0.43		0.12	0.33			0.45			0.08	0.03
Uniform Delay, d1	7.2	8.4		7.4	8.1			8.6			7.4	7.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.1			0.6			0.0	0.0
Delay (s)	7.3	8.7		7.5	8.2			9.2			7.4	7.3
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.6			8.2			9.2			7.4	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.5			HCM 2000 Level of Service			A			
HCM 2000 Volume to Capacity ratio			0.44									
Actuated Cycle Length (s)			36.2			Sum of lost time (s)			9.2			</

NBC Coastal Campus
25: Delaware St & Palm Ave

Horizon Year (1 CVN) with Alternative 1
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗			↖	
Volume (veh/h)	514	5	0	0	3	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	559	5	0	0	3	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			564		559	559
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			564		559	559
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1007		490	529
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	559	5	10			
Volume Left	0	0	3			
Volume Right	0	5	7			
cSH	1700	1700	515			
Volume to Capacity	0.33	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.1			
Lane LOS			B			
Approach Delay (s)	0.0		12.1			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			37.1%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1
Timing Plan: AM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑	↘	↖	↑↑↑			↗			↖	↘
Volume (vph)	24	769	40	27	2043		188	42	58	102	52	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5047		1770	5067			3324			3363	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5047		1770	5067			3324			3363	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	29	915	48	30	2245	55	227	51	70	124	63	34
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	29	960	0	30	2299	0	0	336	0	0	213	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2122		157	2018			646			653	
v/s Ratio Prot	0.02	c0.19		c0.02	c0.45			c0.10			c0.06	
v/s Ratio Perm												
v/c Ratio	0.15	0.45		0.19	1.14			0.52			0.33	
Uniform Delay, d1	72.3	37.3		76.0	54.1			65.0			62.4	
Progression Factor	1.00	1.00		1.20	0.83			1.00			1.00	
Incremental Delay, d2	0.4	0.7		0.4	67.6			0.7			0.3	
Delay (s)	72.7	38.0		91.4	112.3			65.7			62.6	
Level of Service	E	D		F	F			E			E	
Approach Delay (s)		39.0			112.1			65.7			62.6	
Approach LOS		D			F			E			E	
Intersection Summary												
HCM 2000 Control Delay		86.5			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		77.7%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

27: Florida St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	1032	40	23	2241	14	21	5	35	63	12	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5081			1690		1770	1699	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.63	1.00	
Satd. Flow (perm)	1770	5057		1770	5081			1535		1182	1699	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	3	1160	45	26	2547	16	29	7	48	90	17	24
RTOR Reduction (vph)	0	2	0	0	0	0	0	27	0	0	20	0
Lane Group Flow (vph)	3	1203	0	26	2563	0	0	57	0	90	21	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			255		197	283	
v/s Ratio Prot	0.00	0.24		c0.01	c0.50						0.01	
v/s Ratio Perm								0.04		c0.08		
v/c Ratio	0.08	0.35		0.22	0.69			0.22		0.46	0.07	
Uniform Delay, d1	86.2	11.6		79.6	13.1			64.9		67.7	63.3	
Progression Factor	1.55	0.26		1.41	0.40			1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.3		0.4	0.5			0.4		1.7	0.1	
Delay (s)	134.3	3.2		112.4	5.7			65.4		69.3	63.4	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.5			6.8			65.4			67.5	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		9.0			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		77.0%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

28: 13th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	1113	72	110	2075	59	168	22	104	192	41	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1251	81	133	2500	71	189	25	117	256	55	23
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	97	0	3	0
Lane Group Flow (vph)	4	1328	0	133	2500	41	0	214	20	0	331	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.26		c0.08	c0.49			c0.12			c0.10	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.10	0.60		0.68	0.92	0.05		0.70	0.07		0.57	
Uniform Delay, d1	86.2	37.9		76.9	38.8	20.3		70.1	62.5		68.4	
Progression Factor	1.19	0.60		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	1.1		9.0	6.8	0.1		6.7	0.1		1.4	
Delay (s)	103.6	24.0		85.9	45.7	20.4		76.8	62.6		69.7	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		24.3			47.0			71.8			69.7	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		43.9			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		94.0%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	16	1416	29	50	2223	14	18	8	56	44	3	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1673			1724	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.79	
Satd. Flow (perm)	1770	5070		1770	5081			1562			1406	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	17	1539	32	58	2585	16	21	10	67	58	4	32
RTOR Reduction (vph)	0	2	0	0	0	0	0	53	0	0	25	0
Lane Group Flow (vph)	17	1569	0	58	2601	0	0	45	0	0	69	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	1.5	37.9		2.7	39.1			15.3			15.3	
Effective Green, g (s)	1.5	37.9		2.7	39.1			15.3			15.3	
Actuated g/C Ratio	0.02	0.53		0.04	0.55			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	37	2683		66	2774			333			300	
v/s Ratio Prot	0.01	0.31		c0.03	c0.51							
v/s Ratio Perm								0.03			c0.05	
v/c Ratio	0.46	0.58		0.88	0.94			0.14			0.23	
Uniform Delay, d1	34.6	11.5		34.3	15.1			22.8			23.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	8.8	0.3		69.1	6.9			0.2			0.4	
Delay (s)	43.4	11.8		103.4	22.0			23.0			23.7	
Level of Service	D	B		F	C			C			C	
Approach Delay (s)		12.2			23.8			23.0			23.7	
Approach LOS		B			C			C			C	
Intersection Summary												
HCM 2000 Control Delay		19.6			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		71.6			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		61.7%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	105	1431	34	280	2151	246	87	83	884	269	106	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	122	1664	40	298	2288	262	97	92	982	320	126	105
RTOR Reduction (vph)	0	2	0	0	0	69	0	147	173	0	3	65
Lane Group Flow (vph)	122	1702	0	298	2288	193	97	397	357	320	134	29
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.1		17.9	47.0	47.0	8.6	35.4	35.4	10.3	37.1	37.1
Effective Green, g (s)	6.0	35.1		17.9	47.0	47.0	8.6	35.4	35.4	10.3	37.1	37.1
Actuated g/C Ratio	0.05	0.29		0.15	0.39	0.39	0.07	0.29	0.29	0.09	0.31	0.31
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	170	1474		262	1981	616	126	454	441	293	537	462
v/s Ratio Prot	0.04	0.34		c0.17	c0.45		0.05	c0.26		c0.09	0.08	
v/s Ratio Perm						0.12			0.24			0.02
v/c Ratio	0.72	1.15		1.14	1.15	0.31	0.77	0.87	0.81	1.09	0.25	0.06
Uniform Delay, d1	56.5	42.8		51.4	36.8	25.6	55.0	40.5	39.5	55.1	31.3	29.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.5	77.7		97.8	76.0	0.3	24.2	16.9	10.5	79.5	0.2	0.1
Delay (s)	69.9	120.5		149.1	112.8	25.9	79.2	57.3	50.0	134.6	31.6	29.5
Level of Service	E	F		F	F	C	E	E	D	F	C	C
Approach Delay (s)		117.1			108.6			55.8			91.1	
Approach LOS		F			F			E			F	
Intersection Summary												
HCM 2000 Control Delay		99.8			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.08										
Actuated Cycle Length (s)		120.6			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		94.2%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (1 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	326	1244	0	178	1435
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	366	1338	0	198	1594
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	366	1338	0	198	1591
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	18
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.10	c0.38		0.11	c0.57
v/s Ratio Perm						
v/c Ratio		0.14	1.15		0.96	1.04
Uniform Delay, d1		2.5	26.8		35.1	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	76.4		49.7	33.6
Delay (s)		2.5	103.2		84.8	51.6
Level of Service		A	F		F	D
Approach Delay (s)		2.5	103.2		55.3	
Approach LOS		A	F		E	
Intersection Summary						
HCM 2000 Control Delay		68.1			HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio		1.15				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		73.9%			ICU Level of Service	D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)







Horizon Year (1 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	504	0	0	489	600	872	2	165	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3247		1681	1629				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3247		1681	1629				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	579	0	0	532	652	948	2	179	0	0	0
RTOR Reduction (vph)	0	0	0	0	401	0	0	32	0	0	0	0
Lane Group Flow (vph)	0	579	0	0	783	0	578	519	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		18.8			18.8		22.0	22.0				
Effective Green, g (s)		18.8			18.8		22.0	22.0				
Actuated g/C Ratio		0.39			0.39		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1363			1250		757	734				
v/s Ratio Prot		0.16			c0.24							
v/s Ratio Perm							c0.34	0.32				
v/c Ratio		0.42			0.63		0.76	0.71				
Uniform Delay, d1		11.0			12.2		11.2	10.8				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			1.0		4.6	3.1				
Delay (s)		11.2			13.1		15.8	13.9				
Level of Service		B			B		B	B				
Approach Delay (s)		11.2			13.1		14.9				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay		13.4								HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		48.8								Sum of lost time (s)	8.0	
Intersection Capacity Utilization		75.4%								ICU Level of Service	D	
Analysis Period (min)		15										
c Critical Lane Group												













NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Horizon Year (1 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	4	5	67	14	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	16	7	93	34	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	141	34	34			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	141	34	34			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	848	1039	1577			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	16	100	34			
Volume Left	0	7	0			
Volume Right	16	0	0			
cSH	1039	1577	1700			
Volume to Capacity	0.02	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.5	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		1.3				
Intersection Capacity Utilization		17.6%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Horizon Year (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	3528	18	0	1674	241	0	0	908	0	0	56
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%			0%			0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	3675	19	0	1726	248	0	0	1009	0	0	85
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1994			3714			4384	5699	1274	3115	5584	739
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1994			3714			4384	5699	1274	3115	5584	739
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	41	100	100	76
cM capacity (veh/h)	280			57			0	0	1721	2	0	348
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1470	1470	754	690	690	594	1009	85				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	19	0	0	248	1009	85				
cSH	1700	1700	1700	1700	1700	1700	1721	348				
Volume to Capacity	0.86	0.86	0.44	0.41	0.41	0.35	0.59	0.24				
Queue Length 95th (ft)	0	0	0	0	0	0	102	24				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	10.0	18.7				
Lane LOS							B	C				
Approach Delay (s)	0.0			0.0			10.0	18.7				
Approach LOS							B	C				
Intersection Summary												
Average Delay				1.7								
Intersection Capacity Utilization				133.4%			ICU Level of Service	H				
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Horizon Year (1 CVN) with Alternative 1
Timing Plan: PM PEAK

	→	↗	↖	←	↖	↗	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3291	132	0	1712	0	185	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3393	136	0	1783	0	226	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			3549		4095	1239	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			3549		4095	1239	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			66		2	161	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1357	1357	815	594	594	594	226
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	136	0	0	0	226
cSH	1700	1700	1700	1700	1700	1700	161
Volume to Capacity	0.80	0.80	0.48	0.35	0.35	0.35	1.40
Queue Length 95th (ft)	0	0	0	0	0	0	351
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	265.1
Lane LOS							F
Approach Delay (s)	0.0			0.0			265.1
Approach LOS							F
Intersection Summary							
Average Delay			10.8				
Intersection Capacity Utilization			86.6%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Horizon Year (1 CVN) with Alternative 1
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↖	↗	↑	↘	↖	↓	↗
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	
Volume (vph)	0	0	0	977	540	87	86	245	0	0	771	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3527	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3527	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1028	568	92	89	253	0	0	795	15
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	514	1164	0	89	253	0	0	808	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1432		98	1989			1567	
v/s Ratio Prot				c0.34	0.25		c0.05	0.07			c0.23	
v/s Ratio Perm												
v/c Ratio				1.09	0.97dl		0.91	0.13			0.52	
Uniform Delay, d1				31.1	28.7		42.3	9.3			18.0	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				69.3	3.6		61.4	0.0			0.3	
Delay (s)				100.4	32.3		103.7	9.3			18.3	
Level of Service				F	C		F	A			B	
Approach Delay (s)		0.0			53.1			33.9			18.3	
Approach LOS		A			D			C			B	
Intersection Summary												
HCM 2000 Control Delay			40.8				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.76									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)			17.2		
Intersection Capacity Utilization		133.9%					ICU Level of Service			H		
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	0	1710	48	0	0	0	0	339	416	676	1093	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.95	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3140	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3140	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	0	1879	53	0	0	0	0	394	484	704	1139	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	9	29	0	0	0
Lane Group Flow (vph)	0	1879	24	0	0	0	0	598	242	704	1139	0
Confl. Peds. (#/hr)				20					20			
Turn Type	NA	Perm					NA	Perm	Prot	NA		
Protected Phases	4	4					2		1	6		
Permitted Phases			4					2				
Actuated Green, G (s)		63.4	63.4					56.2	56.2	41.0	100.0	
Effective Green, g (s)		63.4	63.4					56.2	56.2	41.0	100.0	
Actuated g/C Ratio		0.36	0.36					0.32	0.32	0.23	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1842	573					1008	433	804	2022	
v/s Ratio Prot		c0.37						c0.19		c0.21	0.32	
v/s Ratio Perm			0.02						0.18			
v/c Ratio		1.02	0.04					0.59	0.56	0.88	0.56	
Uniform Delay, d1		55.8	36.1					49.8	49.2	64.5	23.7	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		26.2	0.0					0.9	1.7	10.5	0.4	
Delay (s)		82.0	36.2					50.8	50.8	75.1	24.1	
Level of Service		F	D					D	D	E	C	
Approach Delay (s)		80.7			0.0			50.8			43.5	
Approach LOS		F			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		60.3		HCM 2000 Level of Service					E			
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)					14.4			
Intersection Capacity Utilization		133.9%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave









Horizon Year (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑↑
Volume (vph)	203	14	1007	787	0	1374
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3258			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3258			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	260	18	1131	884	0	1477
RTOR Reduction (vph)	2	0	67	0	0	0
Lane Group Flow (vph)	276	0	1948	0	0	1477
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA		NA	
Protected Phases	8		2		6	
Permitted Phases						
Actuated Green, G (s)	30.0		120.9		120.9	
Effective Green, g (s)	30.0		120.9		120.9	
Actuated g/C Ratio	0.19		0.76		0.76	
Clearance Time (s)	4.1		5.0		5.0	
Vehicle Extension (s)	3.0		3.0		3.0	
Lane Grp Cap (vph)	296		2461		2540	
v/s Ratio Prot	c0.17		c0.60		0.44	
v/s Ratio Perm						
v/c Ratio	0.93		0.79		0.58	
Uniform Delay, d1	64.0		11.9		8.5	
Progression Factor	1.00		1.00		1.00	
Incremental Delay, d2	35.0		2.7		1.0	
Delay (s)	99.0		14.6		9.5	
Level of Service	F		B		A	
Approach Delay (s)	99.0		14.6		9.5	
Approach LOS	F		B		A	
Intersection Summary						
HCM 2000 Control Delay		18.8		HCM 2000 Level of Service		
HCM 2000 Volume to Capacity ratio		0.84			B	
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		
Intersection Capacity Utilization		86.5%		ICU Level of Service		
Analysis Period (min)		15			E	
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Horizon Year (1 CVN) with Alternative 1







Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	168	12	34	30	12	29	27	1698	58	79	1636	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1724		1770	3522		1770	3487	
Flt Permitted	0.65	0.65	1.00		0.81		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1153	1158	1583		1422		1770	3522		1770	3487	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	215	15	44	47	19	45	29	1826	62	86	1778	193
RTOR Reduction (vph)	0	0	36	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	114	116	8	0	89	0	29	1887	0	86	1968	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	19.7	19.7	19.7		19.7		4.7	70.9		8.1	74.3	
Effective Green, g (s)	19.7	19.7	19.7		19.7		4.7	70.9		8.1	74.3	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.04	0.62		0.07	0.65	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	200	200	274		246		73	2200		126	2282	
v/s Ratio Prot							0.02	0.54		c0.05	c0.56	
v/s Ratio Perm	0.10	c0.10	0.00		0.06							
v/c Ratio	0.57	0.58	0.03		0.36		0.40	0.86		0.68	0.86	
Uniform Delay, d1	43.0	43.1	38.9		41.3		53.0	17.2		51.4	15.5	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.7	4.0	0.0		0.9		3.5	3.6		14.2	3.6	
Delay (s)	46.7	47.1	39.0		42.3		56.5	20.8		65.6	19.2	
Level of Service	D	D	D		D		E	C		E	B	
Approach Delay (s)		45.7			42.3			21.3			21.1	
Approach LOS		D			D			C			C	
Intersection Summary												
HCM 2000 Control Delay		23.3			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		113.5			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		80.8%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Horizon Year (1 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	9	0	169	0	1471	0	38	1798	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	13	0	245	0	1565	0	41	1933	0
RTOR Reduction (vph)	0	0	0	0	198	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	60	0	0	1565	0	41	1933	0
Turn Type				Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					14.0			42.2		2.8	49.2	
Effective Green, g (s)					14.0			42.2		2.8	49.2	
Actuated g/C Ratio					0.19			0.58		0.04	0.67	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					309			2037		67	2375	
v/s Ratio Prot					c0.04			0.44		0.02	c0.55	
v/s Ratio Perm												
v/c Ratio					0.19			0.77		0.61	0.81	
Uniform Delay, d1					24.9			11.8		34.7	8.7	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			1.8		15.4	2.2	
Delay (s)					25.2			13.6		50.1	11.0	
Level of Service					C			B		D	B	
Approach Delay (s)		0.0			25.2			13.6			11.8	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					13.5			HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio					0.79							
Actuated Cycle Length (s)					73.3			Sum of lost time (s)		18.9		
Intersection Capacity Utilization					69.1%			ICU Level of Service		C		
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Horizon Year (1 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	263	42	116	8	64	356	27	878	3	121	1646	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1517		1852	1512	1770	3539	1353	1770	3516	
Flt Permitted	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1517		1852	1512	1770	3539	1353	1770	3516	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	346	55	153	9	70	387	30	965	3	129	1751	68
RTOR Reduction (vph)	0	0	123	0	0	204	0	0	2	0	2	0
Lane Group Flow (vph)	346	55	30	0	79	183	30	965	1	129	1817	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.8	27.8	27.8		20.5	20.5	2.9	57.5	57.5	15.4	70.0	
Effective Green, g (s)	27.8	27.8	27.8		20.5	20.5	2.9	57.5	57.5	15.4	70.0	
Actuated g/C Ratio	0.20	0.20	0.20		0.15	0.15	0.02	0.41	0.41	0.11	0.50	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	349	368	299		270	220	36	1447	553	193	1750	
v/s Ratio Prot	c0.20	0.03			0.04		0.02	0.27		c0.07	c0.52	
v/s Ratio Perm			0.02			c0.12		0.00				
v/c Ratio	0.99	0.15	0.10		0.29	0.83	0.83	0.67	0.00	0.67	1.04	
Uniform Delay, d1	56.3	46.6	46.2		53.6	58.4	68.6	33.8	24.6	60.1	35.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	45.7	0.2	0.1		0.6	22.6	85.2	2.5	0.0	8.5	32.3	
Delay (s)	102.0	46.8	46.3		54.2	81.0	153.8	36.2	24.6	68.6	67.6	
Level of Service	F	D	D		D	F	F	D	C	E	E	
Approach Delay (s)		81.1			76.4			39.7			67.6	
Approach LOS		F			E			D			E	
Intersection Summary												
HCM 2000 Control Delay		63.5			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.99										
Actuated Cycle Length (s)		140.6			Sum of lost time (s)			19.4				
Intersection Capacity Utilization		85.3%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

Horizon Year (1 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	312	428	4	54	165	4
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	347	476	6	76	188	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	423	44			82	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	423	44			82	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	33	54			88	
cM capacity (veh/h)	515	1027			1516	
Direction, Lane #						
Volume Total	822	82	192			
Volume Left	347	0	188			
Volume Right	476	76	0			
cSH	1055	1700	1516			
Volume to Capacity	0.78	0.05	0.12			
Queue Length 95th (ft)	206	0	11			
Control Delay (s)	19.3	0.0	7.6			
Lane LOS	C		A			
Approach Delay (s)	19.3	0.0	7.6			
Approach LOS	C					
Intersection Summary						
Average Delay		15.8				
Intersection Capacity Utilization		40.0%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (1 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	318	4	918	57	0	1795
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1772		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1772		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	403	5	1020	63	0	2017
RTOR Reduction (vph)	1	0	0	36	0	0
Lane Group Flow (vph)	407	0	1020	27	0	2017
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	843		1520	633		1520
v/s Ratio Prot	c0.23		0.29			c0.57
v/s Ratio Perm				0.02		
v/c Ratio	0.48		0.67	0.04		1.33
Uniform Delay, d1	18.7		24.0	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		1.2	0.0		151.8
Delay (s)	19.2		25.2	17.4		181.7
Level of Service	B		C	B		F
Approach Delay (s)	19.2		24.7			181.7
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay		114.4		HCM 2000 Level of Service		F
HCM 2000 Volume to Capacity ratio		0.88				
Actuated Cycle Length (s)		105.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		99.5%		ICU Level of Service		F
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Horizon Year (1 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗	↖	↗
Volume (veh/h)	5	8	741	4	18	1646
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	10	16	862	5	20	1809
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1808	433			866	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1808	433			866	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	85	97			97	
cM capacity (veh/h)	68	571			773	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	574	292	20	904	904
Volume Left	10	0	0	20	0	0
Volume Right	16	0	5	0	0	0
cSH	149	1700	1700	773	1700	1700
Volume to Capacity	0.17	0.34	0.17	0.03	0.53	0.53
Queue Length 95th (ft)	15	0	0	2	0	0
Control Delay (s)	34.1	0.0	0.0	9.8	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	34.1	0.0		0.1		
Approach LOS	D					
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			55.5%		ICU Level of Service	B
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

Horizon Year (1 CVN) with Alternative 1

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement						
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	35	66	678	14	120	1531
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	38	72	770	16	132	1682
RTOR Reduction (vph)	0	47	0	8	0	0
Lane Group Flow (vph)	38	25	770	8	132	1682
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	11.4	25.2	26.1	26.1	8.7	43.6
Effective Green, g (s)	11.4	20.1	26.1	26.1	8.7	43.6
Actuated g/C Ratio	0.18	0.31	0.41	0.41	0.14	0.68
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	313	494	1436	642	239	2399
v/s Ratio Prot	c0.02	0.02	0.22		0.07	c0.48
v/s Ratio Perm				0.01		
v/c Ratio	0.12	0.05	0.54	0.01	0.55	0.70
Uniform Delay, d1	22.2	15.4	14.5	11.4	26.0	6.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.4	0.0	2.7	0.9
Delay (s)	22.4	15.5	14.9	11.4	28.7	7.3
Level of Service	C	B	B	B	C	A
Approach Delay (s)	17.9		14.8			8.9
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			11.0		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.69			
Actuated Cycle Length (s)			64.3		Sum of lost time (s)	18.1
Intersection Capacity Utilization			54.2%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave







Horizon Year (1 CVN) with Alternative 1

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement						
Lane Configurations		↖	↕			↕
Volume (veh/h)	0	27	667	22	0	1566
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	36	767	25	0	1702
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1630	396			792	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1630	396			792	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	94			100	
cM capacity (veh/h)	92	603			824	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	36	511	281	851	851	
Volume Left	0	0	0	0	0	
Volume Right	36	0	25	0	0	
cSH	603	1700	1700	1700	1700	
Volume to Capacity	0.06	0.30	0.17	0.50	0.50	
Queue Length 95th (ft)	5	0	0	0	0	
Control Delay (s)	11.3	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	11.3	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			46.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd





Horizon Year (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	35	30	659	22	27	1538
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	49	42	701	23	30	1690
RTOR Reduction (vph)	0	36	0	10	0	0
Lane Group Flow (vph)	49	6	701	13	30	1690
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	4.2	7.0	28.1	28.1	2.8	38.4
Effective Green, g (s)	4.2	7.0	28.1	28.1	2.8	38.4
Actuated g/C Ratio	0.09	0.14	0.57	0.57	0.06	0.78
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	151	225	2021	904	100	2762
v/s Ratio Prot	c0.03	0.00	0.20		0.02	c0.48
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.32	0.03	0.35	0.01	0.30	0.61
Uniform Delay, d1	21.2	18.2	5.6	4.6	22.3	2.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	0.0	0.1	0.0	1.7	0.4
Delay (s)	22.4	18.2	5.7	4.6	23.9	2.7
Level of Service	C	B	A	A	C	A
Approach Delay (s)	20.5		5.7			3.0
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	4.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	49.2	Sum of lost time (s)	14.1
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	13	17	98	9	0	208	15	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	14	18	127	12	0	234	17	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	14	18	139	251						
Volume Left (vph)	0	0	127	0						
Volume Right (vph)	0	18	0	17						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.1	3.2	4.1	3.2						
Degree Utilization, x	0.02	0.02	0.16	0.22						
Capacity (veh/h)	867	1121	860	1122						
Control Delay (s)	7.1	6.3	7.9	7.1						
Approach Delay (s)	6.6		7.9	7.1						
Approach LOS	A		A	A						

Intersection Summary			
Delay	7.3		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱	↰	↱	↰			
Volume (vph)	12	215	0	0	95	160	14	568	80	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.69	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1279	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	14	244	0	0	109	184	15	624	88	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	97	0	53	0	0	0	0
Lane Group Flow (vph)	14	244	0	0	109	87	15	624	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	10.8	10.8			10.8	10.8	16.2	16.2	16.2			
Effective Green, g (s)	10.8	10.8			10.8	10.8	16.2	16.2	16.2			
Actuated g/C Ratio	0.27	0.27			0.27	0.27	0.40	0.40	0.40			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	341	498			498	423	709	1419	634			
v/s Ratio Prot		c0.13			0.06		0.01	c0.18				
v/s Ratio Perm	0.01					0.06			0.02			
v/c Ratio	0.04	0.49			0.22	0.21	0.02	0.44	0.06			
Uniform Delay, d1	11.0	12.5			11.5	11.5	7.3	8.8	7.4			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.8			0.2	0.2	0.0	0.2	0.0			
Delay (s)	11.0	13.2			11.7	11.7	7.3	9.0	7.5			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		13.1			11.7		8.8				0.0	
Approach LOS		B			B		A				A	
Intersection Summary												
HCM 2000 Control Delay		10.3			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.46										
Actuated Cycle Length (s)		40.4			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		45.2%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												





















NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱	↰
Volume (veh/h)	226	421	105	509	0	1675	57
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	904	1684	119	578	0	1861	63
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2421	962	1924		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2421	962	1924		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	0	61		0		
cM capacity (veh/h)	16	256	303		0		
Direction, Lane #							
Volume Total	2588	119	289	289	1241	684	0
Volume Left	904	119	0	0	0	0	0
Volume Right	1684	0	0	0	0	63	0
cSH	42	303	1700	1700	1700	1700	1700
Volume to Capacity	62.09	0.39	0.17	0.17	0.73	0.40	0.00
Queue Length 95th (ft)	Err	45	0	0	0	0	0
Control Delay (s)	Err	24.4	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C					
Approach Delay (s)	Err	4.2			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			4967.3				
Intersection Capacity Utilization			102.3%		ICU Level of Service		
Analysis Period (min)			15				G



















NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (1 CVN) with Alternative 1
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	102	7	79	19	4	7	85	447	58	19	1578	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.86		1.00	0.90		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1605		1770	1685		1770	3478		1770	3473	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1605		1770	1685		1770	3478		1770	3473	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	136	9	105	38	8	14	93	491	64	21	1753	251
RTOR Reduction (vph)	0	84	0	0	14	0	0	7	0	0	9	0
Lane Group Flow (vph)	136	30	0	38	8	0	93	548	0	21	1995	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	18.4	18.4		2.7	2.7		5.8	48.4		1.6	44.2	
Effective Green, g (s)	18.4	18.4		2.7	2.7		5.8	48.4		1.6	44.2	
Actuated g/C Ratio	0.20	0.20		0.03	0.03		0.06	0.54		0.02	0.49	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	361	328		53	50		114	1870		31	1705	
v/s Ratio Prot	c0.08	0.02		c0.02	0.00		c0.05	c0.16		0.01	c0.57	
v/s Ratio Perm												
v/c Ratio	0.38	0.09		0.72	0.17		0.82	0.29		0.68	1.17	
Uniform Delay, d1	30.9	29.0		43.3	42.6		41.6	11.4		43.9	22.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.1		36.9	1.6		34.4	0.1		45.6	83.3	
Delay (s)	31.5	29.2		80.2	44.2		76.0	11.5		89.6	106.2	
Level of Service	C	C		F	D		E	B		F	F	
Approach Delay (s)	30.4			67.0			20.8			106.0		
Approach LOS	C			E			C			F		
Intersection Summary												
HCM 2000 Control Delay	80.4			HCM 2000 Level of Service			F					
HCM 2000 Volume to Capacity ratio	0.90											
Actuated Cycle Length (s)	90.0			Sum of lost time (s)			18.9					
Intersection Capacity Utilization	79.8%			ICU Level of Service			D					
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (1 CVN) with Alternative 1
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	1523	69	0	489	40	20	46	5	28	30	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.99			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5052			5027		1770	1836			1759	
Flt Permitted	0.95	1.00			1.00		0.69	1.00			0.12	
Satd. Flow (perm)	1770	5052			5027		1294	1836			217	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	75	1731	78	0	520	43	29	66	7	33	35	28
RTOR Reduction (vph)	0	2	0	0	5	0	0	2	0	0	8	0
Lane Group Flow (vph)	75	1807	0	0	558	0	29	71	0	0	88	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1911			2041		251	357			36	
v/s Ratio Prot	c0.04	c0.36			c0.11			c0.04				
v/s Ratio Perm							0.02				c0.40	
v/c Ratio	0.38	0.95			0.27		0.12	0.20			2.44	
Uniform Delay, d1	74.3	54.1			35.7		59.7	60.7			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.2	11.2			0.3		0.2	0.3			721.7	
Delay (s)	75.5	65.3			36.0		60.0	61.0			796.7	
Level of Service	E	E			D		E	E			F	
Approach Delay (s)	65.7				36.0		60.7				796.7	
Approach LOS	E				D		E				F	
Intersection Summary												
HCM 2000 Control Delay	85.8			HCM 2000 Level of Service			F					
HCM 2000 Volume to Capacity ratio	0.97											
Actuated Cycle Length (s)	180.0			Sum of lost time (s)			22.3					
Intersection Capacity Utilization	69.8%			ICU Level of Service			C					
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

Horizon Year (1 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	1557	0	580	532	44	0	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3499							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3499							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1749	0	617	566	47	0	0	0	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	1749	0	617	613	0	0	0	0	0	0	4
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3180							609
v/s Ratio Prot		c0.34		c0.18	c0.18							0.00
v/s Ratio Perm												0.01
v/c Ratio		0.91		0.32	0.19							34.9
Uniform Delay, d1		53.0		21.2	0.9							1.00
Progression Factor		0.28		1.00	1.00							0.0
Incremental Delay, d2		2.6		0.1	0.0							34.9
Delay (s)		17.4		21.3	0.9							C
Level of Service		B		C	A							
Approach Delay (s)		17.4			11.2		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		14.9				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		55.8%				ICU Level of Service		B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave




















Horizon Year (1 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	4	220	0	0	319	42	0	0	0	107	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	5	256	0	0	362	48	0	0	0	162	0	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	410			256			665	675	256	651	651	386
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	410			256			665	675	256	651	651	386
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	57	100	98
cM capacity (veh/h)	1149			1309			365	374	783	380	386	662
Direction, Lane #												
Volume Total	260	410	0	176								
Volume Left	5	0	0	162								
Volume Right	0	48	0	14								
cSH	1149	1309	1700	393								
Volume to Capacity	0.00	0.00	0.00	0.45								
Queue Length 95th (ft)	0	0	0	56								
Control Delay (s)	0.2	0.0	0.0	21.3								
Lane LOS	A			A			C					
Approach Delay (s)	0.2	0.0	0.0	21.3								
Approach LOS				A			C					
Intersection Summary												
Average Delay		4.5										
Intersection Capacity Utilization		32.5%				ICU Level of Service		A				
Analysis Period (min)		15										













NBC Coastal Campus
22: 3rd St & Palm Ave

Horizon Year (1 CVN) with Alternative 1
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	303	13	87	333	25	15	40	70	29	34	14
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	10	388	17	98	374	28	26	70	123	63	74	30
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	10	405	98	402	219	167						
Volume Left (vph)	10	0	98	0	26	63						
Volume Right (vph)	0	17	0	28	123	30						
Hadj (s)	0.53	0.01	0.53	-0.01	-0.28	0.00						
Departure Headway (s)	7.4	6.8	7.3	6.7	6.8	7.3						
Degree Utilization, x	0.02	0.77	0.20	0.75	0.41	0.34						
Capacity (veh/h)	462	507	474	518	465	422						
Control Delay (s)	9.3	27.8	10.9	25.9	14.6	13.9						
Approach Delay (s)	27.4		23.0		14.6	13.9						
Approach LOS	D		C		B	B						
Intersection Summary												
Delay			21.8									
Level of Service			C									
Intersection Capacity Utilization			42.3%		ICU Level of Service		A					
Analysis Period (min)			15									






















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Horizon Year (1 CVN) with Alternative 1
Timing Plan: PM PEAK

									
Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Lane Configurations									
Volume (veh/h)	76	432	466	41	54	146			
Sign Control		Free	Free		Stop				
Grade		0%	0%		0%				
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85			
Hourly flow rate (vph)	78	445	542	48	64	172			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type	None		None						
Median storage (veh)									
Upstream signal (ft)	908								
pX, platoon unblocked									
vC, conflicting volume	590				1168	295			
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	590				1168	295			
tC, single (s)	4.1				6.8	6.9			
tC, 2 stage (s)									
tF (s)	2.2				3.5	3.3			
p0 queue free %	92				63	76			
cM capacity (veh/h)	982				172	702			
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1				
Volume Total	78	445	361	228	235				
Volume Left	78	0	0	0	64				
Volume Right	0	0	0	48	172				
cSH	982	1700	1700	1700	383				
Volume to Capacity	0.08	0.26	0.21	0.13	0.61				
Queue Length 95th (ft)	6	0	0	0	99				
Control Delay (s)	9.0	0.0	0.0	0.0	28.3				
Lane LOS	A				D				
Approach Delay (s)	1.3	0.0			28.3				
Approach LOS					D				
Intersection Summary									
Average Delay			5.5						
Intersection Capacity Utilization			41.4%	ICU Level of Service		A			
Analysis Period (min)			15						




NBC Coastal Campus
24: 7th St & Palm Ave

Horizon Year (1 CVN) with Alternative 1
Timing Plan: PM PEAK

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations														
Volume (vph)	29	441	30	32	468	4	56	27	23	13	45	31		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6		
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00		
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85		
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00		
Satd. Flow (prot)	1770	3505		1770	3535			1762			1842	1583		
Flt Permitted	0.46	1.00		0.44	1.00			0.79			0.89	1.00		
Satd. Flow (perm)	858	3505		823	3535			1436			1664	1583		
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76		
Adj. Flow (vph)	35	525	36	35	514	4	68	33	28	17	59	41		
RTOR Reduction (vph)	0	7	0	0	1	0	0	22	0	0	0	32		
Lane Group Flow (vph)	35	554	0	35	517	0	0	107	0	0	76	9		
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm		
Protected Phases	2			6			8			4				
Permitted Phases	2			6			8			4				
Actuated Green, G (s)	14.9	14.9		14.9	14.9		6.5			4	6.5	6.5		
Effective Green, g (s)	14.9	14.9		14.9	14.9		6.5				6.5	6.5		
Actuated g/C Ratio	0.49	0.49		0.49	0.49		0.21				0.21	0.21		
Clearance Time (s)	4.6	4.6		4.6	4.6		4.6				4.6	4.6		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0				3.0	3.0		
Lane Grp Cap (vph)	417	1706		400	1721		305				353	336		
v/s Ratio Prot	c0.16			0.15										
v/s Ratio Perm	0.04			0.04			c0.07				0.05	0.01		
v/c Ratio	0.08	0.32		0.09	0.30		0.35				0.22	0.03		
Uniform Delay, d1	4.2	4.8		4.2	4.7		10.3				9.9	9.5		
Progression Factor	1.00	1.00		1.00	1.00		1.00				1.00	1.00		
Incremental Delay, d2	0.1	0.1		0.1	0.1		0.7				0.3	0.0		
Delay (s)	4.3	4.9		4.3	4.8		11.0				10.3	9.6		
Level of Service	A	A		A	A		B				B	A		
Approach Delay (s)	4.9			4.8			11.0				10.0			
Approach LOS	A			A			B				B			
Intersection Summary														
HCM 2000 Control Delay	5.8			HCM 2000 Level of Service					A					
HCM 2000 Volume to Capacity ratio	0.33													
Actuated Cycle Length (s)	30.6			Sum of lost time (s)					9.2					
Intersection Capacity Utilization	45.6%			ICU Level of Service					A					
Analysis Period (min)	15													
c Critical Lane Group														

NBC Coastal Campus
25: Delaware St & Palm Ave

Horizon Year (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	490	9	0	0	7	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	598	11	0	0	10	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)	767					
pX, platoon unblocked						
vC, conflicting volume			609		598	598
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			609		598	598
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			970		465	503
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	598	11	15			
Volume Left	0	0	10			
Volume Right	0	11	4			
cSH	1700	1700	476			
Volume to Capacity	0.35	0.01	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.8			
Lane LOS			B			
Approach Delay (s)	0.0		12.8			
Approach LOS			B			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			35.8%	ICU Level of Service		A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	47	1863	143	66	958	149	112	102	71	197	90	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Flt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5031		1770	4982			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5031		1770	4982			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	50	1982	152	67	968	151	123	112	78	221	101	33
RTOR Reduction (vph)	0	5	0	0	11	0	0	18	0	0	4	0
Lane Group Flow (vph)	50	2129	0	67	1108	0	0	295	0	0	351	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2004		196	1984			649			658	
v/s Ratio Prot	0.03	c0.42		c0.04	0.22			c0.09			c0.10	
v/s Ratio Perm												
v/c Ratio	0.26	1.06		0.34	0.56			0.45			0.53	
Uniform Delay, d1	73.2	54.1		73.9	41.9			64.1			65.2	
Progression Factor	1.00	1.00		1.20	0.91			1.00			1.00	
Incremental Delay, d2	0.7	39.1		1.0	1.1			0.5			0.8	
Delay (s)	73.9	93.2		90.0	39.0			64.6			66.0	
Level of Service	E	F		F	D			E			E	
Approach Delay (s)		92.8			41.9			64.6			66.0	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		73.3			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		124.9%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	23	2185	65	56	1420	63	24	12	40	72	15	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	0.99			0.93			1.00	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.95	
Satd. Flow (prot)	1770	5063		1770	5053			1703			1770	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.59	
Satd. Flow (perm)	1770	5063		1770	5053			1541			1103	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.83	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	23	2230	66	58	1464	65	29	14	48	85	18	19
RTOR Reduction (vph)	0	1	0	0	2	0	0	24	0	0	17	0
Lane Group Flow (vph)	23	2295	0	58	1527	0	0	67	0	85	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.3		16.0	130.3			22.5			22.5	
Effective Green, g (s)	12.0	126.3		16.0	130.3			22.5			22.5	
Actuated g/C Ratio	0.07	0.70		0.09	0.72			0.12			0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	118	3552		157	3657			192			137	214
v/s Ratio Prot	0.01	c0.45		c0.03	c0.30						0.01	
v/s Ratio Perm								0.04			c0.08	
v/c Ratio	0.19	0.65		0.37	0.42			0.35			0.62	0.10
Uniform Delay, d1	79.4	14.7		77.2	9.8			72.1			74.7	69.7
Progression Factor	1.41	0.14		1.53	0.27			1.00			1.00	1.00
Incremental Delay, d2	0.2	0.3		1.1	0.3			1.1			8.4	0.2
Delay (s)	112.5	2.3		119.0	3.0			73.2			83.1	69.9
Level of Service	F	A		F	A			E			F	E
Approach Delay (s)		3.4			7.2			73.2			79.1	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.7			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		66.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰		↰↰	
Volume (vph)	30	2051	227	179	1505	93	148	46	146	176	51	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5009		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5009		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	32	2182	241	185	1552	96	161	50	159	238	69	31
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	132	0	4	0
Lane Group Flow (vph)	32	2416	0	185	1552	59	0	211	27	0	334	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2217		192	2364	736		305	269		575	
v/s Ratio Prot	0.02	c0.48		c0.10	c0.31			c0.12			c0.10	
v/s Ratio Perm					0.04			0.02				
v/c Ratio	0.20	1.09		0.96	0.66	0.08		0.69	0.10		0.58	
Uniform Delay, d1	76.1	50.1		79.8	37.1	26.8		70.2	63.0		68.7	
Progression Factor	1.00	1.03		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	47.1		54.0	1.4	0.2		12.2	0.7		4.2	
Delay (s)	76.4	98.8		133.9	38.5	27.0		82.4	63.8		73.0	
Level of Service	E	F		F	D	C		F	E		E	
Approach Delay (s)		98.5			47.5			74.4			73.0	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		76.3			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.89										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		108.6%			ICU Level of Service				G			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰						↰↰	
Volume (vph)	11	2196	57	195	1845	18	45	10	93	27	12	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5066		1770	5078			1680			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.88			0.80	
Satd. Flow (perm)	1770	5066		1770	5078			1503			1451	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.95	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	12	2440	63	205	1942	19	53	12	109	33	15	15
RTOR Reduction (vph)	0	2	0	0	1	0	0	78	0	0	12	0
Lane Group Flow (vph)	12	2501	0	205	1960	0	0	96	0	0	51	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.7			17.7	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.7			17.7	
Actuated g/C Ratio	0.01	0.47		0.13	0.60			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2404		233	3032			313			302	
v/s Ratio Prot	0.01	c0.49		c0.12	0.39							
v/s Ratio Perm								c0.06			0.04	
v/c Ratio	0.75	1.04		0.88	0.65			0.31			0.17	
Uniform Delay, d1	42.0	22.3		36.2	11.2			28.4			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	106.0	29.9		29.1	0.5			0.6			0.3	
Delay (s)	148.0	52.2		65.3	11.7			29.0			27.8	
Level of Service	F	D		E	B			C			C	
Approach Delay (s)		52.6			16.8			29.0			27.8	
Approach LOS		D			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		35.7			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		84.9			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		77.0%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↔↔↔		↔	↔↔↔	↔	↔	↔	↔	↔↔	↔	↔
Volume (vph)	216	2127	30	376	1854	636	76	203	611	674	274	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	227	2239	32	404	1994	684	81	216	650	733	298	284
RTOR Reduction (vph)	0	1	0	0	0	87	0	25	309	0	2	122
Lane Group Flow (vph)	227	2270	0	404	1994	597	81	425	107	733	324	134
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.6	36.3		45.0	69.7	69.7	8.9	40.0	40.0	11.8	42.9	42.9
Effective Green, g (s)	11.6	36.3		45.0	69.7	69.7	8.9	40.0	40.0	11.8	42.9	42.9
Actuated g/C Ratio	0.07	0.23		0.29	0.45	0.45	0.06	0.26	0.26	0.08	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	256	1188		513	2286	711	101	421	388	261	483	416
v/s Ratio Prot	0.07	c0.45		c0.23	c0.39		0.05	c0.26		c0.21	c0.19	
v/s Ratio Perm						0.38			0.07			0.09
v/c Ratio	0.89	1.91		0.79	0.87	0.84	0.80	1.01	0.28	2.81	0.67	0.32
Uniform Delay, d1	71.0	59.4		50.6	38.6	37.7	72.2	57.5	45.9	71.6	49.8	44.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	28.5	413.1		7.8	4.0	8.6	35.2	46.1	0.4	824.4	3.6	0.5
Delay (s)	99.6	472.4		58.4	42.6	46.3	107.4	103.6	46.3	896.0	53.4	44.9
Level of Service	F	F		E	D	D	F	F	D	F	D	D
Approach Delay (s)		438.6			45.5			78.8			521.4	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		254.5										
HCM 2000 Volume to Capacity ratio		1.36										
Actuated Cycle Length (s)		155.0							21.9			
Intersection Capacity Utilization		138.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (1 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔↔	↔↔		↔	↔↔
Volume (vph)	0	581	971	0	504	1901
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	653	1033	0	554	2089
RTOR Reduction (vph)	0	0	0	0	0	2
Lane Group Flow (vph)	0	653	1033	0	554	2087
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.18	c0.29		0.31	c0.75
v/s Ratio Perm						
v/c Ratio		0.37	1.20		0.84	1.18
Uniform Delay, d1		12.0	30.3		22.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	102.8		9.0	85.1
Delay (s)		12.1	133.1		31.7	99.6
Level of Service		B	F		C	F
Approach Delay (s)		12.1	133.1		85.4	
Approach LOS		B	F		F	
Intersection Summary						
HCM 2000 Control Delay		85.7				
HCM 2000 Volume to Capacity ratio		1.27				
Actuated Cycle Length (s)		80.0				14.2
Intersection Capacity Utilization		97.2%				
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	1078	0	0	604	287	492	3	123	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.25	0.25	0.25	
Adj. Flow (vph)	0	1123	0	0	679	322	529	3	132	0	0	0
RTOR Reduction (vph)	0	0	0	0	96	0	0	22	0	0	0	0
Lane Group Flow (vph)	0	1123	0	0	905	0	339	303	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		21.1			21.1		15.5	15.5				
Effective Green, g (s)		21.1			21.1		15.5	15.5				
Actuated g/C Ratio		0.47			0.47		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1674			1593		584	561				
v/s Ratio Prot		0.32			0.27							
v/s Ratio Perm							0.20	0.19				
v/c Ratio		0.67			0.57		0.58	0.54				
Uniform Delay, d1		9.1			8.5		11.9	11.7				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		1.1			0.5		1.5	1.0				
Delay (s)		10.1			8.9		13.4	12.7				
Level of Service		B			A		B	B				
Approach Delay (s)		10.1			8.9		13.0			0.0		
Approach LOS		B			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		10.4			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		44.6			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		53.9%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Horizon Year (1 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	11	9	4	38	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	18	10	4	55	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	79	55	55			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	79	55	55			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	918	1012	1550			
Direction, Lane #						
Volume Total	18	14	55			
Volume Left	0	10	0			
Volume Right	18	0	0			
cSH	1012	1550	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.6				
Intersection Capacity Utilization		17.4%		ICU Level of Service		
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St










Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1303	35	0	3182	535	0	0	479	0	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1570	42	0	3459	582	0	0	599	0	0	13
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4060			1632			2797	5671	584	4313	5402	1484
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4060			1632			2797	5671	584	4313	5402	1484
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	55	100	100	88
cM capacity (veh/h)	41			387			7	0	1334	0	0	110
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	628	628	356	1383	1383	1273	599	13				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	42	0	0	582	599	13				
cSH	1700	1700	1700	1700	1700	1700	1334	110				
Volume to Capacity	0.37	0.37	0.21	0.81	0.81	0.75	0.45	0.12				
Queue Length 95th (ft)	0	0	0	0	0	0	59	10				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.9	42.1				
Lane LOS							A	E				
Approach Delay (s)	0.0			0.0			9.9	42.1				
Approach LOS							A	E				
Intersection Summary												
Average Delay				1.0								
Intersection Capacity Utilization				88.5%			ICU Level of Service		E			
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1164	204	0	3081	0	232	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1323	232	0	3423	0	252	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1575	2620		597	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1575	2620		597	
tC, single (s)			4.1	6.8		6.9	
tC, 2 stage (s)							
tF (s)			2.2	3.5		3.3	
p0 queue free %			100	100		42	
cM capacity (veh/h)			408	19		431	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	529	529	496	1141	1141	1141	252
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	232	0	0	0	252
cSH	1700	1700	1700	1700	1700	1700	431
Volume to Capacity	0.31	0.31	0.29	0.67	0.67	0.67	0.58
Queue Length 95th (ft)	0	0	0	0	0	0	91
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	24.4
Lane LOS							C
Approach Delay (s)	0.0			0.0			24.4
Approach LOS							C
Intersection Summary							
Average Delay	1.2						
Intersection Capacity Utilization	74.4%			ICU Level of Service		D	
Analysis Period (min)	15						

NBC Coastal Campus
3: Orange Ave & Third St

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↔↔↔	↔↔↔		↔	↔↔			↔↔	
Volume (vph)	0	0	0	1457	1545	251	43	94	0	0	260	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			1.00	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4643		1770	3539			3522	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4643		1770	3539			3522	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1567	1661	270	58	127	0	0	299	7
RTOR Reduction (vph)	0	0	0	0	7	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	862	2629	0	58	127	0	0	305	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.0	131.0		20.0	46.3			21.1	
Effective Green, g (s)				131.0	131.0		20.0	46.3			21.1	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1055	3219		187	867			393	
v/s Ratio Prot				c0.57	0.57		c0.03	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.82	0.82		0.31	0.15			0.78	
Uniform Delay, d1				20.5	20.5		78.1	55.8			81.6	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				5.0	1.7		0.9	0.1			9.3	
Delay (s)				25.5	22.2		79.0	55.9			90.9	
Level of Service				C	C		E	E			F	
Approach Delay (s)		0.0			23.0			63.2			90.9	
Approach LOS		A			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		30.1		HCM 2000 Level of Service					C			
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		188.9		Sum of lost time (s)					16.8			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔↔	↔					↔↔	↔	↔↔	↔↔	
Volume (vph)	0	503	68	0	0	0	0	129	207	437	1339	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3177	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3177	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	0	547	74	0	0	0	0	150	225	475	1395	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	66	66	0	0	0
Lane Group Flow (vph)	0	547	45	0	0	0	0	192	51	475	1395	0
Turn Type		NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		60.0	60.0					62.2	62.2	35.0	100.0	
Effective Green, g (s)		60.0	60.0					62.2	62.2	35.0	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.20	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1151	522	700	2062	
v/s Ratio Prot		c0.11						0.06		0.14	c0.39	
v/s Ratio Perm			0.03						0.04			
v/c Ratio		0.31	0.08					0.17	0.10	0.68	0.68	
Uniform Delay, d1		40.7	37.3					37.1	36.2	63.1	24.7	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.1	2.6	0.9	
Delay (s)		40.8	37.4					37.2	36.2	65.7	25.6	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		40.4			0.0			36.9			35.8	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		36.9		HCM 2000 Level of Service					D			
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)					14.4			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗		↖	↗
Volume (vph)	253	8	1286	702	0	1204
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Flt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3309			3362
Flt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3309			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	294	9	1383	755	0	1267
RTOR Reduction (vph)	1	0	59	0	0	0
Lane Group Flow (vph)	302	0	2079	0	0	1267
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	18.5		43.4			43.4
Effective Green, g (s)	18.5		43.4			43.4
Actuated g/C Ratio	0.26		0.61			0.61
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	414		2022			2055
v/s Ratio Prot	c0.19		c0.63			0.38
v/s Ratio Perm						
v/c Ratio	0.73		1.03			0.62
Uniform Delay, d1	24.0		13.8			8.6
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	6.3		27.6			0.6
Delay (s)	30.3		41.4			9.2
Level of Service	C		D			A
Approach Delay (s)	30.3		41.4			9.2
Approach LOS	C		D			A
Intersection Summary						
HCM 2000 Control Delay			29.5		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.99			
Actuated Cycle Length (s)			71.0		Sum of lost time (s)	12.1
Intersection Capacity Utilization			85.5%		ICU Level of Service	E
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Horizon Year (1 CVN) with Alternative 1 No Hooper



















Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↗	↖	↗	↖	↖	↗	↖
Volume (vph)	55	3	12	9	0	7	23	1534	30	46	1369	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Flt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1692	1583		1705		1770	3529		1770	3523	
Flt Permitted	0.74	0.77	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1303	1357	1583		1508		1770	3529		1770	3523	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.84	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	64	3	14	18	0	14	27	1826	36	50	1488	47
RTOR Reduction (vph)	0	0	12	0	27	0	0	1	0	0	1	0
Lane Group Flow (vph)	33	34	2	0	5	0	27	1861	0	50	1534	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	16.1	16.1	16.1		16.1		3.0	69.4		4.0	70.4	
Effective Green, g (s)	16.1	16.1	16.1		16.1		3.0	69.4		4.0	70.4	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.67		0.04	0.68	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	210	246		234		51	2364		68	2394	
v/s Ratio Prot							0.02	c0.53		c0.03	0.44	
v/s Ratio Perm	c0.03	0.03	0.00		0.00							
v/c Ratio	0.16	0.16	0.01		0.02		0.53	0.79		0.74	0.64	
Uniform Delay, d1	37.9	37.9	37.0		37.1		49.6	11.9		49.3	9.4	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4	0.0		0.0		9.6	1.8		33.4	0.6	
Delay (s)	38.3	38.3	37.0		37.1		59.2	13.7		82.7	10.0	
Level of Service	D	D	D		D		E	B		F	B	
Approach Delay (s)		38.1			37.1			14.4			12.3	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			14.2				HCM 2000 Level of Service			B		
HCM 2000 Volume to Capacity ratio			0.67									
Actuated Cycle Length (s)			103.6				Sum of lost time (s)			14.1		
Intersection Capacity Utilization			59.6%				ICU Level of Service			B		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Horizon Year (1 CVN) with Alternative 1 No Hooper
























Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	27	0	1470	9	499	861	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Frt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.66	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	41	0	1615	10	509	879	0
RTOR Reduction (vph)	0	0	0	0	37	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	4	0	0	1615	5	509	879	0
Turn Type					NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.46		c0.29	0.25	
v/s Ratio Perm									0.00			
v/c Ratio					0.03			0.97	0.01	0.83	0.29	
Uniform Delay, d1					60.6			37.5	20.5	43.7	2.4	
Progression Factor					1.00			0.38	1.00	1.00	1.00	
Incremental Delay, d2					0.1			10.8	0.0	9.6	0.3	
Delay (s)					60.7			25.3	20.5	53.3	2.6	
Level of Service					E			C	C	D	A	
Approach Delay (s)		0.0			60.7			25.3			21.2	
Approach LOS		A			E			C			C	
Intersection Summary												
HCM 2000 Control Delay			23.9		HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio			0.86									
Actuated Cycle Length (s)			145.0		Sum of lost time (s)				18.9			
Intersection Capacity Utilization			87.1%		ICU Level of Service				E			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	44	14	2	61	135	137	1304	7	172	424	311
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.88		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3274	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3274	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	42	68	22	2	69	153	152	1449	8	198	487	357
RTOR Reduction (vph)	0	0	21	0	0	129	0	0	4	0	89	0
Lane Group Flow (vph)	42	68	1	0	71	24	152	1449	4	198	755	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Effective Green, g (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Actuated g/C Ratio	0.06	0.06	0.06		0.16	0.16	0.31	0.46	0.46	0.19	0.34	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	97	102	77		295	239	549	1625	618	341	1119	
v/s Ratio Prot	0.02	c0.04			c0.04		0.09	c0.41		c0.11	0.23	
v/s Ratio Perm			0.00			0.02			0.00			
v/c Ratio	0.43	0.67	0.02		0.24	0.10	0.28	0.89	0.01	0.58	0.67	
Uniform Delay, d1	66.3	67.2	64.8		53.4	52.2	37.7	35.9	21.3	53.2	40.8	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.95	0.93	
Incremental Delay, d2	3.1	15.2	0.1		0.4	0.2	0.3	7.9	0.0	2.5	3.2	
Delay (s)	69.4	82.4	64.9		53.8	52.4	38.0	43.8	21.3	53.2	41.2	
Level of Service	E	F	E		D	D	D	D	C	D	D	
Approach Delay (s)		75.4			52.8			43.1			43.5	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay	45.4			HCM 2000 Level of Service					D			
HCM 2000 Volume to Capacity ratio	0.69											
Actuated Cycle Length (s)	145.0			Sum of lost time (s)					19.4			
Intersection Capacity Utilization	92.3%			ICU Level of Service					F			
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖			↖↗
Volume (veh/h)	46	215	5	45	200	10
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	54	253	6	56	217	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	480	34			62	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	480	34			62	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	88	76			86	
cM capacity (veh/h)	468	1039			1540	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	307	62	228			
Volume Left	54	0	217			
Volume Right	253	56	0			
cSH	1261	1700	1540			
Volume to Capacity	0.24	0.04	0.14			
Queue Length 95th (ft)	24	0	12			
Control Delay (s)	10.3	0.0	7.4			
Lane LOS	B		A			
Approach Delay (s)	10.3	0.0	7.4			
Approach LOS	B					
Intersection Summary						
Average Delay		8.1				
Intersection Capacity Utilization		28.3%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖↗	↖		↖↗
Volume (vph)	49	3	1462	421	0	395
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1755		3539	1519		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1755		3539	1519		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	65	4	1539	443	0	617
RTOR Reduction (vph)	4	0	0	131	0	0
Lane Group Flow (vph)	65	0	1539	312	0	617
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.1		30.9	30.9		30.9
Effective Green, g (s)	3.1		30.9	30.9		30.9
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	123		2491	1069		2491
v/s Ratio Prot	c0.04		c0.43			0.17
v/s Ratio Perm				0.21		
v/c Ratio	0.53		0.62	0.29		0.25
Uniform Delay, d1	19.7		3.4	2.4		2.3
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.3		0.5	0.2		0.1
Delay (s)	24.0		3.9	2.6		2.4
Level of Service	C		A	A		A
Approach Delay (s)	24.0		3.6			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.8		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.61				
Actuated Cycle Length (s)		43.9		Sum of lost time (s)	9.9	
Intersection Capacity Utilization		52.8%		ICU Level of Service	A	
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (veh/h)	0	18	2366	7	7	444
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	31	2544	8	10	653
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2895	1276			2552	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2895	1276			2552	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	80			94	
cM capacity (veh/h)	12	158			171	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	31	1696	856	10	326	326
Volume Left	0	0	0	10	0	0
Volume Right	31	0	8	0	0	0
cSH	158	1700	1700	171	1700	1700
Volume to Capacity	0.20	1.00	0.50	0.06	0.19	0.19
Queue Length 95th (ft)	18	0	0	5	0	0
Control Delay (s)	33.3	0.0	0.0	27.4	0.0	0.0
Lane LOS	D			D		
Approach Delay (s)	33.3	0.0		0.4		
Approach LOS	D					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		75.6%		ICU Level of Service		D
Analysis Period (min)		15				

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (vph)	20	101	2265	14	44	400
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	25	125	2435	15	64	580
RTOR Reduction (vph)	0	2	0	1	0	0
Lane Group Flow (vph)	25	123	2435	14	64	580
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases				2		
Actuated Green, G (s)	16.4	26.5	68.2	68.2	5.0	82.0
Effective Green, g (s)	16.4	21.4	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.20	0.63	0.63	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	269	314	2241	1002	82	2694
v/s Ratio Prot	0.01	c0.08	c0.69		c0.04	0.16
v/s Ratio Perm				0.01		
v/c Ratio	0.09	0.39	1.09	0.01	0.78	0.22
Uniform Delay, d1	39.3	37.5	19.8	7.3	50.8	3.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.8	47.3	0.0	37.0	0.0
Delay (s)	39.4	38.3	67.0	7.3	87.8	3.7
Level of Service	D	D	E	A	F	A
Approach Delay (s)	38.5		66.6			12.1
Approach LOS	D		E			B
Intersection Summary						
HCM 2000 Control Delay		54.5		HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio		0.94				
Actuated Cycle Length (s)		107.7		Sum of lost time (s)		18.1
Intersection Capacity Utilization		79.7%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	38	2239	30	0	418
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	61	2357	32	0	565
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2655	1194			2388	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2655	1194			2388	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	66			100	
cM capacity (veh/h)	18	179			199	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	61	1571	817	282	282	
Volume Left	0	0	0	0	0	
Volume Right	61	0	32	0	0	
cSH	179	1700	1700	1700	1700	
Volume to Capacity	0.34	0.92	0.48	0.17	0.17	
Queue Length 95th (ft)	36	0	0	0	0	
Control Delay (s)	35.2	0.0	0.0	0.0	0.0	
Lane LOS	E					
Approach Delay (s)	35.2	0.0		0.0		
Approach LOS	E					
Intersection Summary						
Average Delay			0.7			
Intersection Capacity Utilization			72.8%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	12	8	2269	38	18	391
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	19	13	2364	40	22	483
RTOR Reduction (vph)	0	2	0	10	0	0
Lane Group Flow (vph)	19	11	2364	30	22	483
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.5	4.6	58.8	58.8	3.1	69.4
Effective Green, g (s)	1.5	4.6	58.8	58.8	3.1	69.4
Actuated g/C Ratio	0.02	0.06	0.76	0.76	0.04	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	34	93	2685	1201	70	3169
v/s Ratio Prot	c0.01	0.00	c0.67		c0.01	0.14
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.56	0.12	0.88	0.03	0.31	0.15
Uniform Delay, d1	37.7	34.5	6.8	2.3	36.2	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	18.4	0.6	3.7	0.0	2.6	0.0
Delay (s)	56.1	35.1	10.5	2.3	38.7	0.5
Level of Service	E	D	B	A	D	A
Approach Delay (s)	47.6		10.4			2.2
Approach LOS	D		B			A
Intersection Summary						
HCM 2000 Control Delay			9.4		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.84			
Actuated Cycle Length (s)			77.5		Sum of lost time (s)	14.1
Intersection Capacity Utilization			75.6%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	3	0	53	2	0	51	3	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	12	0	98	4	0	81	5	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	12	0	102	81	5					
Volume Left (vph)	0	0	98	0	0					
Volume Right (vph)	0	0	0	0	5					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.2	3.2					
Degree Utilization, x	0.01	0.00	0.12	0.09	0.00					
Capacity (veh/h)	822	1121	809	828	1121					
Control Delay (s)	7.3	6.2	7.9	7.6	6.2					
Approach Delay (s)	7.3		7.9	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.7							
Level of Service			A							
Intersection Capacity Utilization			19.7%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (1 CVN) with Alternative 1 No Hooper








Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↑		↑	↑	↑	↑	↑			
Volume (vph)	3	43	0	0	38	262	4	2042	59	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.72	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1346	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	4	57	0	0	53	364	4	2172	63	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	54	0	0	27	0	0	0
Lane Group Flow (vph)	4	57	0	0	53	310	4	2172	36	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	18.5	18.5			18.5	18.5	47.7	43.6	43.6			
Effective Green, g (s)	18.5	18.5			18.5	18.5	47.7	43.6	43.6			
Actuated g/C Ratio	0.25	0.25			0.25	0.25	0.63	0.58	0.58			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	329	456			456	387	1118	2043	914			
v/s Ratio Prot		0.03			0.03		0.00	c0.61				
v/s Ratio Perm	0.00					c0.20			0.02			
v/c Ratio	0.01	0.12			0.12	0.80	0.00	1.06	0.04			
Uniform Delay, d1	21.6	22.2			22.1	26.8	5.1	15.9	6.9			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	11.3	0.0	39.2	0.0			
Delay (s)	21.6	22.3			22.3	38.0	5.1	55.1	6.9			
Level of Service	C	C			C	D	A	E	A			
Approach Delay (s)		22.3				36.0		53.7			0.0	
Approach LOS		C				D		D			A	
Intersection Summary												
HCM 2000 Control Delay		50.3						HCM 2000 Level of Service			D	
HCM 2000 Volume to Capacity ratio		0.98										
Actuated Cycle Length (s)		75.5				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		92.3%				ICU Level of Service			F			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (1 CVN) with Alternative 1 No Hooper













Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	0	1810	0	355	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	0	1885	0	449	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1392	225	449		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1392	225	449		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	133	779	1107		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	943	943	300	150	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.55	0.55	0.18	0.09	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			53.4%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	470	2	45	50	8	21	30	1656	11	4	138	214
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	1.00		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1594		1770	1661		1770	3536		1770	3217	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1594		1770	1661		1770	3536		1770	3217	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	534	2	51	161	26	68	32	1743	12	6	200	310
RTOR Reduction (vph)	0	34	0	0	65	0	0	1	0	0	190	0
Lane Group Flow (vph)	534	19	0	161	29	0	32	1754	0	6	320	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	32.4	32.4		5.0	5.0		3.3	39.9		1.0	37.6	
Effective Green, g (s)	32.4	32.4		5.0	5.0		3.3	39.9		1.0	37.6	
Actuated g/C Ratio	0.33	0.33		0.05	0.05		0.03	0.41		0.01	0.39	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	590	531		91	85		60	1451		18	1244	
v/s Ratio Prot	c0.30	0.01		c0.09	0.02		c0.02	c0.50		0.00	0.10	
v/s Ratio Perm												
v/c Ratio	0.91	0.04		1.77	0.35		0.53	1.21		0.33	0.26	
Uniform Delay, d1	30.9	21.9		46.1	44.5		46.2	28.7		47.8	20.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	17.4	0.0		386.9	2.5		8.8	100.8		10.6	0.1	
Delay (s)	48.3	21.9		433.0	47.0		55.0	129.4		58.4	20.4	
Level of Service	D	C		F	D		E	F		E	C	
Approach Delay (s)		45.9			290.7			128.1			20.8	
Approach LOS		D			F			F			C	
Intersection Summary												
HCM 2000 Control Delay			108.4					HCM 2000 Level of Service			F	
HCM 2000 Volume to Capacity ratio			1.12									
Actuated Cycle Length (s)			97.2					Sum of lost time (s)			18.9	
Intersection Capacity Utilization			87.2%					ICU Level of Service			E	
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	9	206	19	0	1494	20	40	27	1900	23	48	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5022			5075		1770	1846			1732	
Flt Permitted	0.95	1.00			1.00		0.65	1.00			0.14	
Satd. Flow (perm)	1770	5022			5075		1210	1846			250	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	10	231	21	0	1642	22	48	32	2	30	62	78
RTOR Reduction (vph)	0	6	0	0	1	0	0	2	0	0	17	0
Lane Group Flow (vph)	10	246	0	0	1663	0	48	32	0	0	153	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1899			2061		235	358			41	
v/s Ratio Prot	c0.01	0.05			c0.33			0.02				
v/s Ratio Perm							c0.04				c0.61	
v/c Ratio	0.05	0.13			0.81		0.20	0.09			3.74	
Uniform Delay, d1	71.5	36.6			47.2		60.8	59.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			3.2		0.4	0.1			1290.2	
Delay (s)	71.6	36.7			50.4		61.3	59.6			1365.2	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		38.0			50.4			60.5			1365.2	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		151.9			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.12										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		67.7%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	223	0	935	1504	10	0	0	0	0	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	272	0	995	1600	11	0	0	0	0	0	20
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	272	0	995	1611	0	0	0	0	0	0	8
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.05		c0.29	c0.46							
v/s Ratio Perm												0.00
v/c Ratio		0.14		0.58	0.50							0.01
Uniform Delay, d1		36.7		31.7	1.4							34.9
Progression Factor		0.42		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.5	0.1							0.0
Delay (s)		15.6		32.2	1.5							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.6			13.2			0.0				35.0
Approach LOS		B			B			A				C
Intersection Summary												
HCM 2000 Control Delay		13.6			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		63.6%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	17	238	0	0	131	755	0	0	0	121	0	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	20	283	0	0	141	812	0	0	0	133	0	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	953			283			877	1276	283	871	871	547
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	953			283			877	1276	283	871	871	547
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			100			100	100	100	50	100	99
cM capacity (veh/h)	721			1279			260	162	756	266	281	537
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	304	953	0	140								
Volume Left	20	0	0	133								
Volume Right	0	812	0	7								
cSH	721	1279	1700	272								
Volume to Capacity	0.03	0.00	0.00	0.51								
Queue Length 95th (ft)	2	0	0	68								
Control Delay (s)	1.0	0.0	0.0	31.3								
Lane LOS	A			A								
Approach Delay (s)	1.0	0.0	0.0	31.3								
Approach LOS				A								
Intersection Summary												
Average Delay				3.3								
Intersection Capacity Utilization				67.2%								
Analysis Period (min)				15								
ICU Level of Service C												

NBC Coastal Campus
22: 3rd St & Palm Ave

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	350	5	27	862	25	12	15	129	12	11	15
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	9	407	6	29	927	27	15	19	159	15	14	19
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	413	29	954	193	48						
Volume Left (vph)	9	0	29	0	15	15						
Volume Right (vph)	0	6	0	27	159	19						
Hadj (s)	0.53	0.02	0.53	0.01	-0.45	-0.14						
Departure Headway (s)	6.7	6.2	6.5	5.9	6.3	7.1						
Degree Utilization, x	0.02	0.71	0.05	1.0	0.34	0.09						
Capacity (veh/h)	531	570	541	610	541	450						
Control Delay (s)	8.6	21.3	8.6	281.6	12.5	10.9						
Approach Delay (s)	21.0		273.6		12.5	10.9						
Approach LOS	C		F		B	B						
Intersection Summary												
Delay				170.6								
Level of Service				F								
Intersection Capacity Utilization				63.4%								
Analysis Period (min)				15								
ICU Level of Service B												























NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱	↕	↕	↰	↱
Volume (veh/h)	244	489	825	156	18	234
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	309	619	1006	190	25	330
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked	0.80				0.80	0.80
vC, conflicting volume	1196				2338	598
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	751				2174	5
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	55				0	62
cM capacity (veh/h)	685				17	863
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	309	619	671	526	355	
Volume Left	309	0	0	0	25	
Volume Right	0	0	0	190	330	
cSH	685	1700	1700	1700	194	
Volume to Capacity	0.45	0.36	0.39	0.31	1.83	
Queue Length 95th (ft)	59	0	0	0	635	
Control Delay (s)	14.5	0.0	0.0	0.0	436.0	
Lane LOS	B				F	
Approach Delay (s)	4.8		0.0		436.0	
Approach LOS					F	
Intersection Summary						
Average Delay			64.2			
Intersection Capacity Utilization			66.8%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 				
Volume (vph)	17	481	17	27	819	0	74	33	83	2	27	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1719			1857	1583
Flt Permitted	0.20	1.00		0.39	1.00			0.85			0.98	1.00
Satd. Flow (perm)	372	3521		722	3539			1497			1826	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	22	625	22	35	1064	0	112	50	126	3	47	48
RTOR Reduction (vph)	0	2	0	0	0	0	0	36	0	0	0	33
Lane Group Flow (vph)	22	645	0	35	1064	0	0	252	0	0	50	15
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	25.5	25.5		25.5	25.5			15.5			15.5	15.5
Effective Green, g (s)	25.5	25.5		25.5	25.5			15.5			15.5	15.5
Actuated g/C Ratio	0.51	0.51		0.51	0.51			0.31			0.31	0.31
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	188	1788		366	1797			462			563	488
v/s Ratio Prot		0.18			c0.30							
v/s Ratio Perm	0.06			0.05				c0.17			0.03	0.01
v/c Ratio	0.12	0.36		0.10	0.59			0.55			0.09	0.03
Uniform Delay, d1	6.5	7.4		6.4	8.7			14.4			12.3	12.1
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.3	0.1		0.1	0.5			1.3			0.1	0.0
Delay (s)	6.7	7.6		6.5	9.2			15.7			12.4	12.1
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)		7.5			9.1			15.7			12.3	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay			9.7		HCM 2000 Level of Service				A			
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		50.2			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		53.4%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗			↖	
Volume (veh/h)	567	5	0	0	3	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	616	5	0	0	3	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			622		616	616
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			622		616	616
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			959		454	490
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	616	5	10			
Volume Left	0	0	3			
Volume Right	0	5	7			
cSH	1700	1700	478			
Volume to Capacity	0.36	0.00	0.02			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.7			
Lane LOS			B			
Approach Delay (s)	0.0		12.7			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			39.8%		ICU Level of Service	A
Analysis Period (min)			15			









NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑	↘	↖	↑↑↑			↗			↖	↘
Volume (vph)	24	777	40	27	2109		188	42	58	102	52	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5048		1770	5068			3324			3363	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5048		1770	5068			3324			3363	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	29	925	48	30	2318	55	227	51	70	124	63	34
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	29	970	0	30	2372	0	0	336	0	0	213	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2122		157	2018			646			653	
v/s Ratio Prot	0.02	c0.19		c0.02	c0.47			c0.10			c0.06	
v/s Ratio Perm												
v/c Ratio	0.15	0.46		0.19	1.18			0.52			0.33	
Uniform Delay, d1	72.3	37.4		76.0	54.1			65.0			62.4	
Progression Factor	1.00	1.00		1.19	0.86			1.00			1.00	
Incremental Delay, d2	0.4	0.7		0.4	83.0			0.7			0.3	
Delay (s)	72.7	38.1		90.8	129.5			65.7			62.6	
Level of Service	E	D		F	F			E			E	
Approach Delay (s)		39.1			129.0			65.7			62.6	
Approach LOS		D			F			E			E	
Intersection Summary												
HCM 2000 Control Delay		97.1			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		78.9%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	1040	40	23	2307	14	21	5	35	63	12	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5081			1690		1770	1699	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.63	1.00	
Satd. Flow (perm)	1770	5057		1770	5081			1535		1182	1699	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	3	1169	45	26	2622	16	29	7	48	90	17	24
RTOR Reduction (vph)	0	2	0	0	0	0	0	27	0	0	20	0
Lane Group Flow (vph)	3	1212	0	26	2638	0	0	57	0	90	21	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			255		197	283	
v/s Ratio Prot	0.00	0.24		c0.01	c0.52						0.01	
v/s Ratio Perm								0.04		c0.08		
v/c Ratio	0.08	0.35		0.22	0.71			0.22		0.46	0.07	
Uniform Delay, d1	86.2	11.6		79.6	13.5			64.9		67.7	63.3	
Progression Factor	1.61	0.25		1.41	0.40			1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.3		0.4	0.5			0.4		1.7	0.1	
Delay (s)	139.8	3.2		112.9	5.9			65.4		69.3	63.4	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.5			7.0			65.4			67.5	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		9.1			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		78.3%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	1120	72	110	2140	59	168	22	104	192	41	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1258	81	133	2578	71	189	25	117	256	55	23
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	97	0	3	0
Lane Group Flow (vph)	4	1335	0	133	2578	41	0	214	20	0	331	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.26		c0.08	c0.51			c0.12			c0.10	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.10	0.60		0.68	0.95	0.05		0.70	0.07		0.57	
Uniform Delay, d1	86.2	38.0		76.9	40.0	20.3		70.1	62.5		68.4	
Progression Factor	1.19	0.60		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	1.1		9.0	9.4	0.1		6.7	0.1		1.4	
Delay (s)	103.4	24.0		85.9	49.5	20.4		76.8	62.6		69.7	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		24.2			50.5			71.8			69.7	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		45.9			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		95.3%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	16	1423	29	50	2288	14	18	8	56	44	3	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1673			1724	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.79	
Satd. Flow (perm)	1770	5070		1770	5081			1562			1406	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	17	1547	32	58	2660	16	21	10	67	58	4	32
RTOR Reduction (vph)	0	2	0	0	0	0	0	53	0	0	25	0
Lane Group Flow (vph)	17	1577	0	58	2676	0	0	45	0	0	69	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	1.5	37.9		2.7	39.1			15.3			15.3	
Effective Green, g (s)	1.5	37.9		2.7	39.1			15.3			15.3	
Actuated g/C Ratio	0.02	0.53		0.04	0.55			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	37	2683		66	2774			333			300	
v/s Ratio Prot	0.01	0.31		c0.03	c0.53							
v/s Ratio Perm								0.03			c0.05	
v/c Ratio	0.46	0.59		0.88	0.96			0.14			0.23	
Uniform Delay, d1	34.6	11.5		34.3	15.6			22.8			23.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	8.8	0.3		69.1	10.1			0.2			0.4	
Delay (s)	43.4	11.8		103.4	25.7			23.0			23.7	
Level of Service	D	B		F	C			C			C	
Approach Delay (s)		12.2			27.3			23.0			23.7	
Approach LOS		B			C			C			C	
Intersection Summary												
HCM 2000 Control Delay		21.8			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		71.6			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		62.9%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	105	1438	34	280	2217	246	87	83	884	269	106	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	122	1672	40	298	2359	262	97	92	982	320	126	105
RTOR Reduction (vph)	0	2	0	0	0	69	0	147	173	0	3	65
Lane Group Flow (vph)	122	1710	0	298	2359	193	97	397	357	320	134	29
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.1		17.9	47.0	47.0	8.6	35.4	35.4	10.3	37.1	37.1
Effective Green, g (s)	6.0	35.1		17.9	47.0	47.0	8.6	35.4	35.4	10.3	37.1	37.1
Actuated g/C Ratio	0.05	0.29		0.15	0.39	0.39	0.07	0.29	0.29	0.09	0.31	0.31
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	170	1474		262	1981	616	126	454	441	293	537	462
v/s Ratio Prot	0.04	0.34		c0.17	c0.46		0.05	c0.26		c0.09	0.08	
v/s Ratio Perm						0.12			0.24			0.02
v/c Ratio	0.72	1.16		1.14	1.19	0.31	0.77	0.87	0.81	1.09	0.25	0.06
Uniform Delay, d1	56.5	42.8		51.4	36.8	25.6	55.0	40.5	39.5	55.1	31.3	29.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.5	80.0		97.8	91.2	0.3	24.2	16.9	10.5	79.5	0.2	0.1
Delay (s)	69.9	122.7		149.1	128.0	25.9	79.2	57.3	50.0	134.6	31.6	29.5
Level of Service	E	F		F	F	C	E	E	D	F	C	C
Approach Delay (s)		119.2			121.0			55.8			91.1	
Approach LOS		F			F			E			F	
Intersection Summary												
HCM 2000 Control Delay		106.2			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.09										
Actuated Cycle Length (s)		120.6			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		95.4%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	326	1244	0	178	1500
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	366	1338	0	198	1667
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	366	1338	0	198	1664
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.10	c0.38		0.11	c0.60
v/s Ratio Perm						
v/c Ratio		0.14	1.15		0.96	1.09
Uniform Delay, d1		2.5	26.8		35.1	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	76.4		49.7	50.2
Delay (s)		2.5	103.2		84.8	68.2
Level of Service		A	F		F	E
Approach Delay (s)		2.5	103.2		69.9	
Approach LOS		A	F		E	
Intersection Summary						
HCM 2000 Control Delay		75.5		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		1.19				
Actuated Cycle Length (s)		80.0		Sum of lost time (s)		14.2
Intersection Capacity Utilization		76.2%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	504	0	0	489	600	872	2	165	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3247		1681	1629				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3247		1681	1629				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	579	0	0	532	652	948	2	179	0	0	0
RTOR Reduction (vph)	0	0	0	0	401	0	0	32	0	0	0	0
Lane Group Flow (vph)	0	579	0	0	783	0	578	519	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		18.8			18.8		22.0	22.0				
Effective Green, g (s)		18.8			18.8		22.0	22.0				
Actuated g/C Ratio		0.39			0.39		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1363			1250		757	734				
v/s Ratio Prot		0.16			c0.24							
v/s Ratio Perm							c0.34	0.32				
v/c Ratio		0.42			0.63		0.76	0.71				
Uniform Delay, d1		11.0			12.2		11.2	10.8				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			1.0		4.6	3.1				
Delay (s)		11.2			13.1		15.8	13.9				
Level of Service		B			B		B	B				
Approach Delay (s)		11.2			13.1		14.9				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay		13.4							HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		48.8							Sum of lost time (s)		8.0	
Intersection Capacity Utilization		75.4%							ICU Level of Service		D	
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (veh/h)	0	4	5	722	87	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	16	7	1003	212	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1229	212	212			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1229	212	212			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	195	828	1358			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	16	1010	212			
Volume Left	0	7	0			
Volume Right	16	0	0			
cSH	828	1358	1700			
Volume to Capacity	0.02	0.01	0.12			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	9.4	0.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.4	0.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			52.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↗	↖	↗	↗	↖	↗	↗	↖	↗	↗
Volume (veh/h)	0	3464	18	0	1658	241	0	0	908	0	0	56
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%			0%			0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	3608	19	0	1709	248	0	0	1009	0	0	85
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1978			3647			4312	5615	1252	3076	5501	734
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1978			3647			4312	5615	1252	3076	5501	734
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	41	100	100	76
cM capacity (veh/h)	284			60			0	0	1707	2	0	351
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1443	1443	740	684	684	590	1009	85				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	19	0	0	248	1009	85				
cSH	1700	1700	1700	1700	1700	1700	1707	351				
Volume to Capacity	0.85	0.85	0.44	0.40	0.40	0.35	0.59	0.24				
Queue Length 95th (ft)	0	0	0	0	0	0	103	23				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	10.1	18.5				
Lane LOS							B	C				
Approach Delay (s)	0.0			0.0			10.1	18.5				
Approach LOS							B	C				
Intersection Summary												
Average Delay				1.8								
Intersection Capacity Utilization				132.2%						ICU Level of Service	H	
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3227	132	0	1696	0	185	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3327	136	0	1767	0	226	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			3483		4024	1217	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			3483		4024	1217	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			71		2	167	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1331	1331	801	589	589	589	226
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	136	0	0	0	226
cSH	1700	1700	1700	1700	1700	1700	167
Volume to Capacity	0.78	0.78	0.47	0.35	0.35	0.35	1.35
Queue Length 95th (ft)	0	0	0	0	0	0	339
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	244.4
Lane LOS							F
Approach Delay (s)	0.0			0.0			244.4
Approach LOS							F
Intersection Summary							
Average Delay			10.1				
Intersection Capacity Utilization			85.4%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	↗
Volume (vph)	0	0	0	961	540		86	245		0	0	771
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Frpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4636		1770	3539				3527
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4636		1770	3539				3527
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1012	568	92	89	253	0	0	0	795
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	0	0	0	2
Lane Group Flow (vph)	0	0	0	506	1156	0	89	253	0	0	0	808
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1432		98	1989				1567
v/s Ratio Prot				c0.33	0.25		c0.05	0.07				c0.23
v/s Ratio Perm												
v/c Ratio				1.08	0.96dl		0.91	0.13				0.52
Uniform Delay, d1				31.1	28.6		42.3	9.3				18.0
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				63.6	3.4		61.4	0.0				0.3
Delay (s)				94.7	32.1		103.7	9.3				18.3
Level of Service				F	C		F	A				B
Approach Delay (s)		0.0			51.0			33.9				18.3
Approach LOS		A			D			C				B
Intersection Summary												
HCM 2000 Control Delay			39.6				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.76									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			17.2			
Intersection Capacity Utilization		133.7%				ICU Level of Service			H			
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	0	1710	48	0	0	0	0	339	352	676	1077	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3184	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3184	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	0	1879	53	0	0	0	0	394	409	704	1122	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	9	29	0	0	0
Lane Group Flow (vph)	0	1879	24	0	0	0	0	545	220	704	1122	0
Confl. Peds. (#/hr)				20					20			
Turn Type	NA	Perm					NA	Perm	Prot	NA		
Protected Phases	4	4					2		1	6		
Permitted Phases		4						2				
Actuated Green, G (s)		63.4	63.4					56.2	56.2	41.0	100.0	
Effective Green, g (s)		63.4	63.4					56.2	56.2	41.0	100.0	
Actuated g/C Ratio		0.36	0.36					0.32	0.32	0.23	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1842	573					1022	433	804	2022	
v/s Ratio Prot		c0.37						0.17		c0.21	c0.32	
v/s Ratio Perm			0.02						0.16			
v/c Ratio		1.02	0.04					0.53	0.51	0.88	0.55	
Uniform Delay, d1		55.8	36.1					48.7	48.2	64.5	23.5	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		26.2	0.0					0.5	0.9	10.5	0.3	
Delay (s)		82.0	36.2					49.2	49.2	75.1	23.9	
Level of Service		F	D					D	D	E	C	
Approach Delay (s)		80.7		0.0				49.2			43.6	
Approach LOS		F		A				D			D	
Intersection Summary												
HCM 2000 Control Delay		60.3		HCM 2000 Level of Service				E				
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		133.7%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave













Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑↑
Volume (vph)	203	14	942	787	0	1358
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.98			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3248			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3248			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	260	18	1058	884	0	1460
RTOR Reduction (vph)	2	0	72	0	0	0
Lane Group Flow (vph)	276	0	1870	0	0	1460
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA		NA	
Protected Phases	8		2		6	
Permitted Phases						
Actuated Green, G (s)	30.0		120.9		120.9	
Effective Green, g (s)	30.0		120.9		120.9	
Actuated g/C Ratio	0.19		0.76		0.76	
Clearance Time (s)	4.1		5.0		5.0	
Vehicle Extension (s)	3.0		3.0		3.0	
Lane Grp Cap (vph)	296		2454		2540	
v/s Ratio Prot	c0.17		c0.58		0.43	
v/s Ratio Perm						
v/c Ratio	0.93		0.76		0.57	
Uniform Delay, d1	64.0		11.3		8.4	
Progression Factor	1.00		1.00		1.00	
Incremental Delay, d2	35.0		2.3		1.0	
Delay (s)	99.0		13.6		9.4	
Level of Service	F		B		A	
Approach Delay (s)	99.0		13.6		9.4	
Approach LOS	F		B		A	
Intersection Summary						
HCM 2000 Control Delay		18.4		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.81				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		84.8%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Horizon Year (1 CVN) with Alternative 1 No Hooper







Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	168	12	34	30	12	29	27	1633	58	79	1620	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	0.99		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1724		1770	3521		1770	3487	
Flt Permitted	0.65	0.65	1.00		0.81		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1153	1158	1583		1422		1770	3521		1770	3487	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	215	15	44	47	19	45	29	1756	62	86	1761	193
RTOR Reduction (vph)	0	0	36	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	114	116	8	0	89	0	29	1817	0	86	1951	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	19.7	19.7	19.7		19.7		4.7	70.9		8.1	74.3	
Effective Green, g (s)	19.7	19.7	19.7		19.7		4.7	70.9		8.1	74.3	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.04	0.62		0.07	0.65	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	200	200	274		246		73	2199		126	2282	
v/s Ratio Prot							0.02	0.52		c0.05	c0.56	
v/s Ratio Perm	0.10	c0.10	0.00		0.06							
v/c Ratio	0.57	0.58	0.03		0.36		0.40	0.83		0.68	0.86	
Uniform Delay, d1	43.0	43.1	38.9		41.3		53.0	16.5		51.4	15.4	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.7	4.0	0.0		0.9		3.5	2.7		14.2	3.4	
Delay (s)	46.7	47.1	39.0		42.3		56.5	19.2		65.6	18.7	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		45.7			42.3			19.8			20.7	
Approach LOS		D			D			B			C	
Intersection Summary												
HCM 2000 Control Delay		22.5			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.80										
Actuated Cycle Length (s)		113.5			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		80.4%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	9	0	169	0	1406	0	38	1782	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	13	0	245	0	1496	0	41	1916	0
RTOR Reduction (vph)	0	0	0	0	198	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	60	0	0	1496	0	41	1916	0
Turn Type				Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					14.0			42.2		2.8	49.2	
Effective Green, g (s)					14.0			42.2		2.8	49.2	
Actuated g/C Ratio					0.19			0.58		0.04	0.67	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					309			2037		67	2375	
v/s Ratio Prot					c0.04			0.42		0.02	c0.54	
v/s Ratio Perm												
v/c Ratio					0.19			0.73		0.61	0.81	
Uniform Delay, d1					24.9			11.4		34.7	8.6	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			1.4		15.4	2.1	
Delay (s)					25.2			12.8		50.1	10.7	
Level of Service					C			B		D	B	
Approach Delay (s)		0.0			25.2			12.8			11.6	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					13.0			HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio					0.78							
Actuated Cycle Length (s)					73.3			Sum of lost time (s)		18.9		
Intersection Capacity Utilization					68.6%			ICU Level of Service		C		
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	263	42	116	8	64	356	27	800	3	121	1630	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1517		1852	1512	1770	3539	1354	1770	3516	
Flt Permitted	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1517		1852	1512	1770	3539	1354	1770	3516	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	346	55	153	9	70	387	30	879	3	129	1734	68
RTOR Reduction (vph)	0	0	123	0	0	209	0	0	2	0	2	0
Lane Group Flow (vph)	346	55	30	0	79	178	30	879	1	129	1800	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.8	27.8	27.8		20.2	20.2	2.9	57.6	57.6	15.4	70.1	
Effective Green, g (s)	27.8	27.8	27.8		20.2	20.2	2.9	57.6	57.6	15.4	70.1	
Actuated g/C Ratio	0.20	0.20	0.20		0.14	0.14	0.02	0.41	0.41	0.11	0.50	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	350	368	300		266	217	36	1451	555	194	1755	
v/s Ratio Prot	c0.20	0.03			0.04		0.02	0.25		c0.07	c0.51	
v/s Ratio Perm			0.02			c0.12			0.00			
v/c Ratio	0.99	0.15	0.10		0.30	0.82	0.83	0.61	0.00	0.66	1.03	
Uniform Delay, d1	56.1	46.5	46.1		53.7	58.3	68.5	32.5	24.4	60.0	35.2	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	44.6	0.2	0.1		0.6	21.4	85.2	1.9	0.0	8.3	28.4	
Delay (s)	100.7	46.7	46.2		54.4	79.7	153.7	34.4	24.4	68.3	63.5	
Level of Service	F	D	D		D	E	F	C	C	E	E	
Approach Delay (s)		80.3			75.4			38.3			63.8	
Approach LOS		F			E			D			E	
Intersection Summary												
HCM 2000 Control Delay		61.6								E		
HCM 2000 Volume to Capacity ratio		0.98										
Actuated Cycle Length (s)		140.4				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		84.9%				ICU Level of Service		E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	312	428	4	54	165	4
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	347	476	6	76	188	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915				600
pX, platoon unblocked						
vC, conflicting volume	423	44			82	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	423	44			82	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	33	54			88	
cM capacity (veh/h)	515	1027			1516	
Direction, Lane #						
Volume Total	822	82	192			
Volume Left	347	0	188			
Volume Right	476	76	0			
cSH	1055	1700	1516			
Volume to Capacity	0.78	0.05	0.12			
Queue Length 95th (ft)	206	0	11			
Control Delay (s)	19.3	0.0	7.6			
Lane LOS	C		A			
Approach Delay (s)	19.3	0.0	7.6			
Approach LOS	C					
Intersection Summary						
Average Delay		15.8				
Intersection Capacity Utilization		40.0%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕		↕
Volume (vph)	318	4	840	57	0	1779
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1772		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1772		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	403	5	933	63	0	1999
RTOR Reduction (vph)	1	0	0	36	0	0
Lane Group Flow (vph)	407	0	933	27	0	1999
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	843		1520	633		1520
v/s Ratio Prot	c0.23		0.26			c0.56
v/s Ratio Perm				0.02		
v/c Ratio	0.48		0.61	0.04		1.32
Uniform Delay, d1	18.7		23.2	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.7	0.0		146.6
Delay (s)	19.2		23.9	17.4		176.5
Level of Service	B		C	B		F
Approach Delay (s)	19.2		23.5			176.5
Approach LOS	B		C			F

Intersection Summary			
HCM 2000 Control Delay	112.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	9.9
Intersection Capacity Utilization	99.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕	↕	↕
Volume (veh/h)	5	8	677	4	18	1630
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	10	16	787	5	20	1791
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1725	396			792	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1725	396			792	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	87	97			98	
cM capacity (veh/h)	78	603			825	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	525	267	20	896	896
Volume Left	10	0	0	20	0	0
Volume Right	16	0	5	0	0	0
cSH	168	1700	1700	825	1700	1700
Volume to Capacity	0.15	0.31	0.16	0.02	0.53	0.53
Queue Length 95th (ft)	13	0	0	2	0	0
Control Delay (s)	30.3	0.0	0.0	9.5	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	30.3	0.0		0.1		
Approach LOS	D					

Intersection Summary			
Average Delay		0.4	
Intersection Capacity Utilization		55.1%	ICU Level of Service B
Analysis Period (min)		15	

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	35	66	614	14	120	1515
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	38	72	698	16	132	1665
RTOR Reduction (vph)	0	49	0	9	0	0
Lane Group Flow (vph)	38	23	698	7	132	1665
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	11.4	25.2	25.6	25.6	8.7	43.1
Effective Green, g (s)	11.4	20.1	25.6	25.6	8.7	43.1
Actuated g/C Ratio	0.18	0.32	0.40	0.40	0.14	0.68
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	316	498	1420	635	241	2390
v/s Ratio Prot	c0.02	0.01	0.20		0.07	c0.47
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.05	0.49	0.01	0.55	0.70
Uniform Delay, d1	22.0	15.2	14.2	11.5	25.7	6.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.3	0.0	2.5	0.9
Delay (s)	22.2	15.2	14.5	11.5	28.3	7.2
Level of Service	C	B	B	B	C	A
Approach Delay (s)	17.6		14.4			8.8
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			10.7		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.69			
Actuated Cycle Length (s)			63.8		Sum of lost time (s)	18.1
Intersection Capacity Utilization			53.8%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↕			↕
Volume (veh/h)	0	27	603	22	0	1550
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	36	693	25	0	1685
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1548	359			718	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1548	359			718	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	94			100	
cM capacity (veh/h)	105	637			879	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	36	462	256	842	842	
Volume Left	0	0	0	0	0	
Volume Right	36	0	25	0	0	
cSH	637	1700	1700	1700	1700	
Volume to Capacity	0.06	0.27	0.15	0.50	0.50	
Queue Length 95th (ft)	4	0	0	0	0	
Control Delay (s)	11.0	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	11.0	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			46.2%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	35	30	595	22	27	1522
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	49	42	633	23	30	1673
RTOR Reduction (vph)	0	37	0	10	0	0
Lane Group Flow (vph)	49	5	633	13	30	1673
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	5.7	27.8	27.8	3.1	38.4
Effective Green, g (s)	2.6	5.7	27.8	27.8	3.1	38.4
Actuated g/C Ratio	0.05	0.12	0.58	0.58	0.07	0.81
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	96	189	2066	924	115	2854
v/s Ratio Prot	c0.03	0.00	0.18		0.02	c0.47
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.51	0.03	0.31	0.01	0.26	0.59
Uniform Delay, d1	21.9	18.5	5.0	4.2	21.2	1.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.5	0.1	0.1	0.0	1.2	0.3
Delay (s)	26.4	18.6	5.1	4.2	22.4	2.0
Level of Service	C	B	A	A	C	A
Approach Delay (s)	22.8		5.1			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.8		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.71			
Actuated Cycle Length (s)			47.6		Sum of lost time (s)	14.1
Intersection Capacity Utilization			53.0%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	13	17	98	9	0	208	15	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	14	18	127	12	0	234	17	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	14	18	139	251						
Volume Left (vph)	0	0	127	0						
Volume Right (vph)	0	18	0	17						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.1	3.2	4.1	3.2						
Degree Utilization, x	0.02	0.02	0.16	0.22						
Capacity (veh/h)	867	1121	860	1122						
Control Delay (s)	7.1	6.3	7.9	7.1						
Approach Delay (s)	6.6		7.9	7.1						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.3							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (1 CVN) with Alternative 1 No Hooper






Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱	↰	↱	↰			
Volume (vph)	12	215	0	0	95	160	14	504	80	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.69	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1279	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	14	244	0	0	109	184	15	554	88	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	124	0	53	0	0	0	0
Lane Group Flow (vph)	14	244	0	0	109	60	15	554	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	10.7	10.7			10.7	10.7	16.2	16.2	16.2			
Effective Green, g (s)	10.7	10.7			10.7	10.7	16.2	16.2	16.2			
Actuated g/C Ratio	0.27	0.27			0.27	0.27	0.40	0.40	0.40			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	339	494			494	420	711	1422	636			
v/s Ratio Prot		c0.13			0.06		0.01	c0.16				
v/s Ratio Perm	0.01					0.04		0.02				
v/c Ratio	0.04	0.49			0.22	0.14	0.02	0.39	0.06			
Uniform Delay, d1	11.0	12.5			11.5	11.3	7.3	8.5	7.4			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	0.8			0.2	0.2	0.0	0.2	0.0			
Delay (s)	11.0	13.3			11.8	11.5	7.3	8.7	7.4			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		13.2			11.6		8.5			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.2			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.43										
Actuated Cycle Length (s)		40.3			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		43.4%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (1 CVN) with Alternative 1 No Hooper









Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	0	671	0	1716	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	0	0	762	0	1907	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2288	953	1907		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2288	953	1907		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	33	259	308		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	381	381	1271	636	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.22	0.22	0.75	0.37	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			50.8%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (1 CVN) with Alternative 1 No Hooper









Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	262	7	79	19	4	7	85	343	58	19	1164	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.86		1.00	0.90		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1605		1770	1685		1770	3462		1770	3442	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1605		1770	1685		1770	3462		1770	3442	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	349	9	105	38	8	14	93	377	64	21	1293	290
RTOR Reduction (vph)	0	78	0	0	14	0	0	11	0	0	16	0
Lane Group Flow (vph)	349	36	0	38	8	0	93	430	0	21	1567	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	24.9	24.9		2.7	2.7		5.7	47.2		1.7	43.2	
Effective Green, g (s)	24.9	24.9		2.7	2.7		5.7	47.2		1.7	43.2	
Actuated g/C Ratio	0.26	0.26		0.03	0.03		0.06	0.49		0.02	0.45	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	461	418		50	47		105	1712		31	1558	
v/s Ratio Prot	c0.20	0.02		c0.02	0.00		c0.05	c0.12		0.01	c0.46	
v/s Ratio Perm												
v/c Ratio	0.76	0.09		0.76	0.18		0.89	0.25		0.68	1.01	
Uniform Delay, d1	32.5	26.7		46.0	45.3		44.5	13.9		46.6	26.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.0	0.1		48.9	1.8		52.9	0.1		45.6	24.2	
Delay (s)	39.4	26.7		95.0	47.1		97.4	14.0		92.2	50.3	
Level of Service	D	C		F	D		F	B		F	D	
Approach Delay (s)		36.3			77.4			28.5			50.9	
Approach LOS		D			E			C			D	
Intersection Summary												
HCM 2000 Control Delay		44.5										
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		95.4						18.9				
Intersection Capacity Utilization		78.3%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	1115	63	0	387	40	18	46	5	28	30	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.99			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5044			5013		1770	1836			1759	
Flt Permitted	0.95	1.00			1.00		0.69	1.00			0.12	
Satd. Flow (perm)	1770	5044			5013		1294	1836			217	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	75	1267	72	0	412	43	26	66	7	33	35	28
RTOR Reduction (vph)	0	4	0	0	7	0	0	2	0	0	8	0
Lane Group Flow (vph)	75	1335	0	0	448	0	26	71	0	0	88	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1908			2035		251	357			36	
v/s Ratio Prot	c0.04	c0.26			c0.09			c0.04				
v/s Ratio Perm							0.02				c0.40	
v/c Ratio	0.38	0.70			0.22		0.10	0.20			2.44	
Uniform Delay, d1	74.3	47.3			34.9		59.6	60.7			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.2	2.2			0.2		0.2	0.3			721.7	
Delay (s)	75.5	49.5			35.1		59.8	61.0			796.7	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		50.9			35.1			60.7			796.7	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		82.5										
HCM 2000 Volume to Capacity ratio		0.86										
Actuated Cycle Length (s)		180.0						22.3				
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	1149	0	698	430	44	0	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3490							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3490							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1291	0	743	457	47	0	0	0	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	1291	0	743	504	0	0	0	0	0	0	4
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3172							609
v/s Ratio Prot		c0.25		c0.22	c0.14							
v/s Ratio Perm												0.00
v/c Ratio		0.67		0.39	0.16							0.01
Uniform Delay, d1		46.6		22.2	0.9							34.9
Progression Factor		0.19		1.00	1.00							1.00
Incremental Delay, d2		1.3		0.1	0.0							0.0
Delay (s)		10.0		22.4	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		10.0			13.7		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		11.9				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.53										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		51.3%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave



















Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑							↑↑
Volume (veh/h)	6	218	0	0	313	202	0	0	0	748	0	15
Sign Control		Free			Free				Stop			Stop
Grade		0%			0%				0%			0%
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	7	253	0	0	356	230	0	0	0	1133	0	23
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	585			253			761	853	253	738	738	470
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	585			253			761	853	253	738	738	470
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	0	100	96
cM capacity (veh/h)	989			1312			308	294	785	332	343	593
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	260	585	0	1156								
Volume Left	7	0	0	1133								
Volume Right	0	230	0	23								
cSH	989	1312	1700	335								
Volume to Capacity	0.01	0.00	0.00	3.45								
Queue Length 95th (ft)	1	0	0	Err								
Control Delay (s)	0.3	0.0	0.0	Err								
Lane LOS	A		A	F								
Approach Delay (s)	0.3	0.0	0.0	Err								
Approach LOS			A	F								
Intersection Summary												
Average Delay		5774.7										
Intersection Capacity Utilization		77.8%			ICU Level of Service				D			
Analysis Period (min)		15										













NBC Coastal Campus
22: 3rd St & Palm Ave

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	942	13	87	487	25	15	40	70	29	34	14
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	10	1208	17	98	547	28	26	70	123	63	74	30
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	10	1224	98	575	219	167						
Volume Left (vph)	10	0	98	0	26	63						
Volume Right (vph)	0	17	0	28	123	30						
Hadj (s)	0.53	0.02	0.53	0.00	-0.28	0.00						
Departure Headway (s)	7.7	7.2	7.6	7.1	7.6	8.1						
Degree Utilization, x	0.02	1.0	0.21	1.0	0.46	0.38						
Capacity (veh/h)	455	510	465	511	452	426						
Control Delay (s)	9.7	675.4	11.4	106.6	17.0	15.9						
Approach Delay (s)	669.9		92.7		17.0	15.9						
Approach LOS	F		F		C	C						
Intersection Summary												
Delay			390.5									
Level of Service			F									
Intersection Capacity Utilization			75.1%		ICU Level of Service		D					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	236	911	586	41	54	181
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	243	939	681	48	64	213
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	729				2131	365
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	729				2131	365
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	72				0	66
cM capacity (veh/h)	871				31	632
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	243	939	454	275	276	
Volume Left	243	0	0	0	64	
Volume Right	0	0	0	48	213	
cSH	871	1700	1700	1700	115	
Volume to Capacity	0.28	0.55	0.27	0.16	2.41	
Queue Length 95th (ft)	29	0	0	0	612	
Control Delay (s)	10.7	0.0	0.0	0.0	722.4	
Lane LOS	B				F	
Approach Delay (s)	2.2		0.0		722.4	
Approach LOS					F	
Intersection Summary						
Average Delay			92.5			
Intersection Capacity Utilization			68.8%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↱	↱	↰	↰↱	↱		↰↱			↰	↱
Volume (vph)	29	913	36	32	586	4	58	25	23	13	39	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3519		1770	3536			1760			1840	1583
Flt Permitted	0.41	1.00		0.20	1.00			0.79			0.90	1.00
Satd. Flow (perm)	756	3519		372	3536			1431			1685	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	35	1087	43	35	644	4	71	30	28	17	51	41
RTOR Reduction (vph)	0	4	0	0	0	0	0	22	0	0	0	32
Lane Group Flow (vph)	35	1126	0	35	648	0	0	107	0	0	68	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	21.8	21.8		21.8	21.8			9.3			9.3	9.3
Effective Green, g (s)	21.8	21.8		21.8	21.8			9.3			9.3	9.3
Actuated g/C Ratio	0.54	0.54		0.54	0.54			0.23			0.23	0.23
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	408	1903		201	1912			330			388	365
v/s Ratio Prot		c0.32			0.18							
v/s Ratio Perm	0.05			0.09				c0.08			0.04	0.01
v/c Ratio	0.09	0.59		0.17	0.34			0.33			0.18	0.03
Uniform Delay, d1	4.5	6.2		4.7	5.2			12.9			12.4	12.0
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.5		0.4	0.1			0.6			0.2	0.0
Delay (s)	4.5	6.7		5.1	5.3			13.5			12.6	12.0
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)		6.7			5.3			13.5			12.4	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay		6.9			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.51										
Actuated Cycle Length (s)		40.3			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		46.9%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↱			↰	↱
Volume (veh/h)	962	9	0	0	7	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1173	11	0	0	10	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			1184		1173	1173
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1184		1173	1173
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		95	98
cM capacity (veh/h)			590		212	234
Direction, Lane #						
Volume Total	1173	11	15			
Volume Left	0	0	10			
Volume Right	0	11	4			
cSH	1700	1700	218			
Volume to Capacity	0.69	0.01	0.07			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.0	0.0	22.7			
Lane LOS			C			
Approach Delay (s)	0.0		22.7			
Approach LOS			C			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			60.6%		ICU Level of Service	B
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	47	1928	143	66	975	149	112	102	71	197	90	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Flt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5033		1770	4984			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5033		1770	4984			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	50	2051	152	67	985	151	123	112	78	221	101	33
RTOR Reduction (vph)	0	5	0	0	11	0	0	18	0	0	4	0
Lane Group Flow (vph)	50	2198	0	67	1125	0	0	295	0	0	351	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2004		196	1985			649			658	
v/s Ratio Prot	0.03	c0.44		c0.04	0.23			c0.09			c0.10	
v/s Ratio Perm												
v/c Ratio	0.26	1.10		0.34	0.57			0.45			0.53	
Uniform Delay, d1	73.2	54.1		73.9	42.1			64.1			65.2	
Progression Factor	1.00	1.00		1.20	0.92			1.00			1.00	
Incremental Delay, d2	0.7	52.1		1.0	1.1			0.5			0.8	
Delay (s)	73.9	106.3		89.9	39.6			64.6			66.0	
Level of Service	E	F		F	D			E			E	
Approach Delay (s)		105.5			42.4			64.6			66.0	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		80.6										
HCM 2000 Volume to Capacity ratio		0.74							F			
Actuated Cycle Length (s)		180.0							18.3			
Intersection Capacity Utilization		124.9%							H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	23	2250	65	56	1437	63	24	12	40	72	15	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	0.99			0.93			1.00	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.95	
Satd. Flow (prot)	1770	5064		1770	5053			1703			1770	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.59	
Satd. Flow (perm)	1770	5064		1770	5053			1541			1103	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	23	2296	66	58	1481	65	29	14	48	85	18	19
RTOR Reduction (vph)	0	1	0	0	2	0	0	24	0	0	17	0
Lane Group Flow (vph)	23	2361	0	58	1544	0	0	67	0	85	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.3		16.0	130.3			22.5			22.5	
Effective Green, g (s)	12.0	126.3		16.0	130.3			22.5			22.5	
Actuated g/C Ratio	0.07	0.70		0.09	0.72			0.12			0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	118	3553		157	3657			192			137	214
v/s Ratio Prot	0.01	c0.47		c0.03	c0.31						0.01	
v/s Ratio Perm								0.04			c0.08	
v/c Ratio	0.19	0.66		0.37	0.42			0.35			0.62	0.10
Uniform Delay, d1	79.4	15.0		77.2	9.9			72.1			74.7	69.7
Progression Factor	1.42	0.17		1.52	0.27			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		1.1	0.3			1.1			8.4	0.2
Delay (s)	113.3	2.6		118.7	2.9			73.2			83.1	69.9
Level of Service	F	A		F	A			E			F	E
Approach Delay (s)		3.7			7.1			73.2			79.1	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.7										
HCM 2000 Volume to Capacity ratio		0.63							A			
Actuated Cycle Length (s)		180.0							15.2			
Intersection Capacity Utilization		66.8%							C			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰		↰↰	
Volume (vph)	30	2115	227	179	1521	93	148	46	146	176	51	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5011		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5011		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	32	2250	241	185	1568	96	161	50	159	238	69	31
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	132	0	4	0
Lane Group Flow (vph)	32	2484	0	185	1568	59	0	211	27	0	334	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2218		192	2364	736		305	269		575	
v/s Ratio Prot	0.02	c0.50		c0.10	c0.31			c0.12			c0.10	
v/s Ratio Perm					0.04			0.02				
v/c Ratio	0.20	1.12		0.96	0.66	0.08		0.69	0.10		0.58	
Uniform Delay, d1	76.1	50.1		79.8	37.2	26.8		70.2	63.0		68.7	
Progression Factor	0.99	1.05		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	59.3		54.0	1.5	0.2		12.2	0.7		4.2	
Delay (s)	75.6	111.7		133.9	38.7	27.0		82.4	63.8		73.0	
Level of Service	E	F		F	D	C		F	E		E	
Approach Delay (s)		111.3			47.6			74.4			73.0	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		82.9			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		0.91										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		109.8%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)




































Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰						↰↰	
Volume (vph)	11	2260	57	195	1861	18	45	10		93	27	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6				5.6
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5067		1770	5078			1680			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.88			0.80	
Satd. Flow (perm)	1770	5067		1770	5078			1503			1451	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85		0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	12	2511	63	205	1959	19	53	12	109	33	15	15
RTOR Reduction (vph)	0	2	0	0	1	0	0	78	0	0	12	0
Lane Group Flow (vph)	12	2572	0	205	1977	0	0	96	0	0	51	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases						4				4		
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.7			17.7	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.7			17.7	
Actuated g/C Ratio	0.01	0.47		0.13	0.60			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2405		233	3032			313			302	
v/s Ratio Prot	0.01	c0.51		c0.12	0.39							
v/s Ratio Perm								c0.06			0.04	
v/c Ratio	0.75	1.07		0.88	0.65			0.31			0.17	
Uniform Delay, d1	42.0	22.3		36.2	11.3			28.4			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	106.0	40.2		29.1	0.5			0.6			0.3	
Delay (s)	148.0	62.5		65.3	11.8			29.0			27.8	
Level of Service	F	E		E	B			C			C	
Approach Delay (s)		62.9			16.8			29.0			27.8	
Approach LOS		E			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		41.2			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.84										
Actuated Cycle Length (s)		84.9			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		78.2%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1 No Hooper















Timing Plan: PM PEAK

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations	 	  			  					 	 		 	
Volume (vph)	216	2192	30	376	1870	636	76	203	611	674	274	261		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6		
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95		
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85		
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		
Satd. Flow (prot)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1747	1504		
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		
Satd. Flow (perm)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1747	1504		
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92		
Adj. Flow (vph)	227	2307	32	404	2011	684	81	216	650	733	298	284		
RTOR Reduction (vph)	0	1	0	0	0	86	0	25	309	0	2	122		
Lane Group Flow (vph)	227	2338	0	404	2011	598	81	425	107	733	324	134		
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm		
Protected Phases	1	6		5	2		7	4		3	8			
Permitted Phases					2				4			8		
Actuated Green, G (s)	11.6	36.3		45.0	69.7	69.7	8.9	40.0	40.0	11.8	42.9	42.9		
Effective Green, g (s)	11.6	36.3		45.0	69.7	69.7	8.9	40.0	40.0	11.8	42.9	42.9		
Actuated g/C Ratio	0.07	0.23		0.29	0.45	0.45	0.06	0.26	0.26	0.08	0.28	0.28		
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)	256	1188		513	2286	711	101	421	388	261	483	416		
v/s Ratio Prot	0.07	c0.46		c0.23	c0.40		0.05	c0.26		c0.21	c0.19			
v/s Ratio Perm						0.38			0.07			0.09		
v/c Ratio	0.89	1.97		0.79	0.88	0.84	0.80	1.01	0.28	2.81	0.67	0.32		
Uniform Delay, d1	71.0	59.4		50.6	38.8	37.7	72.2	57.5	45.9	71.6	49.8	44.5		
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Incremental Delay, d2	28.5	438.8		7.8	4.2	8.8	35.2	46.1	0.4	824.4	3.6	0.5		
Delay (s)	99.6	498.1		58.4	43.1	46.6	107.4	103.6	46.3	896.0	53.4	45.0		
Level of Service	F	F		E	D	D	F	F	D	F	D	D		
Approach Delay (s)		462.8			45.8			78.8			521.4			
Approach LOS		F			D			E			F			
Intersection Summary														
HCM 2000 Control Delay		263.7		HCM 2000 Level of Service					F					
HCM 2000 Volume to Capacity ratio		1.37												
Actuated Cycle Length (s)		155.0		Sum of lost time (s)					21.9					
Intersection Capacity Utilization		140.4%		ICU Level of Service					H					
Analysis Period (min)		15												
c Critical Lane Group														

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		 	 		 	 
Volume (vph)	0	581	971	0	504	1917
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	653	1033	0	554	2107
RTOR Reduction (vph)	0	0	0	0	0	2
Lane Group Flow (vph)	0	653	1033	0	554	2105
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.18	c0.29		0.31	c0.76
v/s Ratio Perm						
v/c Ratio		0.37	1.20		0.84	1.19
Uniform Delay, d1		12.0	30.3		22.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	102.8		9.0	89.5
Delay (s)		12.1	133.1		31.7	104.0
Level of Service		B	F		C	F
Approach Delay (s)		12.1	133.1		88.9	
Approach LOS		B	F		F	
Intersection Summary						
HCM 2000 Control Delay		87.9		HCM 2000 Level of Service		F
HCM 2000 Volume to Capacity ratio		1.27				
Actuated Cycle Length (s)		80.0		Sum of lost time (s)		14.2
Intersection Capacity Utilization		97.8%		ICU Level of Service		F
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	1078	0	0	604	287	492	3	123	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	1123	0	0	679	322	529	3	132	0	0	0
RTOR Reduction (vph)	0	0	0	0	96	0	0	22	0	0	0	0
Lane Group Flow (vph)	0	1123	0	0	905	0	339	303	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases							2					
Actuated Green, G (s)		21.1			21.1		15.5	15.5				
Effective Green, g (s)		21.1			21.1		15.5	15.5				
Actuated g/C Ratio		0.47			0.47		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)	1674			1593			584	561				
v/s Ratio Prot	c0.32			0.27								
v/s Ratio Perm							c0.20	0.19				
v/c Ratio	0.67			0.57			0.58	0.54				
Uniform Delay, d1	9.1			8.5			11.9	11.7				
Progression Factor	1.00			1.00			1.00	1.00				
Incremental Delay, d2	1.1			0.5			1.5	1.0				
Delay (s)	10.1			8.9			13.4	12.7				
Level of Service	B			A			B					
Approach Delay (s)	10.1			8.9			13.0			0.0		
Approach LOS	B			A			B			A		
Intersection Summary												
HCM 2000 Control Delay		10.4					HCM 2000 Level of Service	B				
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		44.6				Sum of lost time (s)		8.0				
Intersection Capacity Utilization		53.9%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	11	9	166	685	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	18	10	180	993	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1193	993	993			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1193	993	993			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	94	99			
cM capacity (veh/h)	204	298	697			
Direction, Lane #						
Volume Total	18	190	993			
Volume Left	0	10	0			
Volume Right	18	0	0			
cSH	298	697	1700			
Volume to Capacity	0.06	0.01	0.58			
Queue Length 95th (ft)	5	1	0			
Control Delay (s)	17.8	0.7	0.0			
Lane LOS	C	A				
Approach Delay (s)	17.8	0.7	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		46.1%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1315	35	0	3296	535	0	0	479	0	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1584	42	0	3583	582	0	0	599	0	0	13
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4184			1647			2853	5810	589	4441	5540	1525
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4184			1647			2853	5810	589	4441	5540	1525
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	55	100	100	87
cM capacity (veh/h)	36			382			6	0	1337	0	0	103
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	634	634	359	1433	1433	1298	599	13				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	42	0	0	582	599	13				
cSH	1700	1700	1700	1700	1700	1700	1337	103				
Volume to Capacity	0.37	0.37	0.21	0.84	0.84	0.76	0.45	0.13				
Queue Length 95th (ft)	0	0	0	0	0	0	59	11				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.9	45.0				
Lane LOS							A	E				
Approach Delay (s)	0.0			0.0			9.9	45.0				
Approach LOS							A	E				
Intersection Summary												
Average Delay				1.0								
Intersection Capacity Utilization				90.7%			ICU Level of Service		E			
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR						
Lane Configurations	↑↑↑			↑↑↑		↑						
Volume (veh/h)	1176	204	0	3195	0	232						
Sign Control	Free			Free	Stop							
Grade	0%			0%	0%							
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92						
Hourly flow rate (vph)	1336	232	0	3550	0	252						
Pedestrians	20			20	20							
Lane Width (ft)	12.0			12.0	12.0							
Walking Speed (ft/s)	4.0			4.0	4.0							
Percent Blockage	2			2	2							
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume				1588	2676	601						
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol				1588	2676	601						
tC, single (s)				4.1	6.8	6.9						
tC, 2 stage (s)												
tF (s)				2.2	3.5	3.3						
p0 queue free %				100	100	41						
cM capacity (veh/h)				403	17	429						
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1					
Volume Total	535	535	499	1183	1183	1183	252					
Volume Left	0	0	0	0	0	0	0					
Volume Right	0	0	232	0	0	0	252					
cSH	1700	1700	1700	1700	1700	1700	429					
Volume to Capacity	0.31	0.31	0.29	0.70	0.70	0.70	0.59					
Queue Length 95th (ft)	0	0	0	0	0	0	92					
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	24.7					
Lane LOS							C					
Approach Delay (s)	0.0			0.0			24.7					
Approach LOS							C					
Intersection Summary												
Average Delay				1.2								
Intersection Capacity Utilization				76.6%			ICU Level of Service		D			
Analysis Period (min)				15								

NBC Coastal Campus
3: Orange Ave & Third St

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↔↔↔	↔↔↔		↔	↔↔			↔↔	
Volume (vph)	0	0	0	1561	1555	251	42	94	0	0	260	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4641		1770	3539			3522	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4641		1770	3539			3522	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1678	1672	270	57	127	0	0	299	7
RTOR Reduction (vph)	0	0	0	0	6	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	889	2725	0	57	127	0	0	305	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.3			21.1	
Effective Green, g (s)				131.2	131.2		20.0	46.3			21.1	
Actuated g/C Ratio				0.69	0.69		0.11	0.24			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1055	3219		187	866			392	
v/s Ratio Prot				0.58	c0.59		c0.03	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.84	0.85		0.30	0.15			0.78	
Uniform Delay, d1				21.3	21.5		78.1	55.9			81.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				6.2	2.2		0.9	0.1			9.4	
Delay (s)				27.6	23.7		79.1	56.0			91.1	
Level of Service				C	C		E	E			F	
Approach Delay (s)		0.0			24.7			63.1			91.1	
Approach LOS		A			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		31.3		HCM 2000 Level of Service					C			
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		189.1		Sum of lost time (s)					16.8			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔↔	↔					↔↔	↔	↔↔	↔↔	
Volume (vph)	0	504	68	0	0	0	0	128	218	437	1443	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.93	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3168	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3168	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	0	548	74	0	0	0	0	149	237	475	1503	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	65	65	0	0	0
Lane Group Flow (vph)	0	548	45	0	0	0	0	200	56	475	1503	0
Turn Type	NA	Perm						NA	Perm	Prot	NA	
Protected Phases	4							2		1	6	
Permitted Phases		4							2			
Actuated Green, G (s)	60.0	60.0						62.2	62.2	35.0	100.0	
Effective Green, g (s)	60.0	60.0						62.2	62.2	35.0	100.0	
Actuated g/C Ratio	0.35	0.35						0.36	0.36	0.20	0.58	
Clearance Time (s)	5.6	5.6						4.6	4.6	4.2	6.0	
Vehicle Extension (s)	3.0	3.0						3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1777	553						1148	522	700	2062	
v/s Ratio Prot	c0.11							0.06		0.14	c0.42	
v/s Ratio Perm		0.03							0.04			
v/c Ratio	0.31	0.08						0.17	0.11	0.68	0.73	
Uniform Delay, d1	40.7	37.3						37.2	36.3	63.1	26.0	
Progression Factor	1.00	1.00						1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	0.1						0.1	0.1	2.6	1.3	
Delay (s)	40.8	37.4						37.3	36.4	65.7	27.3	
Level of Service	D	D						D	D	E	C	
Approach Delay (s)	40.4				0.0			37.0			36.5	
Approach LOS	D				A			D			D	
Intersection Summary												
HCM 2000 Control Delay		37.4		HCM 2000 Level of Service					D			
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)					14.4			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Horizon Year (1 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗		↖↗	↖↗
Volume (vph)	253	8	1298	702	0	1308
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Flt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3310			3362
Flt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3310			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	294	9	1396	755	0	1377
RTOR Reduction (vph)	1	0	59	0	0	0
Lane Group Flow (vph)	302	0	2092	0	0	1377
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	19.9		44.9			44.9
Effective Green, g (s)	19.9		44.9			44.9
Actuated g/C Ratio	0.27		0.61			0.61
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	428		2011			2042
v/s Ratio Prot	c0.19		c0.63			0.41
v/s Ratio Perm						
v/c Ratio	0.70		1.04			0.67
Uniform Delay, d1	24.3		14.5			9.6
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	5.2		31.5			0.9
Delay (s)	29.6		46.0			10.5
Level of Service	C		D			B
Approach Delay (s)	29.6		46.0			10.5
Approach LOS	C		D			B
Intersection Summary						
HCM 2000 Control Delay			31.9		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.98			
Actuated Cycle Length (s)			73.9		Sum of lost time (s)	12.1
Intersection Capacity Utilization			85.9%		ICU Level of Service	E
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas



















Horizon Year (1 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↗	↖	↗	↖↗	↖	↗	↖↗
Volume (vph)	55	3	12	9	0	7	23	1546	30	46	1473	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Flt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1692	1583		1705		1770	3529		1770	3524	
Flt Permitted	0.74	0.77	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1303	1358	1583		1508		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	64	3	14	18	0	14	27	1840	36	50	1601	47
RTOR Reduction (vph)	0	0	12	0	27	0	0	1	0	0	1	0
Lane Group Flow (vph)	33	34	2	0	5	0	27	1875	0	50	1647	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	16.2	16.2	16.2		16.2		3.0	69.9		4.1	71.0	
Effective Green, g (s)	16.2	16.2	16.2		16.2		3.0	69.9		4.1	71.0	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.67		0.04	0.68	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	210	245		234		50	2365		69	2398	
v/s Ratio Prot							0.02	c0.53		c0.03	0.47	
v/s Ratio Perm	c0.03	0.03	0.00		0.00							
v/c Ratio	0.16	0.16	0.01		0.02		0.54	0.79		0.72	0.69	
Uniform Delay, d1	38.2	38.2	37.3		37.3		50.0	12.1		49.5	10.0	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4	0.0		0.0		11.4	1.9		31.2	0.8	
Delay (s)	38.6	38.5	37.3		37.4		61.3	14.0		80.7	10.8	
Level of Service	D	D	D		D		E	B		F	B	
Approach Delay (s)		38.3			37.4			14.7			12.9	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			14.6							B		
HCM 2000 Volume to Capacity ratio			0.68									
Actuated Cycle Length (s)			104.3				Sum of lost time (s)			14.1		
Intersection Capacity Utilization			62.5%				ICU Level of Service			B		
Analysis Period (min)			15									
c Critical Lane Group												























NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	27	0	1482	9	499	965	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Frt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.66	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	41	0	1629	10	509	985	0
RTOR Reduction (vph)	0	0	0	0	37	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	4	0	0	1629	5	509	985	0
Turn Type					NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.46		c0.29	0.28	
v/s Ratio Perm									0.00			
v/c Ratio					0.03			0.98	0.01	0.83	0.33	
Uniform Delay, d1					60.6			37.8	20.5	43.7	2.5	
Progression Factor					1.00			0.40	1.00	1.00	1.00	
Incremental Delay, d2					0.1			11.4	0.0	9.6	0.3	
Delay (s)					60.7			26.5	20.5	53.3	2.8	
Level of Service					E			C	C	D	A	
Approach Delay (s)		0.0			60.7			26.5			20.0	
Approach LOS		A			E			C			B	
Intersection Summary												
HCM 2000 Control Delay		23.9			HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio		0.86										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		87.4%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	49	15	2	66	140	144	1309	7	228	455	328
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1860	1510	1770	3539	1347	1770	3275	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1860	1510	1770	3539	1347	1770	3275	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	46	75	23	2	75	159	160	1454	8	262	523	377
RTOR Reduction (vph)	0	0	21	0	0	134	0	0	4	0	90	0
Lane Group Flow (vph)	46	75	2	0	77	25	160	1454	4	262	810	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1075	
v/s Ratio Prot	0.03	c0.04			c0.04		0.09	c0.41		c0.15	0.25	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.38	0.59	0.02		0.26	0.11	0.29	0.92	0.01	0.77	0.75	
Uniform Delay, d1	64.5	65.5	62.9		53.5	52.2	37.9	37.8	22.3	55.4	43.5	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.93	
Incremental Delay, d2	2.0	6.7	0.1		0.5	0.2	0.3	10.5	0.0	9.7	4.8	
Delay (s)	66.5	72.2	63.0		54.0	52.4	38.2	48.3	22.4	62.7	45.3	
Level of Service	E	E	E		D	D	D	D	C	E	D	
Approach Delay (s)		68.9			52.9			47.2			49.2	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			49.4			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.74									
Actuated Cycle Length (s)			145.0			Sum of lost time (s)				19.4		
Intersection Capacity Utilization			93.7%			ICU Level of Service				F		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖			↖
Volume (veh/h)	44	220	5	64	260	10
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	52	259	6	80	283	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked	0.99					
vC, conflicting volume	622	46			86	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	617	46			86	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	86	75			81	
cM capacity (veh/h)	366	1023			1510	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	311	86	293			
Volume Left	52	0	283			
Volume Right	259	80	0			
cSH	1228	1700	1510			
Volume to Capacity	0.25	0.05	0.19			
Queue Length 95th (ft)	25	0	17			
Control Delay (s)	10.8	0.0	7.7			
Lane LOS	B		A			
Approach Delay (s)	10.8	0.0	7.7			
Approach LOS	B					
Intersection Summary						
Average Delay		8.1				
Intersection Capacity Utilization		31.6%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖	↖		↖
Volume (vph)	47	3	1474	440	0	426
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1755		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1755		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	63	4	1552	463	0	666
RTOR Reduction (vph)	4	0	0	137	0	0
Lane Group Flow (vph)	63	0	1552	326	0	666
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		30.6	30.6		30.6
Effective Green, g (s)	3.0		30.6	30.6		30.6
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	121		2489	1069		2489
v/s Ratio Prot	c0.04		c0.44			0.19
v/s Ratio Perm				0.21		
v/c Ratio	0.52		0.62	0.30		0.27
Uniform Delay, d1	19.6		3.4	2.4		2.4
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.0		0.5	0.2		0.1
Delay (s)	23.6		3.9	2.6		2.4
Level of Service	C		A	A		A
Approach Delay (s)	23.6		3.6			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.8		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.61				
Actuated Cycle Length (s)		43.5		Sum of lost time (s)	9.9	
Intersection Capacity Utilization		53.2%		ICU Level of Service	A	
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (veh/h)	0	18	2396	7	7	474
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	31	2576	8	10	697
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2949	1292			2584	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2949	1292			2584	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	80			94	
cM capacity (veh/h)	11	154			166	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	31	1718	866	10	349	349
Volume Left	0	0	0	10	0	0
Volume Right	31	0	8	0	0	0
cSH	154	1700	1700	166	1700	1700
Volume to Capacity	0.20	1.01	0.51	0.06	0.21	0.21
Queue Length 95th (ft)	18	0	0	5	0	0
Control Delay (s)	34.2	0.0	0.0	28.1	0.0	0.0
Lane LOS	D			D		
Approach Delay (s)	34.2	0.0		0.4		
Approach LOS	D					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		76.5%		ICU Level of Service		D
Analysis Period (min)		15				

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (vph)	20	101	2295	14	44	430
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Frt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Frt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	25	125	2468	15	64	623
RTOR Reduction (vph)	0	2	0	1	0	0
Lane Group Flow (vph)	25	123	2468	14	64	623
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	16.4	26.5	68.2	68.2	5.0	82.0
Effective Green, g (s)	16.4	21.4	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.20	0.63	0.63	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	269	314	2241	1002	82	2694
v/s Ratio Prot	0.01	c0.08	c0.70		c0.04	0.18
v/s Ratio Perm				0.01		
v/c Ratio	0.09	0.39	1.10	0.01	0.78	0.23
Uniform Delay, d1	39.3	37.5	19.8	7.3	50.8	3.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.8	53.1	0.0	37.0	0.0
Delay (s)	39.4	38.3	72.8	7.3	87.8	3.8
Level of Service	D	D	E	A	F	A
Approach Delay (s)	38.5		72.4			11.6
Approach LOS	D		E			B
Intersection Summary						
HCM 2000 Control Delay		58.3		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		0.95				
Actuated Cycle Length (s)		107.7		Sum of lost time (s)		18.1
Intersection Capacity Utilization		80.5%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↖↗			↖↗
Volume (veh/h)	0	38	2269	30	0	448
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	61	2388	32	0	605
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2707	1210			2420	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2707	1210			2420	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	65			100	
cM capacity (veh/h)	17	175			193	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	61	1592	828	303	303	
Volume Left	0	0	0	0	0	
Volume Right	61	0	32	0	0	
cSH	175	1700	1700	1700	1700	
Volume to Capacity	0.35	0.94	0.49	0.18	0.18	
Queue Length 95th (ft)	37	0	0	0	0	
Control Delay (s)	36.4	0.0	0.0	0.0	0.0	
Lane LOS	E					
Approach Delay (s)	36.4	0.0		0.0		
Approach LOS	E					
Intersection Summary						
Average Delay		0.7				
Intersection Capacity Utilization		73.7%		ICU Level of Service	D	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖↗	↖	↖	↖↗
Volume (vph)	12	8	2299	38	18	421
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	19	13	2395	40	22	520
RTOR Reduction (vph)	0	2	0	10	0	0
Lane Group Flow (vph)	19	11	2395	30	22	520
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.5	4.6	58.8	58.8	3.1	69.4
Effective Green, g (s)	1.5	4.6	58.8	58.8	3.1	69.4
Actuated g/C Ratio	0.02	0.06	0.76	0.76	0.04	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	34	93	2685	1201	70	3169
v/s Ratio Prot	c0.01	0.00	c0.68		c0.01	0.15
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.56	0.12	0.89	0.03	0.31	0.16
Uniform Delay, d1	37.7	34.5	7.0	2.3	36.2	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	18.4	0.6	4.2	0.0	2.6	0.0
Delay (s)	56.1	35.1	11.2	2.3	38.7	0.5
Level of Service	E	D	B	A	D	A
Approach Delay (s)	47.6		11.0			2.1
Approach LOS	D		B			A
Intersection Summary						
HCM 2000 Control Delay		9.8		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.86				
Actuated Cycle Length (s)		77.5		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		76.4%		ICU Level of Service	D	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (1 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	3	0	53	2	0	51	3	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	12	0	98	4	0	81	5	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	12	0	102	81	5					
Volume Left (vph)	0	0	98	0	0					
Volume Right (vph)	0	0	0	0	5					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.2	3.2					
Degree Utilization, x	0.01	0.00	0.12	0.09	0.00					
Capacity (veh/h)	822	1121	809	828	1121					
Control Delay (s)	7.3	6.2	7.9	7.6	6.2					
Approach Delay (s)	7.3		7.9	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.7							
Level of Service			A							
Intersection Capacity Utilization			19.7%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (1 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↑		↑	↑	↑	↑	↑			
Volume (vph)	3	43	0	0	38	262	4	2072	59	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.72	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1346	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	4	57	0	0	53	364	4	2204	63	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	54	0	0	27	0	0	0
Lane Group Flow (vph)	4	57	0	0	53	310	4	2204	36	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	18.5	18.5			18.5	18.5	47.7	43.6	43.6			
Effective Green, g (s)	18.5	18.5			18.5	18.5	47.7	43.6	43.6			
Actuated g/C Ratio	0.25	0.25			0.25	0.25	0.63	0.58	0.58			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	329	456			456	387	1118	2043	914			
v/s Ratio Prot		0.03			0.03		0.00	c0.62				
v/s Ratio Perm	0.00					c0.20			0.02			
v/c Ratio	0.01	0.12			0.12	0.80	0.00	1.08	0.04			
Uniform Delay, d1	21.6	22.2			22.1	26.8	5.1	15.9	6.9			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	11.3	0.0	45.0	0.0			
Delay (s)	21.6	22.3			22.3	38.0	5.1	60.9	6.9			
Level of Service	C	C			C	D	A	E	A			
Approach Delay (s)		22.3				36.0		59.3			0.0	
Approach LOS		C				D		E			A	
Intersection Summary												
HCM 2000 Control Delay		55.0				HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio		0.99										
Actuated Cycle Length (s)		75.5				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		93.1%				ICU Level of Service			F			
Analysis Period (min)		15										
c Critical Lane Group												





















NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔
Volume (veh/h)	21	40	355	1819	0	194	191
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	84	160	370	1895	0	246	242
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2053	244	487		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2053	244	487		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	79	66		0		
cM capacity (veh/h)	31	757	1072		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	244	370	947	947	164	324	0
Volume Left	84	370	0	0	0	0	0
Volume Right	160	0	0	0	0	242	0
cSH	85	1072	1700	1700	1700	1700	1700
Volume to Capacity	2.89	0.34	0.56	0.56	0.10	0.19	0.00
Queue Length 95th (ft)	595	39	0	0	0	0	0
Control Delay (s)	957.3	10.1	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B					
Approach Delay (s)	957.3	1.7			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			79.2				
Intersection Capacity Utilization			67.2%		ICU Level of Service		C
Analysis Period (min)			15				

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	458	2	45	50	8	21	30	2031	11	4	180	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	1.00		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1594		1770	1661		1770	3536		1770	3422	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1594		1770	1661		1770	3536		1770	3422	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	520	2	51	161	26	68	32	2138	12	6	261	74
RTOR Reduction (vph)	0	34	0	0	64	0	0	1	0	0	24	0
Lane Group Flow (vph)	520	19	0	161	30	0	32	2149	0	6	311	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	31.4	31.4		5.0	5.0		3.3	40.0		1.0	37.7	
Effective Green, g (s)	31.4	31.4		5.0	5.0		3.3	40.0		1.0	37.7	
Actuated g/C Ratio	0.33	0.33		0.05	0.05		0.03	0.42		0.01	0.39	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	577	519		91	86		60	1468		18	1339	
v/s Ratio Prot	c0.29	0.01		c0.09	0.02		c0.02	c0.61		0.00	0.09	
v/s Ratio Perm												
v/c Ratio	0.90	0.04		1.77	0.34		0.53	1.46		0.33	0.23	
Uniform Delay, d1	31.0	22.1		45.6	44.1		45.7	28.1		47.3	19.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	17.2	0.0		386.9	2.4		8.8	212.7		10.6	0.1	
Delay (s)	48.2	22.2		432.5	46.5		54.6	240.8		57.9	19.7	
Level of Service	D	C		F	D		D	F		E	B	
Approach Delay (s)		45.8			290.2			238.1			20.4	
Approach LOS		D			F			F			C	
Intersection Summary												
HCM 2000 Control Delay			187.0			HCM 2000 Level of Service				F		
HCM 2000 Volume to Capacity ratio			1.25									
Actuated Cycle Length (s)			96.3			Sum of lost time (s)			18.9			
Intersection Capacity Utilization			96.9%			ICU Level of Service				F		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	9	247	20	0	1863	20	46	27	1900	23	48	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5029			5077		1770	1846			1732	
Flt Permitted	0.95	1.00			1.00		0.65	1.00			0.14	
Satd. Flow (perm)	1770	5029			5077		1210	1846			250	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	10	278	22	0	2047	22	55	32	2	30	62	78
RTOR Reduction (vph)	0	5	0	0	1	0	0	2	0	0	17	0
Lane Group Flow (vph)	10	295	0	0	2068	0	55	32	0	0	153	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1902			2061		235	358			41	
v/s Ratio Prot	c0.01	0.06			c0.41			0.02				
v/s Ratio Perm							c0.05				c0.61	
v/c Ratio	0.05	0.16			1.00		0.23	0.09			3.74	
Uniform Delay, d1	71.5	37.0			53.5		61.2	59.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.2			19.1		0.5	0.1			1290.2	
Delay (s)	71.6	37.1			72.6		61.7	59.6			1365.2	
Level of Service	E	D			E		E	E			F	
Approach Delay (s)		38.2			72.6			60.9			1365.2	
Approach LOS		D			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		151.4			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.22										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		74.9%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	257	0	457	1873	10	0	0	0	0	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	313	0	486	1993	11	0	0	0	0	0	20
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	313	0	486	2004	0	0	0	0	0	0	8
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.06		0.14	c0.57							
v/s Ratio Perm												0.00
v/c Ratio		0.16		0.28	0.62							0.01
Uniform Delay, d1		37.1		26.2	1.7							34.9
Progression Factor		0.37		1.00	1.00							1.00
Incremental Delay, d2		0.2		0.1	0.4							0.0
Delay (s)		13.8		26.3	2.1							35.0
Level of Service		B		C	A							C
Approach Delay (s)		13.8			6.8		0.0					35.0
Approach LOS		B			A		A					C
Intersection Summary												
HCM 2000 Control Delay		7.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		73.8%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

Horizon Year (1 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	10	243	0	0	132	107	0	0	0	49	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	12	289	0	0	142	115	0	0	0	54	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	257			289			518	570	289	513	513	199
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	257			289			518	570	289	513	513	199
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1308			1273			462	427	750	469	461	842

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	301	257	0	59
Volume Left	12	0	0	54
Volume Right	0	115	0	5
cSH	1308	1273	1700	489
Volume to Capacity	0.01	0.00	0.00	0.12
Queue Length 95th (ft)	1	0	0	10
Control Delay (s)	0.4	0.0	0.0	13.4
Lane LOS	A		A	B
Approach Delay (s)	0.4	0.0	0.0	13.4
Approach LOS			A	B

Intersection Summary

Average Delay	1.5			
Intersection Capacity Utilization	30.9%		ICU Level of Service	A
Analysis Period (min)	15			

NBC Coastal Campus

22: 3rd St & Palm Ave

Horizon Year (1 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	283	5	27	215	25	12	15	129	12	11	15
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	9	329	6	29	231	27	15	19	159	15	14	19
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	335	29	258	193	48						
Volume Left (vph)	9	0	29	0	15	15						
Volume Right (vph)	0	6	0	27	159	19						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.1	5.5	6.1	5.5	5.2	5.8						
Degree Utilization, x	0.02	0.52	0.05	0.40	0.28	0.08						
Capacity (veh/h)	573	629	559	622	625	536						
Control Delay (s)	8.0	13.1	8.2	11.0	10.1	9.2						
Approach Delay (s)	13.0		10.7		10.1	9.2						
Approach LOS	B		B		B	A						











Intersection Summary

Delay	11.4			
Level of Service	B			
Intersection Capacity Utilization	38.4%		ICU Level of Service	A
Analysis Period (min)	15			

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK


















Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	232	435	340	156	18	71
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	294	551	415	190	25	100
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	605				1648	302
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	605				1648	302
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	70				60	86
cM capacity (veh/h)	969				63	694
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	294	551	276	328	125	
Volume Left	294	0	0	0	25	
Volume Right	0	0	0	190	100	
cSH	969	1700	1700	1700	228	
Volume to Capacity	0.30	0.32	0.16	0.19	0.55	
Queue Length 95th (ft)	32	0	0	0	74	
Control Delay (s)	10.3	0.0	0.0	0.0	38.4	
Lane LOS	B				E	
Approach Delay (s)	3.6		0.0		38.4	
Approach LOS					E	
Intersection Summary						
Average Delay			5.0			
Intersection Capacity Utilization			42.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	428	16	27	341	0	67	39	83	2	28	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3520		1770	3539			1722			1857	1583
Flt Permitted	0.50	1.00		0.43	1.00			0.87			0.98	1.00
Satd. Flow (perm)	923	3520		810	3539			1528			1824	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	22	556	21	35	443	0	102	59	126	3	48	48
RTOR Reduction (vph)	0	4	0	0	0	0	0	33	0	0	0	30
Lane Group Flow (vph)	22	573	0	35	443	0	0	254	0	0	51	18
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.5	13.5		13.5	13.5			13.4			13.4	13.4
Effective Green, g (s)	13.5	13.5		13.5	13.5			13.4			13.4	13.4
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	345	1316		302	1323			567			677	587
v/s Ratio Prot		c0.16			0.13							
v/s Ratio Perm	0.02			0.04				c0.17			0.03	0.01
v/c Ratio	0.06	0.44		0.12	0.33			0.45			0.08	0.03
Uniform Delay, d1	7.2	8.5		7.4	8.1			8.6			7.3	7.2
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.2			0.6			0.0	0.0
Delay (s)	7.3	8.7		7.6	8.2			9.1			7.4	7.2
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.6			8.2			9.1			7.3	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.5			HCM 2000 Level of Service			A			
HCM 2000 Volume to Capacity ratio			0.44									
Actuated Cycle Length (s)			36.1			Sum of lost time (s)			9.2			
Intersection Capacity Utilization			47.6%			ICU Level of Service			A			
Analysis Period (min)			15									
c. Critical Lane Group												



























NBC Coastal Campus
25: Delaware St & Palm Ave

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↘			↖	
Volume (veh/h)	514	5	0	0	3	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	559	5	0	0	3	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			564		559	559
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			564		559	559
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1007		490	529
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	559	5	10			
Volume Left	0	0	3			
Volume Right	0	5	7			
cSH	1700	1700	515			
Volume to Capacity	0.33	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.1			
Lane LOS			B			
Approach Delay (s)	0.0		12.1			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			37.1%	ICU Level of Service		A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			  			  	
Volume (vph)	24	764	40	27	2000	50	187	42	58	102	52	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5047		1770	5067			3324			3363	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5047		1770	5067			3324			3363	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	29	910	48	30	2198	55	225	51	70	124	63	34
RTOR Reduction (vph)	0	3	0	0	1	0	0	13	0	0	8	0
Lane Group Flow (vph)	29	955	0	30	2252	0	0	333	0	0	213	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2122		157	2018			646			653	
v/s Ratio Prot	0.02	c0.19		c0.02	c0.44			c0.10			c0.06	
v/s Ratio Perm												
v/c Ratio	0.15	0.45		0.19	1.12			0.52			0.33	
Uniform Delay, d1	72.3	37.3		76.0	54.1			64.9			62.4	
Progression Factor	1.00	1.00		1.20	0.80			1.00			1.00	
Incremental Delay, d2	0.4	0.7		0.4	58.0			0.7			0.3	
Delay (s)	72.7	38.0		91.8	101.4			65.6			62.6	
Level of Service	E	D		F	F			E			E	
Approach Delay (s)		39.0			101.3			65.6			62.6	
Approach LOS		D			F			E			E	
Intersection Summary												
HCM 2000 Control Delay			79.8			HCM 2000 Level of Service			E			
HCM 2000 Volume to Capacity ratio			0.70									
Actuated Cycle Length (s)			180.0			Sum of lost time (s)			18.3			
Intersection Capacity Utilization			76.8%			ICU Level of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

27: Florida St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3

Timing Plan: AM PEAK























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	1027	40	23	2198	14	21	5	35	63	12	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5080			1690		1770	1699	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.63	1.00	
Satd. Flow (perm)	1770	5057		1770	5080			1535		1182	1699	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	3	1154	45	26	2498	16	29	7	48	90	17	24
RTOR Reduction (vph)	0	2	0	0	0	0	0	27	0	0	20	0
Lane Group Flow (vph)	3	1197	0	26	2514	0	0	57	0	90	21	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3716			255		197	283	
v/s Ratio Prot	0.00	0.24		c0.01	c0.49						0.01	
v/s Ratio Perm								0.04		c0.08		
v/c Ratio	0.08	0.34		0.22	0.68			0.22		0.46	0.07	
Uniform Delay, d1	86.2	11.5		79.6	12.8			64.9		67.7	63.3	
Progression Factor	1.62	0.26		1.41	0.39			1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.3		0.5	0.5			0.4		1.7	0.1	
Delay (s)	140.2	3.2		112.5	5.6			65.4		69.3	63.4	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.6			6.7			65.4			67.5	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		9.0			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		76.2%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

28: 13th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	1107	72	110	2031	59	167	22	104	192	41	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.91	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1244	81	133	2447	71	188	25	117	256	55	23
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	97	0	3	0
Lane Group Flow (vph)	4	1321	0	133	2447	41	0	213	20	0	331	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.26		c0.08	c0.48			c0.12			c0.10	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.10	0.59		0.68	0.91	0.05		0.69	0.07		0.57	
Uniform Delay, d1	86.2	37.9		76.9	38.1	20.3		70.0	62.5		68.4	
Progression Factor	1.19	0.60		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	1.1		9.0	5.6	0.1		6.6	0.1		1.4	
Delay (s)	103.3	24.0		85.9	43.7	20.4		76.7	62.6		69.7	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		24.2			45.2			71.7			69.7	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		42.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.80										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		93.2%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	16	1410	29	50	2179	14	18	8	56	44	3	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1673			1724	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.79	
Satd. Flow (perm)	1770	5070		1770	5081			1562			1405	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	17	1533	32	58	2534	16	21	10	67	58	4	32
RTOR Reduction (vph)	0	2	0	0	0	0	0	53	0	0	25	0
Lane Group Flow (vph)	17	1563	0	58	2550	0	0	45	0	0	69	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	1.5	37.8		2.7	39.0			15.3			15.3	
Effective Green, g (s)	1.5	37.8		2.7	39.0			15.3			15.3	
Actuated g/C Ratio	0.02	0.53		0.04	0.55			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	37	2680		66	2771			334			300	
v/s Ratio Prot	0.01	0.31		c0.03	c0.50							
v/s Ratio Perm								0.03			c0.05	
v/c Ratio	0.46	0.58		0.88	0.92			0.14			0.23	
Uniform Delay, d1	34.6	11.5		34.2	14.8			22.7			23.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	8.8	0.3		69.1	5.6			0.2			0.4	
Delay (s)	43.4	11.8		103.3	20.5			22.9			23.6	
Level of Service	D	B		F	C			C			C	
Approach Delay (s)		12.1			22.3			22.9			23.6	
Approach LOS		B			C			C			C	
Intersection Summary												
HCM 2000 Control Delay		18.7			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		71.5			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		60.8%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰		↰	↰	↰	↰	↰	↰
Volume (vph)	105	1427	34	280	2108	246	86	83	884	269	106	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	122	1659	40	298	2243	262	96	92	982	320	126	105
RTOR Reduction (vph)	0	2	0	0	0	69	0	147	173	0	3	65
Lane Group Flow (vph)	122	1697	0	298	2243	193	96	397	357	320	134	29
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.1		17.9	47.0	47.0	8.5	35.3	35.3	10.3	37.1	37.1
Effective Green, g (s)	6.0	35.1		17.9	47.0	47.0	8.5	35.3	35.3	10.3	37.1	37.1
Actuated g/C Ratio	0.05	0.29		0.15	0.39	0.39	0.07	0.29	0.29	0.09	0.31	0.31
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	170	1475		262	1983	617	124	453	440	293	538	463
v/s Ratio Prot	0.04	0.33		c0.17	c0.44		0.05	c0.26		c0.09	0.08	
v/s Ratio Perm						0.12			0.24			0.02
v/c Ratio	0.72	1.15		1.14	1.13	0.31	0.77	0.88	0.81	1.09	0.25	0.06
Uniform Delay, d1	56.4	42.7		51.3	36.8	25.5	55.1	40.5	39.5	55.1	31.3	29.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.5	76.0		97.8	66.0	0.3	25.4	17.1	10.8	79.5	0.2	0.1
Delay (s)	69.9	118.7		149.1	102.8	25.8	80.5	57.6	50.3	134.6	31.5	29.5
Level of Service	E	F		F	F	C	F	E	D	F	C	C
Approach Delay (s)		115.4			100.5			56.2			91.0	
Approach LOS		F			F			E			F	
Intersection Summary												
HCM 2000 Control Delay		95.8			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.07										
Actuated Cycle Length (s)		120.5			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		93.3%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (1 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	326	1245	0	178	1392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	366	1339	0	198	1547
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	366	1339	0	198	1544
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.10	c0.38		0.11	c0.55
v/s Ratio Perm						
v/c Ratio		0.14	1.15		0.96	1.01
Uniform Delay, d1		2.5	26.8		35.1	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	76.7		49.7	24.9
Delay (s)		2.5	103.5		84.8	42.9
Level of Service		A	F		F	D
Approach Delay (s)		2.5	103.5		47.6	
Approach LOS		A	F		D	
Intersection Summary						
HCM 2000 Control Delay		64.5		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		1.13				
Actuated Cycle Length (s)		80.0		Sum of lost time (s)		14.2
Intersection Capacity Utilization		72.4%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)







Horizon Year (1 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	504	0	0	489	600	872	2	165	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3247		1681	1629				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3247		1681	1629				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	579	0	0	532	652	948	2	179	0	0	0
RTOR Reduction (vph)	0	0	0	0	401	0	0	32	0	0	0	0
Lane Group Flow (vph)	0	579	0	0	783	0	578	519	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		18.8			18.8		22.0	22.0				
Effective Green, g (s)		18.8			18.8		22.0	22.0				
Actuated g/C Ratio		0.39			0.39		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1363			1250		757	734				
v/s Ratio Prot		0.16			c0.24							
v/s Ratio Perm							c0.34	0.32				
v/c Ratio		0.42			0.63		0.76	0.71				
Uniform Delay, d1		11.0			12.2		11.2	10.8				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			1.0		4.6	3.1				
Delay (s)		11.2			13.1		15.8	13.9				
Level of Service		B			B		B	B				
Approach Delay (s)		11.2			13.1		14.9				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay		13.4							HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		48.8							Sum of lost time (s)		8.0	
Intersection Capacity Utilization		75.4%							ICU Level of Service		D	
Analysis Period (min)		15										
c Critical Lane Group												













NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Horizon Year (1 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	4	5	67	14	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	16	7	93	34	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	141	34	34			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	141	34	34			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	848	1039	1577			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	16	100	34			
Volume Left	0	7	0			
Volume Right	16	0	0			
cSH	1039	1577	1700			
Volume to Capacity	0.02	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.5	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		1.3				
Intersection Capacity Utilization		17.6%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	3573	18	0	1686	241	0	0	908	0	0	56
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%			0%	0%		0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	3722	19	0	1738	248	0	0	1009	0	0	85
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2007			3761			4435	5758	1290	3143	5643	744
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2007			3761			4435	5758	1290	3143	5643	744
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	42	100	100	75
cM capacity (veh/h)	277			54			0	0	1730	2	0	345
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1489	1489	763	695	695	596	1009	85				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	19	0	0	248	1009	85				
cSH	1700	1700	1700	1700	1700	1700	1730	345				
Volume to Capacity	0.88	0.88	0.45	0.41	0.41	0.35	0.58	0.25				
Queue Length 95th (ft)	0	0	0	0	0	0	100	24				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.9	18.8				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.9	18.8				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.7								
Intersection Capacity Utilization			134.3%				ICU Level of Service	H				
Analysis Period (min)			15									

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3336	132	0	1724	0	191	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3439	136	0	1796	0	233	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			3595		4146	1254	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			3595		4146	1254	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			64		2	158	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1376	1376	824	599	599	599	233
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	136	0	0	0	233
cSH	1700	1700	1700	1700	1700	1700	158
Volume to Capacity	0.81	0.81	0.48	0.35	0.35	0.35	1.48
Queue Length 95th (ft)	0	0	0	0	0	0	379
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	298.9
Lane LOS							F
Approach Delay (s)	0.0			0.0			298.9
Approach LOS							F
Intersection Summary							
Average Delay			12.4				
Intersection Capacity Utilization			87.9%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	
Volume (vph)	0	0	0	986	543		87	245		0	0	771
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4636		1770	3539				3527
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4636		1770	3539				3527
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1038	572	92	90	253	0	0	0	795
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	0	0	0	2
Lane Group Flow (vph)	0	0	0	519	1173	0	90	253	0	0	0	808
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA				NA
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1432		98	1989				1567
v/s Ratio Prot				c0.34	0.25		c0.05	0.07				c0.23
v/s Ratio Perm												
v/c Ratio				1.10	0.98dl		0.92	0.13				0.52
Uniform Delay, d1				31.1	28.8		42.3	9.3				18.0
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				73.0	3.8		64.3	0.0				0.3
Delay (s)				104.1	32.6		106.6	9.3				18.3
Level of Service				F	C		F	A				B
Approach Delay (s)		0.0			54.4			34.8				18.3
Approach LOS		A			D			C				B
Intersection Summary												
HCM 2000 Control Delay			41.8				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.77									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			17.2			
Intersection Capacity Utilization		134.1%				ICU Level of Service			H			
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	0	1720	49	0	0	0	0	340	451	676	1102	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3124	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3124	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	0	1890	54	0	0	0	0	395	524	704	1148	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	9	29	0	0	0
Lane Group Flow (vph)	0	1890	25	0	0	0	0	622	259	704	1148	0
Confl. Peds. (#/hr)				20					20			
Turn Type	NA	Perm					NA	Perm	Prot	NA		
Protected Phases	4	4					2		1	6		
Permitted Phases			4					2				
Actuated Green, G (s)		63.4	63.4					56.2	56.2	41.0	100.0	
Effective Green, g (s)		63.4	63.4					56.2	56.2	41.0	100.0	
Actuated g/C Ratio		0.36	0.36					0.32	0.32	0.23	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1842	573					1003	433	804	2022	
v/s Ratio Prot		c0.37						c0.20		c0.21	0.32	
v/s Ratio Perm			0.02						0.19			
v/c Ratio		1.03	0.04					0.62	0.60	0.88	0.57	
Uniform Delay, d1		55.8	36.2					50.4	49.9	64.5	23.8	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		27.9	0.0					1.2	2.2	10.5	0.4	
Delay (s)		83.7	36.2					51.6	52.2	75.1	24.2	
Level of Service		F	D					D	D	E	C	
Approach Delay (s)		82.4		0.0				51.7			43.5	
Approach LOS		F		A				D			D	
Intersection Summary												
HCM 2000 Control Delay		61.1		HCM 2000 Level of Service				E				
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		134.1%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												













NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑↑
Volume (vph)	203	14	1040	793	0	1384
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3262			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3262			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	260	18	1169	891	0	1488
RTOR Reduction (vph)	2	0	66	0	0	0
Lane Group Flow (vph)	276	0	1994	0	0	1488
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA		NA	
Protected Phases	8		2		6	
Permitted Phases						
Actuated Green, G (s)	30.0		120.9		120.9	
Effective Green, g (s)	30.0		120.9		120.9	
Actuated g/C Ratio	0.19		0.76		0.76	
Clearance Time (s)	4.1		5.0		5.0	
Vehicle Extension (s)	3.0		3.0		3.0	
Lane Grp Cap (vph)	296		2464		2540	
v/s Ratio Prot	c0.17		c0.61		0.44	
v/s Ratio Perm						
v/c Ratio	0.93		0.81		0.59	
Uniform Delay, d1	64.0		12.3		8.6	
Progression Factor	1.00		1.00		1.00	
Incremental Delay, d2	35.0		3.0		1.0	
Delay (s)	99.0		15.3		9.6	
Level of Service	F		B		A	
Approach Delay (s)	99.0		15.3		9.6	
Approach LOS	F		B		A	
Intersection Summary						
HCM 2000 Control Delay		19.2		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.85				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		87.6%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						







NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	168	12	34	30	12	29	27	1737	58	79	1646	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1724		1770	3522		1770	3488	
Flt Permitted	0.65	0.65	1.00		0.81		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1153	1158	1583		1422		1770	3522		1770	3488	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	215	15	44	47	19	45	29	1868	62	86	1789	193
RTOR Reduction (vph)	0	0	36	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	114	116	8	0	89	0	29	1929	0	86	1979	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	19.7	19.7	19.7		19.7		4.7	70.9		8.1	74.3	
Effective Green, g (s)	19.7	19.7	19.7		19.7		4.7	70.9		8.1	74.3	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.04	0.62		0.07	0.65	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	200	200	274		246		73	2200		126	2283	
v/s Ratio Prot							0.02	0.55		c0.05	c0.57	
v/s Ratio Perm	0.10	c0.10	0.00		0.06							
v/c Ratio	0.57	0.58	0.03		0.36		0.40	0.88		0.68	0.87	
Uniform Delay, d1	43.0	43.1	38.9		41.3		53.0	17.7		51.4	15.7	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.7	4.0	0.0		0.9		3.5	4.3		14.2	3.8	
Delay (s)	46.7	47.1	39.0		42.3		56.5	22.0		65.6	19.4	
Level of Service	D	D	D		D		E	C		E	B	
Approach Delay (s)		45.7			42.3			22.5			21.3	
Approach LOS		D			D			C			C	
Intersection Summary												
HCM 2000 Control Delay		23.9			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		113.5			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		81.1%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	9	0	169	0	1510	0	38	1808	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	13	0	245	0	1606	0	41	1944	0
RTOR Reduction (vph)	0	0	0	0	198	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	60	0	0	1606	0	41	1944	0
Turn Type				Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.0			42.2		2.8	49.2	
Effective Green, g (s)					14.0			42.2		2.8	49.2	
Actuated g/C Ratio					0.19			0.58		0.04	0.67	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					309			2037		67	2375	
v/s Ratio Prot					c0.04			0.45		0.02	c0.55	
v/s Ratio Perm												
v/c Ratio					0.19			0.79		0.61	0.82	
Uniform Delay, d1					24.9			12.1		34.7	8.8	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			2.1		15.4	2.3	
Delay (s)					25.2			14.2		50.1	11.1	
Level of Service					C			B		D	B	
Approach Delay (s)		0.0			25.2			14.2			11.9	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					13.8			HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio					0.79							
Actuated Cycle Length (s)					73.3			Sum of lost time (s)		18.9		
Intersection Capacity Utilization					69.3%			ICU Level of Service		C		
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Horizon Year (1 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	289	48	123	8	70	402	29	843	3	135	1638	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1515		1853	1510	1770	3539	1346	1770	3515	
Flt Permitted	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1515		1853	1510	1770	3539	1346	1770	3515	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	380	63	162	9	76	437	32	926	3	144	1743	72
RTOR Reduction (vph)	0	0	131	0	0	196	0	0	2	0	2	0
Lane Group Flow (vph)	380	63	31	0	85	241	32	926	1	144	1813	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.7	27.7	27.7		25.2	25.2	4.0	56.8	56.8	16.9	69.7	
Effective Green, g (s)	27.7	27.7	27.7		25.2	25.2	4.0	56.8	56.8	16.9	69.7	
Actuated g/C Ratio	0.19	0.19	0.19		0.17	0.17	0.03	0.39	0.39	0.12	0.48	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	335	353	287		319	260	48	1376	523	204	1678	
v/s Ratio Prot	c0.21	0.03			0.05		0.02	0.26		c0.08	c0.52	
v/s Ratio Perm			0.02			c0.16			0.00			
v/c Ratio	1.13	0.18	0.11		0.27	0.93	0.67	0.67	0.00	0.71	1.08	
Uniform Delay, d1	59.1	49.6	48.9		52.4	59.5	70.3	36.9	27.3	62.2	38.1	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	90.7	0.2	0.2		0.5	36.3	29.8	2.6	0.0	10.6	47.2	
Delay (s)	149.8	49.9	49.1		52.8	95.8	100.1	39.6	27.3	72.7	85.4	
Level of Service	F	D	D		D	F	F	D	C	E	F	
Approach Delay (s)		112.4			88.8			41.5			84.4	
Approach LOS		F			F			D			F	
Intersection Summary												
HCM 2000 Control Delay		79.0			HCM 2000 Level of Service					E		
HCM 2000 Volume to Capacity ratio		1.06										
Actuated Cycle Length (s)		146.0			Sum of lost time (s)					19.4		
Intersection Capacity Utilization		86.7%			ICU Level of Service					E		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

Horizon Year (1 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	331	478	4	55	180	4
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	368	531	6	77	205	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915				600
pX, platoon unblocked	1.00					
vC, conflicting volume	458	44			83	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	456	44			83	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	24	48			86	
cM capacity (veh/h)	485	1026			1514	
Direction, Lane #						
Volume Total	899	83	209			
Volume Left	368	0	205			
Volume Right	531	77	0			
cSH	946	1700	1514			
Volume to Capacity	0.95	0.05	0.14			
Queue Length 95th (ft)	392	0	12			
Control Delay (s)	39.5	0.0	7.6			
Lane LOS	E		A			
Approach Delay (s)	39.5	0.0	7.6			
Approach LOS	E					
Intersection Summary						
Average Delay		31.2				
Intersection Capacity Utilization		41.9%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (1 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕		↕
Volume (vph)	337	5	884	58	0	1787
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1771		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1771		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	427	6	982	64	0	2008
RTOR Reduction (vph)	1	0	0	37	0	0
Lane Group Flow (vph)	432	0	982	27	0	2008
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	843		1520	633		1520
v/s Ratio Prot	c0.24		0.28			c0.57
v/s Ratio Perm				0.02		
v/c Ratio	0.51		0.65	0.04		1.32
Uniform Delay, d1	19.1		23.6	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.5		1.0	0.0		149.2
Delay (s)	19.6		24.6	17.4		179.1
Level of Service	B		C	B		F
Approach Delay (s)	19.6		24.2			179.1
Approach LOS	B		C			F

Intersection Summary

HCM 2000 Control Delay	112.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	9.9
Intersection Capacity Utilization	99.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Horizon Year (1 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕	↕	↕
Volume (veh/h)	5	8	711	4	18	1663
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	10	16	827	5	20	1827
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1782	416			831	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1782	416			831	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	86	97			98	
cM capacity (veh/h)	71	586			797	

Direction, Lane

	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
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Volume Total	26	551	280	20	914	914
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Volume Left	10	0	0	20	0	0
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Volume Right	16	0	5	0	0	0
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cSH	155	1700	1700	797	1700	1700
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Volume to Capacity	0.17	0.32	0.16	0.02	0.54	0.54
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Queue Length 95th (ft)	15	0	0	2	0	0
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Control Delay (s)	32.8	0.0	0.0	9.6	0.0	0.0
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Lane LOS	D			A		
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Approach Delay (s)	32.8	0.0		0.1		
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Approach LOS	D					
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Intersection Summary

Average Delay		0.4				
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Intersection Capacity Utilization		56.0%		ICU Level of Service		B
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Analysis Period (min)		15				
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NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement						
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	35	66	648	14	120	1548
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	38	72	736	16	132	1701
RTOR Reduction (vph)	0	49	0	8	0	0
Lane Group Flow (vph)	38	23	736	8	132	1701
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	11.4	25.2	25.9	25.9	8.7	43.4
Effective Green, g (s)	11.4	20.1	25.9	25.9	8.7	43.4
Actuated g/C Ratio	0.18	0.31	0.40	0.40	0.14	0.68
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	314	496	1429	639	240	2396
v/s Ratio Prot	c0.02	0.01	0.21		0.07	c0.48
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.05	0.52	0.01	0.55	0.71
Uniform Delay, d1	22.1	15.3	14.4	11.4	25.9	6.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.3	0.0	2.7	1.0
Delay (s)	22.3	15.4	14.7	11.4	28.6	7.4
Level of Service	C	B	B	B	C	A
Approach Delay (s)	17.8		14.6			8.9
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay		10.9			HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio		0.70				
Actuated Cycle Length (s)		64.1			Sum of lost time (s)	18.1
Intersection Capacity Utilization		54.7%			ICU Level of Service	A
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement						
Lane Configurations		↖	↕			↕
Volume (veh/h)	0	27	637	22	0	1583
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	36	732	25	0	1721
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1605	379			757	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1605	379			757	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	94			100	
cM capacity (veh/h)	96	619			849	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	36	488	269	860	860	
Volume Left	0	0	0	0	0	
Volume Right	36	0	25	0	0	
cSH	619	1700	1700	1700	1700	
Volume to Capacity	0.06	0.29	0.16	0.51	0.51	
Queue Length 95th (ft)	5	0	0	0	0	
Control Delay (s)	11.2	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	11.2	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay		0.2				
Intersection Capacity Utilization		47.1%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↕	↕	↰	↱
Volume (vph)	35	30	629	22	27	1555
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	49	42	669	23	30	1709
RTOR Reduction (vph)	0	36	0	10	0	0
Lane Group Flow (vph)	49	6	669	13	30	1709
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	4.2	7.0	28.6	28.6	2.8	38.9
Effective Green, g (s)	4.2	7.0	28.6	28.6	2.8	38.9
Actuated g/C Ratio	0.08	0.14	0.58	0.58	0.06	0.78
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	149	222	2036	910	99	2769
v/s Ratio Prot	c0.03	0.00	0.19		0.02	c0.48
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.33	0.03	0.33	0.01	0.30	0.62
Uniform Delay, d1	21.4	18.4	5.5	4.5	22.5	2.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	0.0	0.1	0.0	1.7	0.4
Delay (s)	22.7	18.5	5.6	4.5	24.2	2.7
Level of Service	C	B	A	A	C	A
Approach Delay (s)	20.8		5.6			3.1
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			4.4		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.71			
Actuated Cycle Length (s)			49.7		Sum of lost time (s)	14.1
Intersection Capacity Utilization			53.9%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↕	↕		↕			↕		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	13	17	98	9	0	208	15	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	14	18	127	12	0	234	17	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	14	18	139	251						
Volume Left (vph)	0	0	127	0						
Volume Right (vph)	0	18	0	17						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.1	3.2	4.1	3.2						
Degree Utilization, x	0.02	0.02	0.16	0.22						
Capacity (veh/h)	867	1121	860	1122						
Control Delay (s)	7.1	6.3	7.9	7.1						
Approach Delay (s)	6.6		7.9	7.1						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.3							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (1 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱	↰	↱	↰			
Volume (vph)	12	215	0	0	95	160	14	538	80	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.69	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1279	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	14	244	0	0	109	184	15	591	88	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	109	0	53	0	0	0	0
Lane Group Flow (vph)	14	244	0	0	109	75	15	591	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	10.7	10.7			10.7	10.7	16.2	16.2	16.2			
Effective Green, g (s)	10.7	10.7			10.7	10.7	16.2	16.2	16.2			
Actuated g/C Ratio	0.27	0.27			0.27	0.27	0.40	0.40	0.40			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	339	494			494	420	711	1422	636			
v/s Ratio Prot		c0.13			0.06		0.01	c0.17				
v/s Ratio Perm	0.01					0.05			0.02			
v/c Ratio	0.04	0.49			0.22	0.18	0.02	0.42	0.06			
Uniform Delay, d1	11.0	12.5			11.5	11.4	7.3	8.7	7.4			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	0.8			0.2	0.2	0.0	0.2	0.0			
Delay (s)	11.0	13.3			11.8	11.6	7.3	8.8	7.4			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		13.2			11.7			8.6			0.0	
Approach LOS		B			B			A			A	
Intersection Summary												
HCM 2000 Control Delay		10.3			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.45										
Actuated Cycle Length (s)		40.3			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		44.4%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd









Horizon Year (1 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱	↰
Volume (veh/h)	189	351	88	516	0	1702	47
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	756	1404	100	586	0	1891	52
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2410	972	1943		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2410	972	1943		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	0	66		0		
cM capacity (veh/h)	18	252	298		0		
Direction, Lane #							
Volume Total	2160	100	293	293	1261	683	0
Volume Left	756	100	0	0	0	0	0
Volume Right	1404	0	0	0	0	52	0
cSH	46	298	1700	1700	1700	1700	1700
Volume to Capacity	47.24	0.34	0.17	0.17	0.74	0.40	0.00
Queue Length 95th (ft)	Err	36	0	0	0	0	0
Control Delay (s)	Err	23.1	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C					
Approach Delay (s)	Err	3.4			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			4509.7				
Intersection Capacity Utilization			95.5%		ICU Level of Service		
Analysis Period (min)			15				F









NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	101	7	79	19	4	7	85	436	58	19	1536	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.86		1.00	0.90		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1605		1770	1685		1770	3477		1770	3471	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1605		1770	1685		1770	3477		1770	3471	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	135	9	105	38	8	14	93	479	64	21	1707	251
RTOR Reduction (vph)	0	84	0	0	14	0	0	7	0	0	9	0
Lane Group Flow (vph)	135	30	0	38	8	0	93	536	0	21	1949	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	18.4	18.4		2.7	2.7		5.8	48.4		1.6	44.2	
Effective Green, g (s)	18.4	18.4		2.7	2.7		5.8	48.4		1.6	44.2	
Actuated g/C Ratio	0.20	0.20		0.03	0.03		0.06	0.54		0.02	0.49	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	361	328		53	50		114	1869		31	1704	
v/s Ratio Prot	c0.08	0.02		c0.02	0.00		c0.05	c0.15		0.01	c0.56	
v/s Ratio Perm												
v/c Ratio	0.37	0.09		0.72	0.17		0.82	0.29		0.68	1.14	
Uniform Delay, d1	30.8	29.0		43.3	42.6		41.6	11.4		43.9	22.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.1		36.9	1.6		34.4	0.1		45.6	72.2	
Delay (s)	31.5	29.2		80.2	44.2		76.0	11.5		89.6	95.1	
Level of Service	C	C		F	D		E	B		F	F	
Approach Delay (s)		30.4			67.0			20.9			95.0	
Approach LOS		C			E			C			F	
Intersection Summary												
HCM 2000 Control Delay		72.8										
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		90.0										
Intersection Capacity Utilization		78.5%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	1480	69	0	478	40	19	46	5	28	30	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.99			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5051			5026		1770	1836			1759	
Flt Permitted	0.95	1.00			1.00		0.69	1.00			0.12	
Satd. Flow (perm)	1770	5051			5026		1294	1836			217	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	75	1682	78	0	509	43	27	66	7	33	35	28
RTOR Reduction (vph)	0	2	0	0	5	0	0	2	0	0	8	0
Lane Group Flow (vph)	75	1758	0	0	547	0	27	71	0	0	88	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1910			2041		251	357			36	
v/s Ratio Prot	c0.04	c0.35			c0.11			c0.04				
v/s Ratio Perm							0.02				c0.40	
v/c Ratio	0.38	0.92			0.27		0.11	0.20			2.44	
Uniform Delay, d1	74.3	53.4			35.6		59.7	60.7			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.2	8.7			0.3		0.2	0.3			721.7	
Delay (s)	75.5	62.1			35.9		59.8	61.0			796.7	
Level of Service	E	E			D		E	E			F	
Approach Delay (s)		62.6			35.9			60.7			796.7	
Approach LOS		E			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		84.1										
HCM 2000 Volume to Capacity ratio		0.95										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		69.5%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	1514	0	580	521	44	0	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3498							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3498							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1701	0	617	554	47	0	0	0	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	1701	0	617	601	0	0	0	0	0	0	4
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3179							609
v/s Ratio Prot		c0.33		c0.18	c0.17							
v/s Ratio Perm												0.00
v/c Ratio		0.88		0.32	0.19							0.01
Uniform Delay, d1		52.3		21.2	0.9							34.9
Progression Factor		0.26		1.00	1.00							1.00
Incremental Delay, d2		2.3		0.1	0.0							0.0
Delay (s)		15.9		21.3	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		15.9			11.3		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		14.1										B
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		180.0						22.3				
Intersection Capacity Utilization		55.0%							A			
Analysis Period (min)		15										
c Critical Lane Group												



















NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	4	219	0	0	318	42	0	0	0	107	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	5	255	0	0	361	48	0	0	0	162	0	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	409			255			663	673	255	649	649	385
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	409			255			663	673	255	649	649	385
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	58	100	98
cM capacity (veh/h)	1150			1310			366	375	784	382	387	662
Direction, Lane #												
Volume Total	259	409	0	176								
Volume Left	5	0	0	162								
Volume Right	0	48	0	14								
cSH	1150	1310	1700	395								
Volume to Capacity	0.00	0.00	0.00	0.45								
Queue Length 95th (ft)	0	0	0	56								
Control Delay (s)	0.2	0.0	0.0	21.3								
Lane LOS	A			A			C					
Approach Delay (s)	0.2	0.0	0.0	21.3								
Approach LOS				A			C					
Intersection Summary												
Average Delay		4.5										
Intersection Capacity Utilization		32.4%								A		
Analysis Period (min)		15										













NBC Coastal Campus
22: 3rd St & Palm Ave

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	302	13	87	332	25	15	40	70	29	34	14
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	10	387	17	98	373	28	26	70	123	63	74	30
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	10	404	98	401	219	167						
Volume Left (vph)	10	0	98	0	26	63						
Volume Right (vph)	0	17	0	28	123	30						
Hadj (s)	0.53	0.01	0.53	-0.02	-0.28	0.00						
Departure Headway (s)	7.4	6.8	7.3	6.7	6.8	7.2						
Degree Utilization, x	0.02	0.77	0.20	0.75	0.41	0.34						
Capacity (veh/h)	462	507	474	518	466	422						
Control Delay (s)	9.3	27.6	10.8	25.7	14.5	13.9						
Approach Delay (s)	27.1		22.8		14.5	13.9						
Approach LOS	D		C		B	B						
Intersection Summary												
Delay			21.6									
Level of Service			C									
Intersection Capacity Utilization			42.3%		ICU Level of Service		A					
Analysis Period (min)			15									




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

									
Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Lane Configurations									
Volume (veh/h)	75	432	466	41	54	146			
Sign Control		Free	Free		Stop				
Grade		0%	0%		0%				
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85			
Hourly flow rate (vph)	77	445	542	48	64	172			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type	None		None						
Median storage (veh)									
Upstream signal (ft)	908								
pX, platoon unblocked									
vC, conflicting volume	590				1166	295			
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	590				1166	295			
tC, single (s)	4.1				6.8	6.9			
tC, 2 stage (s)									
tF (s)	2.2				3.5	3.3			
p0 queue free %	92				63	76			
cM capacity (veh/h)	982				172	702			
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1				
Volume Total	77	445	361	228	235				
Volume Left	77	0	0	0	64				
Volume Right	0	0	0	48	172				
cSH	982	1700	1700	1700	384				
Volume to Capacity	0.08	0.26	0.21	0.13	0.61				
Queue Length 95th (ft)	6	0	0	0	98				
Control Delay (s)	9.0	0.0	0.0	0.0	28.2				
Lane LOS	A				D				
Approach Delay (s)	1.3	0.0			28.2				
Approach LOS					D				
Intersection Summary									
Average Delay			5.4						
Intersection Capacity Utilization			41.4%	ICU Level of Service		A			
Analysis Period (min)			15						










NBC Coastal Campus
24: 7th St & Palm Ave

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	441	30	32	468	4	56	26	23	13	45	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3535			1761			1842	1583
Flt Permitted	0.46	1.00		0.44	1.00			0.79			0.89	1.00
Satd. Flow (perm)	858	3505		823	3535			1433			1665	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	35	525	36	35	514	4	68	32	28	17	59	41
RTOR Reduction (vph)	0	7	0	0	1	0	0	22	0	0	0	32
Lane Group Flow (vph)	35	554	0	35	517	0	0	106	0	0	76	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases	2			6			8			4		
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	14.9	14.9		14.9	14.9			6.5			6.5	6.5
Effective Green, g (s)	14.9	14.9		14.9	14.9			6.5			6.5	6.5
Actuated g/C Ratio	0.49	0.49		0.49	0.49			0.21			0.21	0.21
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	417	1706		400	1721			304			353	336
v/s Ratio Prot	c0.16			0.15								
v/s Ratio Perm	0.04			0.04				c0.07			0.05	0.01
v/c Ratio	0.08		0.32	0.09		0.30		0.35			0.22	0.03
Uniform Delay, d1	4.2		4.8	4.2		4.7		10.2			9.9	9.5
Progression Factor	1.00		1.00	1.00		1.00		1.00			1.00	1.00
Incremental Delay, d2	0.1		0.1	0.1		0.1		0.7			0.3	0.0
Delay (s)	4.3		4.9	4.3		4.8		10.9			10.3	9.6
Level of Service	A		A	A		A		B			B	A
Approach Delay (s)	4.9			4.8				10.9			10.0	
Approach LOS	A			A				B			B	
Intersection Summary												
HCM 2000 Control Delay	5.8			HCM 2000 Level of Service				A				
HCM 2000 Volume to Capacity ratio	0.33											
Actuated Cycle Length (s)	30.6			Sum of lost time (s)				9.2				
Intersection Capacity Utilization	45.5%			ICU Level of Service				A				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	490	9	0	0	7	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	598	11	0	0	10	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)			767			
pX, platoon unblocked						
vC, conflicting volume			609		598	598
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			609		598	598
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			970		465	503
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	598	11	15			
Volume Left	0	0	10			
Volume Right	0	11	4			
cSH	1700	1700	476			
Volume to Capacity	0.35	0.01	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.8			
Lane LOS			B			
Approach Delay (s)	0.0		12.8			
Approach LOS			B			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			35.8%		ICU Level of Service A	
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	47	1821	143	66	948	149	111	102	71	197	90	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Flt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5030		1770	4981			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5030		1770	4981			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	50	1937	152	67	958	151	122	112	78	221	101	33
RTOR Reduction (vph)	0	5	0	0	11	0	0	19	0	0	4	0
Lane Group Flow (vph)	50	2084	0	67	1098	0	0	293	0	0	351	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2003		196	1984			649			658	
v/s Ratio Prot	0.03	c0.41		c0.04	0.22			c0.09			c0.10	
v/s Ratio Perm												
v/c Ratio	0.26	1.04		0.34	0.55			0.45			0.53	
Uniform Delay, d1	73.2	54.1		73.9	41.8			64.0			65.2	
Progression Factor	1.00	1.00		1.21	0.90			1.00			1.00	
Incremental Delay, d2	0.7	31.6		1.0	1.0			0.5			0.8	
Delay (s)	73.9	85.7		90.4	38.7			64.5			66.0	
Level of Service	E	F		F	D			E			E	
Approach Delay (s)		85.4			41.6			64.5			66.0	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		69.1			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		124.9%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	23	2143	65	56	1410	63	24	12	40	72	15	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5063		1770	5053			1703		1770	1719	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.59	1.00	
Satd. Flow (perm)	1770	5063		1770	5053			1541		1103	1719	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.83	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	23	2187	66	58	1454	65	29	14	48	85	18	19
RTOR Reduction (vph)	0	1	0	0	2	0	0	24	0	0	17	0
Lane Group Flow (vph)	23	2252	0	58	1517	0	0	67	0	85	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.3		16.0	130.3			22.5		22.5	22.5	
Effective Green, g (s)	12.0	126.3		16.0	130.3			22.5		22.5	22.5	
Actuated g/C Ratio	0.07	0.70		0.09	0.72			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3552		157	3657			192		137	214	
v/s Ratio Prot	0.01	c0.44		c0.03	c0.30						0.01	
v/s Ratio Perm								0.04		c0.08		
v/c Ratio	0.19	0.63		0.37	0.41			0.35		0.62	0.10	
Uniform Delay, d1	79.4	14.4		77.2	9.8			72.1		74.7	69.7	
Progression Factor	1.41	0.13		1.52	0.28			1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3		1.1	0.3			1.1		8.4	0.2	
Delay (s)	112.6	2.1		118.9	3.0			73.2		83.1	69.9	
Level of Service	F	A		F	A			E		F	E	
Approach Delay (s)		3.2			7.2			73.2			79.1	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.6			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		66.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												







NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	2008	227	179	1494	93	147	46	146	176	51	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5008		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5008		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	32	2136	241	185	1540	96	160	50	159	238	69	31
RTOR Reduction (vph)	0	8	0	0	0	37	0	0	132	0	4	0
Lane Group Flow (vph)	32	2369	0	185	1540	59	0	210	27	0	334	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2217		192	2364	736		305	269		575	
v/s Ratio Prot	0.02	c0.47		c0.10	c0.30			c0.12			c0.10	
v/s Ratio Perm						0.04			0.02			
v/c Ratio	0.20	1.07		0.96	0.65	0.08		0.69	0.10		0.58	
Uniform Delay, d1	76.1	50.1		79.8	37.0	26.8		70.2	63.0		68.7	
Progression Factor	1.00	1.02		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	39.0		54.0	1.4	0.2		12.0	0.7		4.2	
Delay (s)	76.7	90.1		133.9	38.4	27.0		82.2	63.8		73.0	
Level of Service	E	F		F	D	C		F	E		E	
Approach Delay (s)		89.9			47.5			74.2			73.0	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		71.9			HCM 2000 Level of Service					E		
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		107.8%			ICU Level of Service				G			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	2153	57	195	1834	18	45	10			12	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5066		1770	5078			1680			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.88			0.80	
Satd. Flow (perm)	1770	5066		1770	5078			1503			1451	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.95	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	12	2392	63	205	1931	19	53	12	109	33	15	15
RTOR Reduction (vph)	0	2	0	0	1	0	0	78	0	0	12	0
Lane Group Flow (vph)	12	2453	0	205	1949	0	0	96	0	0	51	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.7			17.7	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.7			17.7	
Actuated g/C Ratio	0.01	0.47		0.13	0.60			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2404		233	3032			313			302	
v/s Ratio Prot	0.01	c0.48		c0.12	0.38							
v/s Ratio Perm								c0.06			0.04	
v/c Ratio	0.75	1.02		0.88	0.64			0.31			0.17	
Uniform Delay, d1	42.0	22.3		36.2	11.2			28.4			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	106.0	23.7		29.1	0.5			0.6			0.3	
Delay (s)	148.0	46.0		65.3	11.7			29.0			27.8	
Level of Service	F	D		E	B			C			C	
Approach Delay (s)		46.5			16.8			29.0			27.8	
Approach LOS		D			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		32.4			HCM 2000 Level of Service					C		
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		84.9			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		76.1%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	216	2084	30	376	1844	636	75	203	611	674	274	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	227	2194	32	404	1983	684	80	216	650	733	298	284
RTOR Reduction (vph)	0	1	0	0	0	88	0	25	309	0	2	122
Lane Group Flow (vph)	227	2225	0	404	1983	596	80	425	107	733	324	134
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.6	36.3		45.0	69.7	69.7	8.9	40.0	40.0	11.8	42.9	42.9
Effective Green, g (s)	11.6	36.3		45.0	69.7	69.7	8.9	40.0	40.0	11.8	42.9	42.9
Actuated g/C Ratio	0.07	0.23		0.29	0.45	0.45	0.06	0.26	0.26	0.08	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	256	1188		513	2286	711	101	421	388	261	483	416
v/s Ratio Prot	0.07	c0.44		c0.23	c0.39		0.05	c0.26		c0.21	c0.19	
v/s Ratio Perm						0.38			0.07			0.09
v/c Ratio	0.89	1.87		0.79	0.87	0.84	0.79	1.01	0.28	2.81	0.67	0.32
Uniform Delay, d1	71.0	59.4		50.6	38.5	37.7	72.1	57.5	45.9	71.6	49.8	44.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	28.5	396.1		7.8	3.8	8.6	33.3	46.1	0.4	824.4	3.6	0.5
Delay (s)	99.6	455.5		58.4	42.2	46.3	105.5	103.6	46.3	896.0	53.4	44.9
Level of Service	F	F		E	D	D	F	F	D	F	D	D
Approach Delay (s)		422.5			45.3			78.6			521.4	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		248.6			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.35										
Actuated Cycle Length (s)		155.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		137.8%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	↔
Volume (vph)	0	581	971	0	504	1891
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	653	1033	0	554	2078
RTOR Reduction (vph)	0	0	0	0	0	2
Lane Group Flow (vph)	0	653	1033	0	554	2076
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.18	c0.29		0.31	c0.75
v/s Ratio Perm						
v/c Ratio		0.37	1.20		0.84	1.17
Uniform Delay, d1		12.0	30.3		22.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	102.8		9.0	82.5
Delay (s)		12.1	133.1		31.7	97.0
Level of Service		B	F		C	F
Approach Delay (s)		12.1	133.1		83.3	
Approach LOS		B	F		F	
Intersection Summary						
HCM 2000 Control Delay		84.4			HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio		1.26				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		96.9%			ICU Level of Service	F
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	1078	0	0	604	287	492	3	123	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.25	0.25	0.25	
Adj. Flow (vph)	0	1123	0	0	679	322	529	3	132	0	0	0
RTOR Reduction (vph)	0	0	0	0	96	0	0	22	0	0	0	0
Lane Group Flow (vph)	0	1123	0	0	905	0	339	303	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		21.1			21.1		15.5	15.5				
Effective Green, g (s)		21.1			21.1		15.5	15.5				
Actuated g/C Ratio		0.47			0.47		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1674			1593		584	561				
v/s Ratio Prot		0.32			0.27							
v/s Ratio Perm							0.20	0.19				
v/c Ratio		0.67			0.57		0.58	0.54				
Uniform Delay, d1		9.1			8.5		11.9	11.7				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		1.1			0.5		1.5	1.0				
Delay (s)		10.1			8.9		13.4	12.7				
Level of Service		B			A		B	B				
Approach Delay (s)		10.1			8.9		13.0			0.0		
Approach LOS		B			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		10.4			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		44.6			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		53.9%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Horizon Year (1 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	11	9	4	38	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	18	10	4	55	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	79	55	55			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	79	55	55			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	918	1012	1550			
Direction, Lane #						
	EB 1	NB 1	SB 1			
Volume Total	18	14	55			
Volume Left	0	10	0			
Volume Right	18	0	0			
cSH	1012	1550	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.6				
Intersection Capacity Utilization		17.4%		ICU Level of Service		
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1309	35	0	3241	535	0	0	479	0	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1577	42	0	3523	582	0	0	599	0	0	13
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4124			1639			2826	5743	587	4379	5473	1505
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4124			1639			2826	5743	587	4379	5473	1505
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	55	100	100	87
cM capacity (veh/h)	38			385			7	0	1336	0	0	107
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	631	631	358	1409	1409	1286	599	13				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	42	0	0	582	599	13				
cSH	1700	1700	1700	1700	1700	1700	1336	107				
Volume to Capacity	0.37	0.37	0.21	0.83	0.83	0.76	0.45	0.13				
Queue Length 95th (ft)	0	0	0	0	0	0	59	10				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.9	43.6				
Lane LOS							A	E				
Approach Delay (s)	0.0			0.0			9.9	43.6				
Approach LOS							A	E				
Intersection Summary												
Average Delay				1.0								
Intersection Capacity Utilization				89.7%			ICU Level of Service		E			
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR						
Lane Configurations	↑↑↑			↑↑↑		↑						
Volume (veh/h)	1170	204	0	3140	0	232						
Sign Control	Free			Free	Stop							
Grade	0%			0%	0%							
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92						
Hourly flow rate (vph)	1330	232	0	3489	0	252						
Pedestrians	20			20	20							
Lane Width (ft)	12.0			12.0	12.0							
Walking Speed (ft/s)	4.0			4.0	4.0							
Percent Blockage	2			2	2							
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume				1581	2648	599						
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol				1581	2648	599						
tC, single (s)				4.1	6.8	6.9						
tC, 2 stage (s)												
tF (s)				2.2	3.5	3.3						
p0 queue free %				100	100	41						
cM capacity (veh/h)				405	18	430						
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1					
Volume Total	532	532	498	1163	1163	1163	252					
Volume Left	0	0	0	0	0	0	0					
Volume Right	0	0	232	0	0	0	252					
cSH	1700	1700	1700	1700	1700	1700	430					
Volume to Capacity	0.31	0.31	0.29	0.68	0.68	0.68	0.59					
Queue Length 95th (ft)	0	0	0	0	0	0	91					
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	24.6					
Lane LOS							C					
Approach Delay (s)	0.0			0.0			24.6					
Approach LOS							C					
Intersection Summary												
Average Delay				1.2								
Intersection Capacity Utilization				75.5%			ICU Level of Service		D			
Analysis Period (min)				15								

NBC Coastal Campus
3: Orange Ave & Third St

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↔↔↔	↔↔↔		↔	↔			↔↔	
Volume (vph)	0	0	0	1506	1555	251	42	94	0	0	260	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			1.00	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4642		1770	3539			3522	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4642		1770	3539			3522	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1619	1672	270	57	127	0	0	299	7
RTOR Reduction (vph)	0	0	0	0	6	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	874	2681	0	57	127	0	0	305	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.3			21.1	
Effective Green, g (s)				131.2	131.2		20.0	46.3			21.1	
Actuated g/C Ratio				0.69	0.69		0.11	0.24			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1055	3220		187	866			392	
v/s Ratio Prot				0.57	c0.58		c0.03	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.83	0.83		0.30	0.15			0.78	
Uniform Delay, d1				20.8	21.0		78.1	55.9			81.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				5.5	2.0		0.9	0.1			9.4	
Delay (s)				26.3	23.0		79.1	56.0			91.1	
Level of Service				C	C		E	E			F	
Approach Delay (s)		0.0			23.8			63.1			91.1	
Approach LOS		A			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		30.7		HCM 2000 Level of Service					C			
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		189.1		Sum of lost time (s)					16.8			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔↔	↔					↔↔	↔	↔↔	↔↔	
Volume (vph)	0	504	68	0	0	0	0	128	212	437	1388	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3174	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3174	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	0	548	74	0	0	0	0	149	230	475	1446	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	65	65	0	0	0
Lane Group Flow (vph)	0	548	45	0	0	0	0	194	55	475	1446	0
Turn Type		NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		60.0	60.0					62.2	62.2	35.0	100.0	
Effective Green, g (s)		60.0	60.0					62.2	62.2	35.0	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.20	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1150	522	700	2062	
v/s Ratio Prot		c0.11						0.06		0.14	c0.41	
v/s Ratio Perm			0.03						0.04			
v/c Ratio		0.31	0.08					0.17	0.11	0.68	0.70	
Uniform Delay, d1		40.7	37.3					37.1	36.3	63.1	25.3	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.1	2.6	1.1	
Delay (s)		40.8	37.4					37.2	36.3	65.7	26.4	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		40.4			0.0			36.9			36.1	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		37.1		HCM 2000 Level of Service					D			
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)					14.4			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↗	↖↗
Volume (vph)	253	8	1292	702	0	1254
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Flt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3310			3362
Flt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3310			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	294	9	1389	755	0	1320
RTOR Reduction (vph)	1	0	60	0	0	0
Lane Group Flow (vph)	302	0	2084	0	0	1320
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	19.9		44.4			44.4
Effective Green, g (s)	19.9		44.4			44.4
Actuated g/C Ratio	0.27		0.60			0.60
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	431		2002			2033
v/s Ratio Prot	c0.19		c0.63			0.39
v/s Ratio Perm						
v/c Ratio	0.70		1.04			0.65
Uniform Delay, d1	24.1		14.5			9.4
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	4.9		31.8			0.7
Delay (s)	29.0		46.3			10.2
Level of Service	C		D			B
Approach Delay (s)	29.0		46.3			10.2
Approach LOS	C		D			B
Intersection Summary						
HCM 2000 Control Delay			32.2		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.98			
Actuated Cycle Length (s)			73.4		Sum of lost time (s)	12.1
Intersection Capacity Utilization			85.7%		ICU Level of Service	E
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↗	↖	↗	↖	↗	↖	↗
Volume (vph)	55	3	12	9	0	7	23	1540	30	46	1419	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Flt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1692	1583		1705		1770	3529		1770	3524	
Flt Permitted	0.74	0.77	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1303	1358	1583		1508		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	64	3	14	18	0	14	27	1833	36	50	1542	47
RTOR Reduction (vph)	0	0	12	0	27	0	0	1	0	0	1	0
Lane Group Flow (vph)	33	34	2	0	5	0	27	1868	0	50	1588	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	16.2	16.2	16.2		16.2		3.0	69.8		4.1	70.9	
Effective Green, g (s)	16.2	16.2	16.2		16.2		3.0	69.8		4.1	70.9	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.67		0.04	0.68	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	211	246		234		50	2363		69	2397	
v/s Ratio Prot							0.02	c0.53		c0.03	0.45	
v/s Ratio Perm	c0.03	0.03	0.00		0.00							
v/c Ratio	0.16	0.16	0.01		0.02		0.54	0.79		0.72	0.66	
Uniform Delay, d1	38.1	38.1	37.2		37.3		49.9	12.1		49.5	9.7	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4	0.0		0.0		11.4	1.9		31.2	0.7	
Delay (s)	38.5	38.5	37.2		37.3		61.3	14.0		80.7	10.4	
Level of Service	D	D	D		D		E	B		F	B	
Approach Delay (s)		38.3			37.3			14.6			12.5	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			14.4							B		
HCM 2000 Volume to Capacity ratio			0.67									
Actuated Cycle Length (s)			104.2				Sum of lost time (s)		14.1			
Intersection Capacity Utilization			61.0%				ICU Level of Service		B			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	27	0	1476	9	499	911	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	41	0	1622	10	509	930	0
RTOR Reduction (vph)	0	0	0	0	37	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	4	0	0	1622	5	509	930	0
Turn Type					NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.46		c0.29	0.26	
v/s Ratio Perm								0.00				
v/c Ratio					0.03			0.98	0.01	0.83	0.31	
Uniform Delay, d1					60.6			37.6	20.5	43.7	2.4	
Progression Factor					1.00			0.40	1.00	1.00	1.00	
Incremental Delay, d2					0.1			10.8	0.0	9.6	0.3	
Delay (s)					60.7			25.7	20.5	53.3	2.7	
Level of Service					E			C	C	D	A	
Approach Delay (s)		0.0			60.7			25.7			20.6	
Approach LOS		A			E			C			C	
Intersection Summary												
HCM 2000 Control Delay		23.8			HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio		0.86										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		87.3%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	49	15	2	66	140	144	1302	7	228	401	328
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1860	1510	1770	3539	1347	1770	3256	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1860	1510	1770	3539	1347	1770	3256	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	46	75	23	2	75	159	160	1447	8	262	461	377
RTOR Reduction (vph)	0	0	21	0	0	134	0	0	4	0	101	0
Lane Group Flow (vph)	46	75	2	0	77	25	160	1447	4	262	737	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1068	
v/s Ratio Prot	0.03	c0.04			c0.04		0.09	c0.41		c0.15	0.23	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.38	0.59	0.02		0.26	0.11	0.29	0.92	0.01	0.77	0.69	
Uniform Delay, d1	64.5	65.5	62.9		53.5	52.2	37.9	37.7	22.3	55.4	42.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.93	
Incremental Delay, d2	2.0	6.7	0.1		0.5	0.2	0.3	10.1	0.0	9.8	3.6	
Delay (s)	66.5	72.2	63.0		54.0	52.4	38.2	47.8	22.4	62.8	42.9	
Level of Service	E	E	E		D	D	D	D	C	E	D	
Approach Delay (s)		68.9			52.9			46.7			47.6	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay		48.5			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		92.3%			ICU Level of Service				F			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖			↖
Volume (veh/h)	44	220	5	64	260	10
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	52	259	6	80	283	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked	0.99					
vC, conflicting volume	622	46			86	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	617	46			86	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	86	75			81	
cM capacity (veh/h)	366	1023			1510	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	311	86	293			
Volume Left	52	0	283			
Volume Right	259	80	0			
cSH	1228	1700	1510			
Volume to Capacity	0.25	0.05	0.19			
Queue Length 95th (ft)	25	0	17			
Control Delay (s)	10.8	0.0	7.7			
Lane LOS	B		A			
Approach Delay (s)	10.8	0.0	7.7			
Approach LOS	B					
Intersection Summary						
Average Delay		8.1				
Intersection Capacity Utilization		31.6%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖	↖		↖
Volume (vph)	47	3	1467	440	0	372
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1755		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1755		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	63	4	1544	463	0	581
RTOR Reduction (vph)	4	0	0	137	0	0
Lane Group Flow (vph)	63	0	1544	326	0	581
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		30.6	30.6		30.6
Effective Green, g (s)	3.0		30.6	30.6		30.6
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	121		2489	1069		2489
v/s Ratio Prot	c0.04		c0.44			0.16
v/s Ratio Perm				0.21		
v/c Ratio	0.52		0.62	0.30		0.23
Uniform Delay, d1	19.6		3.4	2.4		2.3
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.0		0.5	0.2		0.0
Delay (s)	23.6		3.9	2.6		2.3
Level of Service	C		A	A		A
Approach Delay (s)	23.6		3.6			2.3
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.8		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.61				
Actuated Cycle Length (s)		43.5		Sum of lost time (s)		9.9
Intersection Capacity Utilization		53.0%		ICU Level of Service		A
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (veh/h)	0	18	2390	7	7	420
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	31	2570	8	10	618
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2903	1289			2577	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2903	1289			2577	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	80			94	
cM capacity (veh/h)	12	155			167	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	31	1713	864	10	309	309
Volume Left	0	0	0	10	0	0
Volume Right	31	0	8	0	0	0
cSH	155	1700	1700	167	1700	1700
Volume to Capacity	0.20	1.01	0.51	0.06	0.18	0.18
Queue Length 95th (ft)	18	0	0	5	0	0
Control Delay (s)	34.1	0.0	0.0	28.0	0.0	0.0
Lane LOS	D			D		
Approach Delay (s)	34.1	0.0		0.5		
Approach LOS	D					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		76.3%		ICU Level of Service		D
Analysis Period (min)		15				

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (vph)	20	101	2289	14	44	376
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	25	125	2461	15	64	545
RTOR Reduction (vph)	0	2	0	1	0	0
Lane Group Flow (vph)	25	123	2461	14	64	545
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	16.4	26.5	68.2	68.2	5.0	82.0
Effective Green, g (s)	16.4	21.4	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.20	0.63	0.63	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	269	314	2241	1002	82	2694
v/s Ratio Prot	0.01	c0.08	c0.70		c0.04	0.15
v/s Ratio Perm				0.01		
v/c Ratio	0.09	0.39	1.10	0.01	0.78	0.20
Uniform Delay, d1	39.3	37.5	19.8	7.3	50.8	3.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.8	51.8	0.0	37.0	0.0
Delay (s)	39.4	38.3	71.6	7.3	87.8	3.7
Level of Service	D	D	E	A	F	A
Approach Delay (s)	38.5		71.2			12.5
Approach LOS	D		E			B
Intersection Summary						
HCM 2000 Control Delay		58.6		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		0.95				
Actuated Cycle Length (s)		107.7		Sum of lost time (s)		18.1
Intersection Capacity Utilization		80.4%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	38	2263	30	0	394
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	61	2382	32	0	532
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2664	1207			2414	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2664	1207			2414	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	65			100	
cM capacity (veh/h)	18	175			194	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	61	1588	826	266	266	
Volume Left	0	0	0	0	0	
Volume Right	61	0	32	0	0	
cSH	175	1700	1700	1700	1700	
Volume to Capacity	0.35	0.93	0.49	0.16	0.16	
Queue Length 95th (ft)	37	0	0	0	0	
Control Delay (s)	36.1	0.0	0.0	0.0	0.0	
Lane LOS	E					
Approach Delay (s)	36.1	0.0		0.0		
Approach LOS	E					
Intersection Summary						
Average Delay			0.7			
Intersection Capacity Utilization			73.5%		ICU Level of Service	D
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Horizon Year (1 CVN) with Alternative 3 No Hooper
















Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	12	8	2293	38	18	367
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	19	13	2389	40	22	453
RTOR Reduction (vph)	0	2	0	10	0	0
Lane Group Flow (vph)	19	11	2389	30	22	453
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.5	4.6	58.8	58.8	3.1	69.4
Effective Green, g (s)	1.5	4.6	58.8	58.8	3.1	69.4
Actuated g/C Ratio	0.02	0.06	0.76	0.76	0.04	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	34	93	2685	1201	70	3169
v/s Ratio Prot	c0.01	0.00	c0.68		c0.01	0.13
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.56	0.12	0.89	0.03	0.31	0.14
Uniform Delay, d1	37.7	34.5	6.9	2.3	36.2	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	18.4	0.6	4.0	0.0	2.6	0.0
Delay (s)	56.1	35.1	11.0	2.3	38.7	0.5
Level of Service	E	D	B	A	D	A
Approach Delay (s)	47.6		10.8			2.3
Approach LOS	D		B			A
Intersection Summary						
HCM 2000 Control Delay			9.9		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.85			
Actuated Cycle Length (s)			77.5		Sum of lost time (s)	14.1
Intersection Capacity Utilization			76.2%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

										
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	3	0	53	2	0	51	3	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	12	0	98	4	0	81	5	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	12	0	102	81	5					
Volume Left (vph)	0	0	98	0	0					
Volume Right (vph)	0	0	0	0	5					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.2	3.2					
Degree Utilization, x	0.01	0.00	0.12	0.09	0.00					
Capacity (veh/h)	822	1121	809	828	1121					
Control Delay (s)	7.3	6.2	7.9	7.6	6.2					
Approach Delay (s)	7.3		7.9	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.7							
Level of Service			A							
Intersection Capacity Utilization			19.7%	ICU Level of Service				A		
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (1 CVN) with Alternative 3 No Hooper








Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑	↑	↑	↑			
Volume (vph)	3	43	0	0	38	262	4	2066	59	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.72	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1346	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	4	57	0	0	53	364	4	2198	63	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	54	0	0	27	0	0	0
Lane Group Flow (vph)	4	57	0	0	53	310	4	2198	36	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	18.5	18.5			18.5	18.5	47.7	43.6	43.6			
Effective Green, g (s)	18.5	18.5			18.5	18.5	47.7	43.6	43.6			
Actuated g/C Ratio	0.25	0.25			0.25	0.25	0.63	0.58	0.58			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	329	456			456	387	1118	2043	914			
v/s Ratio Prot		0.03			0.03		0.00	c0.62				
v/s Ratio Perm	0.00					c0.20			0.02			
v/c Ratio	0.01	0.12			0.12	0.80	0.00	1.08	0.04			
Uniform Delay, d1	21.6	22.2			22.1	26.8	5.1	15.9	6.9			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	11.3	0.0	43.9	0.0			
Delay (s)	21.6	22.3			22.3	38.0	5.1	59.8	6.9			
Level of Service	C	C			C	D	A	E	A			
Approach Delay (s)		22.3				36.0		58.2			0.0	
Approach LOS		C				D		E			A	
Intersection Summary												
HCM 2000 Control Delay		54.1				HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio		0.99										
Actuated Cycle Length (s)		75.5				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		92.9%				ICU Level of Service			F			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (1 CVN) with Alternative 3 No Hooper













Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	0	1834	0	331	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	0	1910	0	419	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1374	209	419		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1374	209	419		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	137	796	1137		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	955	955	279	140	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.56	0.56	0.16	0.08	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			54.0%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	468	2	45	50	8	21	30	1682	11	4	141	187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	1.00		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1594		1770	1661		1770	3536		1770	3236	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1594		1770	1661		1770	3536		1770	3236	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	532	2	51	161	26	68	32	1771	12	6	204	271
RTOR Reduction (vph)	0	34	0	0	64	0	0	1	0	0	166	0
Lane Group Flow (vph)	532	19	0	161	30	0	32	1782	0	6	309	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	32.3	32.3		5.0	5.0		3.3	39.9		1.0	37.6	
Effective Green, g (s)	32.3	32.3		5.0	5.0		3.3	39.9		1.0	37.6	
Actuated g/C Ratio	0.33	0.33		0.05	0.05		0.03	0.41		0.01	0.39	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	588	530		91	85		60	1453		18	1253	
v/s Ratio Prot	c0.30	0.01		c0.09	0.02		c0.02	c0.50		0.00	0.10	
v/s Ratio Perm												
v/c Ratio	0.90	0.04		1.77	0.35		0.53	1.23		0.33	0.25	
Uniform Delay, d1	30.9	21.9		46.0	44.5		46.1	28.6		47.7	20.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	17.4	0.0		386.9	2.5		8.8	108.3		10.6	0.1	
Delay (s)	48.3	21.9		432.9	46.9		55.0	136.9		58.3	20.3	
Level of Service	D	C		F	D		D	F		E	C	
Approach Delay (s)		45.9			290.6			135.5			20.7	
Approach LOS		D			F			F			C	
Intersection Summary												
HCM 2000 Control Delay			113.8									
HCM 2000 Volume to Capacity ratio			1.13									
Actuated Cycle Length (s)			97.1									
Intersection Capacity Utilization			87.9%									
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	9	209	19	0	1519	20	41	27		23	48	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5023			5075		1770	1846			1732	
Flt Permitted	0.95	1.00			1.00		0.65	1.00			0.14	
Satd. Flow (perm)	1770	5023			5075		1210	1846			250	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	
Adj. Flow (vph)	10	235	21	0	1669	22	49	32	2	30	62	78
RTOR Reduction (vph)	0	6	0	0	1	0	0	2	0	0	17	0
Lane Group Flow (vph)	10	250	0	0	1690	0	49	32	0	0	153	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1900			2061		235	358			41	
v/s Ratio Prot	c0.01	0.05			c0.33			0.02				
v/s Ratio Perm							c0.04				c0.61	
v/c Ratio	0.05	0.13			0.82		0.21	0.09			3.74	
Uniform Delay, d1	71.5	36.6			47.6		60.9	59.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			3.5		0.4	0.1			1290.2	
Delay (s)	71.6	36.8			51.1		61.3	59.6			1365.2	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		38.1			51.1			60.6			1365.2	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		150.9			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.13										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		68.2%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	226	0	856	1529	10	0	0	0	0	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	276	0	911	1627	11	0	0	0	0	0	20
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	276	0	911	1638	0	0	0	0	0	0	8
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.05		c0.27	c0.46							
v/s Ratio Perm												0.00
v/c Ratio		0.14		0.53	0.51							0.01
Uniform Delay, d1		36.8		30.6	1.4							34.9
Progression Factor		0.41		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.3	0.1							0.0
Delay (s)		15.4		30.9	1.5							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.4			12.0			0.0				35.0
Approach LOS		B			B			A				C
Intersection Summary												
HCM 2000 Control Delay		12.5			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.54										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		64.3%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	15	238	0	0	131	648	0	0	0	109	0	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	18	283	0	0	141	697	0	0	0	120	0	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flar (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	838			283			815	1157	283	808	808	489
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	838			283			815	1157	283	808	808	489
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			100			100	100	100	59	100	99
cM capacity (veh/h)	797			1279			288	192	756	294	308	579
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	301	838	0	126								
Volume Left	18	0	0	120								
Volume Right	0	697	0	7								
cSH	797	1279	1700	302								
Volume to Capacity	0.02	0.00	0.00	0.42								
Queue Length 95th (ft)	2	0	0	50								
Control Delay (s)	0.8	0.0	0.0	25.2								
Lane LOS	A			D								
Approach Delay (s)	0.8	0.0	0.0	25.2								
Approach LOS				D								
Intersection Summary												
Average Delay		2.7										
Intersection Capacity Utilization		59.9%			ICU Level of Service				B			
Analysis Period (min)		15										

NBC Coastal Campus
22: 3rd St & Palm Ave

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	338	5	27	755	25	12	15	129	12	11	15
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	9	393	6	29	812	27	15	19	159	15	14	19
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	399	29	839	193	48						
Volume Left (vph)	9	0	29	0	15	15						
Volume Right (vph)	0	6	0	27	159	19						
Hadj (s)	0.53	0.02	0.53	0.01	-0.45	-0.14						
Departure Headway (s)	6.7	6.1	6.4	5.9	6.3	7.1						
Degree Utilization, x	0.02	0.68	0.05	1.0	0.34	0.09						
Capacity (veh/h)	531	569	543	622	544	454						
Control Delay (s)	8.6	20.0	8.6	197.0	12.4	10.8						
Approach Delay (s)	19.8		190.7		12.4	10.8						
Approach LOS	C		F		B	B						
Intersection Summary												
Delay		116.4										
Level of Service		F										
Intersection Capacity Utilization		57.8%		ICU Level of Service					B			
Analysis Period (min)		15										
























NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱	↕	↕	↰	↱
Volume (veh/h)	242	480	744	156	18	207
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	306	608	907	190	25	292
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked	0.83				0.83	0.83
vC, conflicting volume	1098				2223	549
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	717				2067	58
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	58				0	65
cM capacity (veh/h)	733				23	830
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	306	608	605	493	317	
Volume Left	306	0	0	0	25	
Volume Right	0	0	0	190	292	
cSH	733	1700	1700	1700	216	
Volume to Capacity	0.42	0.36	0.36	0.29	1.46	
Queue Length 95th (ft)	52	0	0	0	472	
Control Delay (s)	13.4	0.0	0.0	0.0	274.3	
Lane LOS	B				F	
Approach Delay (s)	4.5		0.0		274.3	
Approach LOS					F	
Intersection Summary						
Average Delay			39.1			
Intersection Capacity Utilization			62.7%		ICU Level of Service	B
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Volume (vph)	17	473	17	27	740	0	72	34	83	2	27	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1720			1857	1583
Flt Permitted	0.23	1.00		0.39	1.00			0.86			0.98	1.00
Satd. Flow (perm)	434	3521		733	3539			1506			1825	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	22	614	22	35	961	0	109	52	126	3	47	48
RTOR Reduction (vph)	0	3	0	0	0	0	0	35	0	0	0	33
Lane Group Flow (vph)	22	633	0	35	961	0	0	252	0	0	50	15
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	22.1	22.1		22.1	22.1			14.9			14.9	14.9
Effective Green, g (s)	22.1	22.1		22.1	22.1			14.9			14.9	14.9
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.32			0.32	0.32
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	207	1684		350	1692			485			588	510
v/s Ratio Prot		0.18			c0.27							
v/s Ratio Perm	0.05			0.05				c0.17			0.03	0.01
v/c Ratio	0.11	0.38		0.10	0.57			0.52			0.09	0.03
Uniform Delay, d1	6.6	7.7		6.6	8.6			12.7			10.9	10.7
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.2	0.1		0.1	0.4			0.9			0.1	0.0
Delay (s)	6.8	7.8		6.7	9.1			13.7			11.0	10.7
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)		7.8			9.0			13.7			10.9	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay			9.3		HCM 2000 Level of Service				A			
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		46.2			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		51.1%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

HCM Unsignalized Intersection Capacity Analysis
KHA

Synchro 8 Report
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Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

HCM Signalized Intersection Capacity Analysis
KHA

Synchro 8 Report
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NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	
Volume (vph)	3	1033	40	23	2252	14	21	5	35	63	12	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5081			1690		1770	1699	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.63	1.00	
Satd. Flow (perm)	1770	5057		1770	5081			1535		1182	1699	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	3	1161	45	26	2559	16	29	7	48	90	17	24
RTOR Reduction (vph)	0	2	0	0	0	0	0	27	0	0	20	0
Lane Group Flow (vph)	3	1204	0	26	2575	0	0	57	0	90	21	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			255		197	283	
v/s Ratio Prot	0.00	0.24		c0.01	c0.51						0.01	
v/s Ratio Perm								0.04		c0.08		
v/c Ratio	0.08	0.35		0.22	0.69			0.22		0.46	0.07	
Uniform Delay, d1	86.2	11.6		79.6	13.1			64.9		67.7	63.3	
Progression Factor	1.55	0.26		1.42	0.40			1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.3		0.4	0.5			0.4		1.7	0.1	
Delay (s)	134.4	3.2		113.3	5.7			65.4		69.3	63.4	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.5			6.8			65.4			67.5	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		9.0			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		77.2%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	
Volume (vph)	4	1113	72	110	2086	59	167	22	104	192	41	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.91	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1251	81	133	2513	71	188	25	117	256	55	23
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	97	0	3	0
Lane Group Flow (vph)	4	1328	0	133	2513	41	0	213	20	0	331	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.26		c0.08	c0.49			c0.12			c0.10	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.10	0.60		0.68	0.93	0.05		0.69	0.07		0.57	
Uniform Delay, d1	86.2	37.9		76.9	39.0	20.3		70.0	62.5		68.4	
Progression Factor	1.19	0.60		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	1.1		9.0	7.2	0.1		6.6	0.1		1.4	
Delay (s)	103.7	24.0		85.9	46.2	20.4		76.7	62.6		69.7	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		24.2			47.5			71.7			69.7	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		44.2			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		94.2%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	16	1416	29	50	2234	14	18	8	56	44	3	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1673			1724	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.79	
Satd. Flow (perm)	1770	5070		1770	5081			1562			1406	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	17	1539	32	58	2598	16	21	10	67	58	4	32
RTOR Reduction (vph)	0	2	0	0	0	0	0	53	0	0	25	0
Lane Group Flow (vph)	17	1569	0	58	2614	0	0	45	0	0	69	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	1.5	37.9		2.7	39.1			15.3			15.3	
Effective Green, g (s)	1.5	37.9		2.7	39.1			15.3			15.3	
Actuated g/C Ratio	0.02	0.53		0.04	0.55			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	37	2683		66	2774			333			300	
v/s Ratio Prot	0.01	0.31		c0.03	c0.51							
v/s Ratio Perm								0.03			c0.05	
v/c Ratio	0.46	0.58		0.88	0.94			0.14			0.23	
Uniform Delay, d1	34.6	11.5		34.3	15.2			22.8			23.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	8.8	0.3		69.1	7.4			0.2			0.4	
Delay (s)	43.4	11.8		103.4	22.6			23.0			23.7	
Level of Service	D	B		F	C			C			C	
Approach Delay (s)		12.2			24.4			23.0			23.7	
Approach LOS		B			C			C			C	
Intersection Summary												
HCM 2000 Control Delay		20.0			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		71.6			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		61.9%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	105	1433	34	280	2162	246	86	83	884	269	106	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	122	1666	40	298	2300	262	96	92	982	320	126	105
RTOR Reduction (vph)	0	2	0	0	0	69	0	147	173	0	3	65
Lane Group Flow (vph)	122	1704	0	298	2300	193	96	397	357	320	134	29
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.1		17.9	47.0	47.0	8.5	35.3	35.3	10.3	37.1	37.1
Effective Green, g (s)	6.0	35.1		17.9	47.0	47.0	8.5	35.3	35.3	10.3	37.1	37.1
Actuated g/C Ratio	0.05	0.29		0.15	0.39	0.39	0.07	0.29	0.29	0.09	0.31	0.31
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	170	1475		262	1983	617	124	453	440	293	538	463
v/s Ratio Prot	0.04	0.34		c0.17	c0.45		0.05	c0.26		c0.09	0.08	
v/s Ratio Perm						0.12			0.24			0.02
v/c Ratio	0.72	1.16		1.14	1.16	0.31	0.77	0.88	0.81	1.09	0.25	0.06
Uniform Delay, d1	56.4	42.7		51.3	36.8	25.5	55.1	40.5	39.5	55.1	31.3	29.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.5	78.0		97.8	78.0	0.3	25.4	17.1	10.8	79.5	0.2	0.1
Delay (s)	69.9	120.7		149.1	114.8	25.8	80.5	57.6	50.3	134.6	31.5	29.5
Level of Service	E	F		F	F	C	F	E	D	F	C	C
Approach Delay (s)		117.3			110.2			56.2			91.0	
Approach LOS		F			F			E			F	
Intersection Summary												
HCM 2000 Control Delay		100.7			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.08										
Actuated Cycle Length (s)		120.5			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		94.4%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	326	1245	0	178	1446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	366	1339	0	198	1607
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	366	1339	0	198	1604
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.10	c0.38		0.11	c0.58
v/s Ratio Perm						
v/c Ratio		0.14	1.15		0.96	1.05
Uniform Delay, d1		2.5	26.8		35.1	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	76.7		49.7	36.3
Delay (s)		2.5	103.5		84.8	54.3
Level of Service		A	F		F	D
Approach Delay (s)		2.5	103.5		57.7	
Approach LOS		A	F		E	
Intersection Summary						
HCM 2000 Control Delay			69.4		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			1.16			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			74.3%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	504	0	0	489	600	872	2	165	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3247		1681	1629				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3247		1681	1629				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	579	0	0	532	652	948	2	179	0	0	0
RTOR Reduction (vph)	0	0	0	0	401	0	0	32	0	0	0	0
Lane Group Flow (vph)	0	579	0	0	783	0	578	519	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		18.8			18.8		22.0	22.0				
Effective Green, g (s)		18.8			18.8		22.0	22.0				
Actuated g/C Ratio		0.39			0.39		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1363			1250		757	734				
v/s Ratio Prot		0.16			c0.24							
v/s Ratio Perm							c0.34	0.32				
v/c Ratio		0.42			0.63		0.76	0.71				
Uniform Delay, d1		11.0			12.2		11.2	10.8				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			1.0		4.6	3.1				
Delay (s)		11.2			13.1		15.8	13.9				
Level of Service		B			B		B	B				
Approach Delay (s)		11.2			13.1		14.9				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					13.4					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.70							
Actuated Cycle Length (s)					48.8					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					75.4%					ICU Level of Service	D	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (veh/h)	0	4	5	613	75	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	16	7	851	183	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1048	183	183			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1048	183	183			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	251	860	1392			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	16	858	183			
Volume Left	0	7	0			
Volume Right	16	0	0			
cSH	860	1392	1700			
Volume to Capacity	0.02	0.00	0.11			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	9.3	0.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.3	0.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			46.2%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↗	↖	↗	↗	↖	↗	↗	↖	↗	↗
Volume (veh/h)	0	3519	18	0	1673	241	0	0	908	0	0	56
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%			0%			0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	3666	19	0	1725	248	0	0	1009	0	0	85
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1993			3704			4375	5688	1271	3111	5573	739
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1993			3704			4375	5688	1271	3111	5573	739
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	41	100	100	76
cM capacity (veh/h)	280			57			0	0	1719	2	0	348
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1466	1466	752	690	690	593	1009	85				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	19	0	0	248	1009	85				
cSH	1700	1700	1700	1700	1700	1700	1719	348				
Volume to Capacity	0.86	0.86	0.44	0.41	0.41	0.35	0.59	0.24				
Queue Length 95th (ft)	0	0	0	0	0	0	102	24				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	10.0	18.7				
Lane LOS							B	C				
Approach Delay (s)	0.0			0.0			10.0	18.7				
Approach LOS							B	C				
Intersection Summary												
Average Delay				1.7								
Intersection Capacity Utilization				133.2%						ICU Level of Service	H	
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3282	132	0	1711	0	191	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3384	136	0	1782	0	233	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			3540		4086	1236	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			3540		4086	1236	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			67		2	162	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1353	1353	813	594	594	594	233
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	136	0	0	0	233
cSH	1700	1700	1700	1700	1700	1700	162
Volume to Capacity	0.80	0.80	0.48	0.35	0.35	0.35	1.44
Queue Length 95th (ft)	0	0	0	0	0	0	369
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	280.1
Lane LOS							F
Approach Delay (s)	0.0			0.0			280.1
Approach LOS							F
Intersection Summary							
Average Delay			11.8				
Intersection Capacity Utilization			86.8%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	↘
Volume (vph)	0	0	0	973	543		87	245		0	0	771
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4636		1770	3539				3527
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4636		1770	3539				3527
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1024	572	92	90	253	0	0	0	795
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	0	0	0	2
Lane Group Flow (vph)	0	0	0	512	1166	0	90	253	0	0	0	808
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA				NA
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1432		98	1989				1567
v/s Ratio Prot				c0.34	0.25		c0.05	0.07				c0.23
v/s Ratio Perm												
v/c Ratio				1.09	0.97dl		0.92	0.13				0.52
Uniform Delay, d1				31.1	28.7		42.3	9.3				18.0
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				67.9	3.7		64.3	0.0				0.3
Delay (s)				99.0	32.4		106.6	9.3				18.3
Level of Service				F	C		F	A				B
Approach Delay (s)		0.0			52.6			34.8				18.3
Approach LOS		A			D			C				B
Intersection Summary												
HCM 2000 Control Delay			40.7				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.76									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)			17.2		
Intersection Capacity Utilization		133.9%					ICU Level of Service			H		
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	0	1720	49	0	0	0	0	340	397	676	1089	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.95	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3155	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3155	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	0	1890	54	0	0	0	0	395	462	704	1134	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	9	29	0	0	0
Lane Group Flow (vph)	0	1890	25	0	0	0	0	580	239	704	1134	0
Confl. Peds. (#/hr)				20					20			
Turn Type	NA	Perm					NA	Perm	Prot	NA		
Protected Phases	4	4					2		1	6		
Permitted Phases		4						2				
Actuated Green, G (s)		63.4	63.4					56.2	56.2	41.0	100.0	
Effective Green, g (s)		63.4	63.4					56.2	56.2	41.0	100.0	
Actuated g/C Ratio		0.36	0.36					0.32	0.32	0.23	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1842	573					1013	433	804	2022	
v/s Ratio Prot		c0.37						c0.18		c0.21	0.32	
v/s Ratio Perm			0.02						0.18			
v/c Ratio		1.03	0.04					0.57	0.55	0.88	0.56	
Uniform Delay, d1		55.8	36.2					49.4	49.0	64.5	23.7	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		27.9	0.0					0.8	1.5	10.5	0.4	
Delay (s)		83.7	36.2					50.2	50.6	75.1	24.0	
Level of Service		F	D					D	D	E	C	
Approach Delay (s)		82.4		0.0				50.3			43.6	
Approach LOS		F		A				D			D	
Intersection Summary												
HCM 2000 Control Delay		61.1		HCM 2000 Level of Service				E				
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		133.9%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave













Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑↑
Volume (vph)	203	14	986	793	0	1370
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3254			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3254			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	260	18	1108	891	0	1473
RTOR Reduction (vph)	2	0	69	0	0	0
Lane Group Flow (vph)	276	0	1930	0	0	1473
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA		NA	
Protected Phases	8		2		6	
Permitted Phases						
Actuated Green, G (s)	30.0		120.9		120.9	
Effective Green, g (s)	30.0		120.9		120.9	
Actuated g/C Ratio	0.19		0.76		0.76	
Clearance Time (s)	4.1		5.0		5.0	
Vehicle Extension (s)	3.0		3.0		3.0	
Lane Grp Cap (vph)	296		2458		2540	
v/s Ratio Prot	c0.17		c0.59		0.44	
v/s Ratio Perm						
v/c Ratio	0.93		0.79		0.58	
Uniform Delay, d1	64.0		11.7		8.5	
Progression Factor	1.00		1.00		1.00	
Incremental Delay, d2	35.0		2.6		1.0	
Delay (s)	99.0		14.3		9.5	
Level of Service	F		B		A	
Approach Delay (s)	99.0		14.3		9.5	
Approach LOS	F		B		A	
Intersection Summary						
HCM 2000 Control Delay		18.7		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.83				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		86.1%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Horizon Year (1 CVN) with Alternative 3 No Hooper








Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	168	12	34	30	12	29	27	1683	58	79	1632	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1724		1770	3522		1770	3487	
Flt Permitted	0.65	0.65	1.00		0.81		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1153	1158	1583		1422		1770	3522		1770	3487	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	215	15	44	47	19	45	29	1810	62	86	1774	193
RTOR Reduction (vph)	0	0	36	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	114	116	8	0	89	0	29	1871	0	86	1964	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	19.7	19.7	19.7		19.7		4.7	70.9		8.1	74.3	
Effective Green, g (s)	19.7	19.7	19.7		19.7		4.7	70.9		8.1	74.3	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.04	0.62		0.07	0.65	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	200	200	274		246		73	2200		126	2282	
v/s Ratio Prot							0.02	0.53		c0.05	c0.56	
v/s Ratio Perm	0.10	c0.10	0.00		0.06							
v/c Ratio	0.57	0.58	0.03		0.36		0.40	0.85		0.68	0.86	
Uniform Delay, d1	43.0	43.1	38.9		41.3		53.0	17.1		51.4	15.5	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.7	4.0	0.0		0.9		3.5	3.4		14.2	3.6	
Delay (s)	46.7	47.1	39.0		42.3		56.5	20.4		65.6	19.1	
Level of Service	D	D	D		D		E	C		E	B	
Approach Delay (s)		45.7			42.3			21.0			21.0	
Approach LOS		D			D			C			C	
Intersection Summary												
HCM 2000 Control Delay		23.1			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		113.5			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		80.7%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Horizon Year (1 CVN) with Alternative 3 No Hooper























Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	9	0	169	0	1456	0	38	1794	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	13	0	245	0	1549	0	41	1929	0
RTOR Reduction (vph)	0	0	0	0	198	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	60	0	0	1549	0	41	1929	0
Turn Type				Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.0			42.2		2.8	49.2	
Effective Green, g (s)					14.0			42.2		2.8	49.2	
Actuated g/C Ratio					0.19			0.58		0.04	0.67	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					309			2037		67	2375	
v/s Ratio Prot					c0.04			0.44		0.02	c0.55	
v/s Ratio Perm												
v/c Ratio					0.19			0.76		0.61	0.81	
Uniform Delay, d1					24.9			11.7		34.7	8.7	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			1.7		15.4	2.2	
Delay (s)					25.2			13.5		50.1	10.9	
Level of Service					C			B		D	B	
Approach Delay (s)		0.0			25.2			13.5			11.7	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					13.4			HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio					0.78							
Actuated Cycle Length (s)					73.3			Sum of lost time (s)		18.9		
Intersection Capacity Utilization					69.0%			ICU Level of Service		C		
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	289	48	123	8	70	402	29	778	3	135	1624	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1515		1853	1510	1770	3539	1346	1770	3515	
Flt Permitted	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1515		1853	1510	1770	3539	1346	1770	3515	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	380	63	162	9	76	437	32	855	3	144	1728	72
RTOR Reduction (vph)	0	0	131	0	0	200	0	0	2	0	2	0
Lane Group Flow (vph)	380	63	31	0	85	237	32	855	1	144	1798	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.7	27.7	27.7		24.8	24.8	4.0	56.8	56.8	16.9	69.7	
Effective Green, g (s)	27.7	27.7	27.7		24.8	24.8	4.0	56.8	56.8	16.9	69.7	
Actuated g/C Ratio	0.19	0.19	0.19		0.17	0.17	0.03	0.39	0.39	0.12	0.48	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	336	354	288		315	257	48	1380	525	205	1682	
v/s Ratio Prot	c0.21	0.03			0.05		0.02	0.24		c0.08	c0.51	
v/s Ratio Perm			0.02			c0.16			0.00			
v/c Ratio	1.13	0.18	0.11		0.27	0.92	0.67	0.62	0.00	0.70	1.07	
Uniform Delay, d1	58.9	49.4	48.7		52.5	59.5	70.1	35.7	27.1	61.9	37.9	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	89.4	0.2	0.2		0.5	35.8	29.8	2.1	0.0	10.4	43.0	
Delay (s)	148.4	49.6	48.9		53.0	95.3	99.9	37.8	27.1	72.3	80.9	
Level of Service	F	D	D		D	F	F	D	C	E	F	
Approach Delay (s)		111.5			88.4			40.0			80.3	
Approach LOS		F			F			D			F	
Intersection Summary												
HCM 2000 Control Delay	77.1			HCM 2000 Level of Service					E			
HCM 2000 Volume to Capacity ratio	1.05											
Actuated Cycle Length (s)	145.6			Sum of lost time (s)					19.4			
Intersection Capacity Utilization	86.3%			ICU Level of Service					E			
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰			↱
Volume (veh/h)	331	478	4	55	180	4
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	368	531	6	77	205	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915				600
pX, platoon unblocked	1.00					
vC, conflicting volume	458	44			83	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	456	44			83	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	24	48			86	
cM capacity (veh/h)	485	1026			1514	
Direction, Lane #						
Volume Total	899	83	209			
Volume Left	368	0	205			
Volume Right	531	77	0			
cSH	946	1700	1514			
Volume to Capacity	0.95	0.05	0.14			
Queue Length 95th (ft)	392	0	12			
Control Delay (s)	39.5	0.0	7.6			
Lane LOS	E		A			
Approach Delay (s)	39.5	0.0	7.6			
Approach LOS	E					
Intersection Summary						
Average Delay		31.2				
Intersection Capacity Utilization		41.9%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕		↕
Volume (vph)	337	5	819	58	0	1773
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1771		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1771		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	427	6	910	64	0	1992
RTOR Reduction (vph)	1	0	0	37	0	0
Lane Group Flow (vph)	432	0	910	27	0	1992
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	843		1520	633		1520
v/s Ratio Prot	c0.24		0.26			c0.56
v/s Ratio Perm				0.02		
v/c Ratio	0.51		0.60	0.04		1.31
Uniform Delay, d1	19.1		23.0	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.5		0.6	0.0		144.6
Delay (s)	19.6		23.6	17.4		174.5
Level of Service	B		C	B		F
Approach Delay (s)	19.6		23.2			174.5
Approach LOS	B		C			F

Intersection Summary			
HCM 2000 Control Delay	111.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	9.9
Intersection Capacity Utilization	98.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕	↕	↕
Volume (veh/h)	5	8	657	4	18	1650
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	10	16	764	5	20	1813
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1712	384			769	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1712	384			769	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	87	97			98	
cM capacity (veh/h)	80	614			841	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	509	259	20	907	907
Volume Left	10	0	0	20	0	0
Volume Right	16	0	5	0	0	0
cSH	171	1700	1700	841	1700	1700
Volume to Capacity	0.15	0.30	0.15	0.02	0.53	0.53
Queue Length 95th (ft)	13	0	0	2	0	0
Control Delay (s)	29.8	0.0	0.0	9.4	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	29.8	0.0		0.1		
Approach LOS	D					

Intersection Summary			
Average Delay		0.4	
Intersection Capacity Utilization		55.6%	ICU Level of Service B
Analysis Period (min)		15	

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	35	66	594	14	120	1535
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	38	72	675	16	132	1687
RTOR Reduction (vph)	0	49	0	9	0	0
Lane Group Flow (vph)	38	23	675	7	132	1687
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases				2		
Actuated Green, G (s)	11.4	25.2	25.6	25.6	8.7	43.1
Effective Green, g (s)	11.4	20.1	25.6	25.6	8.7	43.1
Actuated g/C Ratio	0.18	0.32	0.40	0.40	0.14	0.68
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	316	498	1420	635	241	2390
v/s Ratio Prot	c0.02	0.01	0.19		0.07	c0.48
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.05	0.48	0.01	0.55	0.71
Uniform Delay, d1	22.0	15.2	14.1	11.5	25.7	6.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.3	0.0	2.5	1.0
Delay (s)	22.2	15.2	14.4	11.5	28.3	7.4
Level of Service	C	B	B	B	C	A
Approach Delay (s)	17.6		14.3			8.9
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay		10.7			HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio		0.70				
Actuated Cycle Length (s)		63.8			Sum of lost time (s)	18.1
Intersection Capacity Utilization		54.3%			ICU Level of Service	A
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Horizon Year (1 CVN) with Alternative 3 No Hooper







Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↕			↕
Volume (veh/h)	0	27	583	22	0	1570
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	36	670	25	0	1707
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1536	348			695	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1536	348			695	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	94			100	
cM capacity (veh/h)	107	648			896	
Direction, Lane #						
Volume Total	36	447	249	853	853	
Volume Left	0	0	0	0	0	
Volume Right	36	0	25	0	0	
cSH	648	1700	1700	1700	1700	
Volume to Capacity	0.06	0.26	0.15	0.50	0.50	
Queue Length 95th (ft)	4	0	0	0	0	
Control Delay (s)	10.9	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.9	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			46.7%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	35	30	575	22	27	1542
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	49	42	612	23	30	1695
RTOR Reduction (vph)	0	36	0	10	0	0
Lane Group Flow (vph)	49	6	612	13	30	1695
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	4.2	7.0	28.2	28.2	2.8	38.5
Effective Green, g (s)	4.2	7.0	28.2	28.2	2.8	38.5
Actuated g/C Ratio	0.09	0.14	0.57	0.57	0.06	0.78
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	150	224	2024	905	100	2763
v/s Ratio Prot	c0.03	0.00	0.17		0.02	c0.48
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.33	0.03	0.30	0.01	0.30	0.61
Uniform Delay, d1	21.2	18.2	5.5	4.6	22.3	2.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	0.0	0.1	0.0	1.7	0.4
Delay (s)	22.5	18.3	5.5	4.6	24.0	2.7
Level of Service	C	B	A	A	C	A
Approach Delay (s)	20.5		5.5			3.1
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	4.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	49.3	Sum of lost time (s)	14.1
Intersection Capacity Utilization	53.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	13	17	98	9	0	208	15	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	14	18	127	12	0	234	17	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	14	18	139	251						
Volume Left (vph)	0	0	127	0						
Volume Right (vph)	0	18	0	17						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.1	3.2	4.1	3.2						
Degree Utilization, x	0.02	0.02	0.16	0.22						
Capacity (veh/h)	867	1121	860	1122						
Control Delay (s)	7.1	6.3	7.9	7.1						
Approach Delay (s)	6.6		7.9	7.1						
Approach LOS	A		A	A						

Intersection Summary			
Delay	7.3		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱	↰	↱	↰			
Volume (vph)	12	215	0	0	95	160	14	484	80	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.69	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1279	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	14	244	0	0	109	184	15	532	88	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	134	0	53	0	0	0	0
Lane Group Flow (vph)	14	244	0	0	109	50	15	532	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	10.7	10.7			10.7	10.7	16.2	16.2	16.2			
Effective Green, g (s)	10.7	10.7			10.7	10.7	16.2	16.2	16.2			
Actuated g/C Ratio	0.27	0.27			0.27	0.27	0.40	0.40	0.40			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	339	494			494	420	711	1422	636			
v/s Ratio Prot		c0.13			0.06		0.01	c0.15				
v/s Ratio Perm	0.01					0.03		0.02				
v/c Ratio	0.04	0.49			0.22	0.12	0.02	0.37	0.06			
Uniform Delay, d1	11.0	12.5			11.5	11.2	7.3	8.5	7.4			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	0.8			0.2	0.1	0.0	0.2	0.0			
Delay (s)	11.0	13.3			11.8	11.4	7.3	8.6	7.4			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		13.2			11.5		8.4			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.2			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.42										
Actuated Cycle Length (s)		40.3			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		42.9%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (1 CVN) with Alternative 3 No Hooper











Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱	↰
Volume (veh/h)	0	0	0	651	0	1736	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	0	0	740	0	1929	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2299	964	1929		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2299	964	1929		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	33	255	302		0		
Direction, Lane #							
Volume Total	0	0	370	370	1286	643	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.22	0.22	0.76	0.38	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			51.3%		ICU Level of Service		
Analysis Period (min)			15				

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (1 CVN) with Alternative 3 No Hooper











Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	235	7	79	19	4	7	85	350	58	19	1190	255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.86		1.00	0.90		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1605		1770	1685		1770	3464		1770	3446	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1605		1770	1685		1770	3464		1770	3446	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	313	9	105	38	8	14	93	385	64	21	1322	283
RTOR Reduction (vph)	0	79	0	0	14	0	0	10	0	0	15	0
Lane Group Flow (vph)	313	35	0	38	8	0	93	439	0	21	1590	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	23.7	23.7		2.7	2.7		5.7	47.4		1.7	43.4	
Effective Green, g (s)	23.7	23.7		2.7	2.7		5.7	47.4		1.7	43.4	
Actuated g/C Ratio	0.25	0.25		0.03	0.03		0.06	0.50		0.02	0.46	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	444	402		50	48		106	1739		31	1584	
v/s Ratio Prot	c0.18	0.02		c0.02	0.00		c0.05	c0.13		0.01	c0.46	
v/s Ratio Perm												
v/c Ratio	0.70	0.09		0.76	0.18		0.88	0.25		0.68	1.00	
Uniform Delay, d1	32.2	27.1		45.5	44.8		44.0	13.4		46.1	25.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.0	0.1		48.9	1.7		50.3	0.1		45.6	23.5	
Delay (s)	37.2	27.2		94.5	46.5		94.3	13.5		91.7	49.0	
Level of Service	D	C		F	D		F	B		F	D	
Approach Delay (s)		34.5			76.9			27.3			49.6	
Approach LOS		C			E			C			D	
Intersection Summary												
HCM 2000 Control Delay		43.2										
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		94.4										
Intersection Capacity Utilization		77.3%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	1140	64	0	393	40	14	46	5	28	30	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6				5.6
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00				1.00
Flt	1.00	0.99			0.99		1.00	0.99				0.96
Flt Protected	0.95	1.00			1.00		0.95	1.00				0.98
Satd. Flow (prot)	1770	5045			5014		1770	1836				1759
Flt Permitted	0.95	1.00			1.00		0.69	1.00				0.12
Satd. Flow (perm)	1770	5045			5014		1294	1836				217
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	75	1295	73	0	418	43	20	66	7	33	35	28
RTOR Reduction (vph)	0	3	0	0	7	0	0	2	0	0	8	0
Lane Group Flow (vph)	75	1365	0	0	454	0	20	71	0	0	88	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1908			2036		251	357			36	
v/s Ratio Prot	c0.04	c0.27			c0.09			c0.04				
v/s Ratio Perm							0.02				c0.40	
v/c Ratio	0.38	0.72			0.22		0.08	0.20			2.44	
Uniform Delay, d1	74.3	47.7			34.9		59.3	60.7			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.2	2.3			0.3		0.1	0.3			721.7	
Delay (s)	75.5	50.0			35.2		59.5	61.0			796.7	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		51.3			35.2			60.7			796.7	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		82.4										
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		67.9%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	1174	0	679	436	44	0	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3490							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3490							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1319	0	722	464	47	0	0	0	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	1319	0	722	511	0	0	0	0	0	0	4
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3172							609
v/s Ratio Prot		c0.26		c0.21	c0.15							
v/s Ratio Perm												0.00
v/c Ratio		0.69		0.38	0.16							0.01
Uniform Delay, d1		47.0		22.1	0.9							34.9
Progression Factor		0.19		1.00	1.00							1.00
Incremental Delay, d2		1.3		0.1	0.0							0.0
Delay (s)		10.0		22.2	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		10.0			13.4		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		11.7										B
HCM 2000 Volume to Capacity ratio		0.53										
Actuated Cycle Length (s)		180.0							22.3			
Intersection Capacity Utilization		51.2%										A
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave



















Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	5	218	0	0	313	176	0	0	0	642	0	14
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	6	253	0	0	356	200	0	0	0	973	0	21
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	556			253			742	821	253	721	721	456
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	556			253			742	821	253	721	721	456
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	0	100	96
cM capacity (veh/h)	1015			1312			319	308	785	341	351	605
Direction, Lane #												
Volume Total	259	556	0	994								
Volume Left	6	0	0	973								
Volume Right	0	200	0	21								
cSH	1015	1312	1700	344								
Volume to Capacity	0.01	0.00	0.00	2.89								
Queue Length 95th (ft)	0	0	0	2139								
Control Delay (s)	0.2	0.0	0.0	879.9								
Lane LOS	A			F								
Approach Delay (s)	0.2	0.0	0.0	879.9								
Approach LOS				F								
Intersection Summary												
Average Delay		483.5										
Intersection Capacity Utilization		70.3%										C
Analysis Period (min)		15										













NBC Coastal Campus
22: 3rd St & Palm Ave

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	836	13	87	461	25	15	40	70	29	34	14
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	10	1072	17	98	518	28	26	70	123	63	74	30
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	10	1088	98	546	219	167						
Volume Left (vph)	10	0	98	0	26	63						
Volume Right (vph)	0	17	0	28	123	30						
Hadj (s)	0.53	0.02	0.53	0.00	-0.28	0.00						
Departure Headway (s)	7.7	7.2	7.6	7.1	7.6	8.1						
Degree Utilization, x	0.02	1.0	0.21	1.0	0.46	0.38						
Capacity (veh/h)	455	508	465	517	451	426						
Control Delay (s)	9.7	553.4	11.4	87.2	17.0	15.9						
Approach Delay (s)	548.3		75.7		17.0	15.9						
Approach LOS	F		F		C	C						
Intersection Summary												
Delay			308.8									
Level of Service			F									
Intersection Capacity Utilization			69.6%		ICU Level of Service		C					
Analysis Period (min)			15									




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	209	832	566	41	54	175
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	215	858	658	48	64	206
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)	908					
pX, platoon unblocked						
vC, conflicting volume	706				1971	353
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	706				1971	353
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	76				0	68
cM capacity (veh/h)	888				41	643
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	215	858	439	267	269	
Volume Left	215	0	0	0	64	
Volume Right	0	0	0	48	206	
cSH	888	1700	1700	1700	145	
Volume to Capacity	0.24	0.50	0.26	0.16	1.86	
Queue Length 95th (ft)	24	0	0	0	512	
Control Delay (s)	10.3	0.0	0.0	0.0	463.5	
Lane LOS	B				F	
Approach Delay (s)	2.1		0.0		463.5	
Approach LOS					F	
Intersection Summary						
Average Delay			62.0			
Intersection Capacity Utilization			64.2%	ICU Level of Service		C
Analysis Period (min)			15			










NBC Coastal Campus
24: 7th St & Palm Ave

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	835	35	32	567	4	57	25	23	13	40	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3518		1770	3536			1760			1840	1583
Flt Permitted	0.41	1.00		0.23	1.00			0.79			0.91	1.00
Satd. Flow (perm)	771	3518		429	3536			1431			1691	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	35	994	42	35	623	4	70	30	28	17	53	41
RTOR Reduction (vph)	0	4	0	0	0	0	0	21	0	0	0	31
Lane Group Flow (vph)	35	1032	0	35	627	0	0	107	0	0	70	10
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases	2			6			8			4		
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	20.5	20.5		20.5	20.5			9.3			9.3	9.3
Effective Green, g (s)	20.5	20.5		20.5	20.5			9.3			9.3	9.3
Actuated g/C Ratio	0.53	0.53		0.53	0.53			0.24			0.24	0.24
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	405	1849		225	1858			341			403	377
v/s Ratio Prot	c0.29			0.18								
v/s Ratio Perm	0.05			0.08				c0.07			0.04	0.01
v/c Ratio	0.09	0.56		0.16	0.34			0.31			0.17	0.03
Uniform Delay, d1	4.6	6.2		4.8	5.3			12.2			11.8	11.4
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.4		0.3	0.1			0.5			0.2	0.0
Delay (s)	4.7	6.6		5.1	5.4			12.7			12.0	11.4
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)	6.5			5.4				12.7			11.8	
Approach LOS	A			A				B			B	
Intersection Summary												
HCM 2000 Control Delay	6.9			HCM 2000 Level of Service				A				
HCM 2000 Volume to Capacity ratio	0.48											
Actuated Cycle Length (s)	39.0			Sum of lost time (s)				9.2				
Intersection Capacity Utilization	46.8%			ICU Level of Service				A				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	884	9	0	0	7	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1078	11	0	0	10	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)			767			
pX, platoon unblocked						
vC, conflicting volume			1089		1078	1078
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1089		1078	1078
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		96	98
cM capacity (veh/h)			641		242	266
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	1078	11	15			
Volume Left	0	0	10			
Volume Right	0	11	4			
cSH	1700	1700	249			
Volume to Capacity	0.63	0.01	0.06			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.0	0.0	20.4			
Lane LOS			C			
Approach Delay (s)	0.0		20.4			
Approach LOS			C			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			56.5%		ICU Level of Service B	
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	47	1875	143	66	961	149	111	102	71	197	90	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5031		1770	4983			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5031		1770	4983			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	50	1995	152	67	971	151	122	112	78	221	101	33
RTOR Reduction (vph)	0	5	0	0	11	0	0	19	0	0	4	0
Lane Group Flow (vph)	50	2142	0	67	1111	0	0	293	0	0	351	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2004		196	1984			649			658	
v/s Ratio Prot	0.03	c0.43		c0.04	0.22			c0.09			c0.10	
v/s Ratio Perm												
v/c Ratio	0.26	1.07		0.34	0.56			0.45			0.53	
Uniform Delay, d1	73.2	54.1		73.9	41.9			64.0			65.2	
Progression Factor	1.00	1.00		1.20	0.91			1.00			1.00	
Incremental Delay, d2	0.7	41.5		1.0	1.1			0.5			0.8	
Delay (s)	73.9	95.6		90.0	39.2			64.5			66.0	
Level of Service	E	F		F	D			E			E	
Approach Delay (s)		95.1			42.0			64.5			66.0	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		74.6			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		124.9%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	23	2197	65	56	1423	63	24	12	40	72	15	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5063		1770	5053			1703		1770	1719	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.59	1.00	
Satd. Flow (perm)	1770	5063		1770	5053			1541		1103	1719	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.83	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	23	2242	66	58	1467	65	29	14	48	85	18	19
RTOR Reduction (vph)	0	1	0	0	2	0	0	24	0	0	17	0
Lane Group Flow (vph)	23	2307	0	58	1530	0	0	67	0	85	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.3		16.0	130.3			22.5		22.5	22.5	
Effective Green, g (s)	12.0	126.3		16.0	130.3			22.5		22.5	22.5	
Actuated g/C Ratio	0.07	0.70		0.09	0.72			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3552		157	3657			192		137	214	
v/s Ratio Prot	0.01	c0.46		c0.03	c0.30						0.01	
v/s Ratio Perm								0.04		c0.08		
v/c Ratio	0.19	0.65		0.37	0.42			0.35		0.62	0.10	
Uniform Delay, d1	79.4	14.7		77.2	9.8			72.1		74.7	69.7	
Progression Factor	1.41	0.15		1.53	0.27			1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.2		1.1	0.3			1.1		8.4	0.2	
Delay (s)	112.4	2.4		119.1	2.9			73.2		83.1	69.9	
Level of Service	F	A		F	A			E		F	E	
Approach Delay (s)		3.5			7.2			73.2			79.1	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.7			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		66.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	2062	227	179	1508	93	147	46	146	176	51	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5010		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5010		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	32	2194	241	185	1555	96	160	50	159	238	69	31
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	132	0	4	0
Lane Group Flow (vph)	32	2428	0	185	1555	59	0	210	27	0	334	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2218		192	2364	736		305	269		575	
v/s Ratio Prot	0.02	c0.48		c0.10	c0.31			c0.12			c0.10	
v/s Ratio Perm						0.04			0.02			
v/c Ratio	0.20	1.09		0.96	0.66	0.08		0.69	0.10		0.58	
Uniform Delay, d1	76.1	50.1		79.8	37.1	26.8		70.2	63.0		68.7	
Progression Factor	1.00	1.03		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	49.0		54.0	1.4	0.2		12.0	0.7		4.2	
Delay (s)	76.3	100.8		133.9	38.6	27.0		82.2	63.8		73.0	
Level of Service	E	F		F	D	C		F	E		E	
Approach Delay (s)		100.5			47.6			74.2			73.0	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		77.3			HCM 2000 Level of Service					E		
HCM 2000 Volume to Capacity ratio		0.90										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		108.8%			ICU Level of Service				G			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)
























Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	2207	57	195	1848	18	45	10	93	27	12	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5066		1770	5078			1680			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.88			0.80	
Satd. Flow (perm)	1770	5066		1770	5078			1503			1451	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.95	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	12	2452	63	205	1945	19	53	12	109	33	15	15
RTOR Reduction (vph)	0	2	0	0	1	0	0	78	0	0	12	0
Lane Group Flow (vph)	12	2513	0	205	1963	0	0	96	0	0	51	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.7			17.7	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.7			17.7	
Actuated g/C Ratio	0.01	0.47		0.13	0.60			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2404		233	3032			313			302	
v/s Ratio Prot	0.01	c0.50		c0.12	0.39							
v/s Ratio Perm								c0.06			0.04	
v/c Ratio	0.75	1.05		0.88	0.65			0.31			0.17	
Uniform Delay, d1	42.0	22.3		36.2	11.2			28.4			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	106.0	31.5		29.1	0.5			0.6			0.3	
Delay (s)	148.0	53.8		65.3	11.7			29.0			27.8	
Level of Service	F	D		E	B			C			C	
Approach Delay (s)		54.3			16.8			29.0			27.8	
Approach LOS		D			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		36.6			HCM 2000 Level of Service					D		
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		84.9			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		77.2%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	216	2138	30	376	1858	636	75	203	611	674	274	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	227	2251	32	404	1998	684	80	216	650	733	298	284
RTOR Reduction (vph)	0	1	0	0	0	87	0	25	309	0	2	122
Lane Group Flow (vph)	227	2282	0	404	1998	597	80	425	107	733	324	134
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.6	36.3		45.0	69.7	69.7	8.9	40.0	40.0	11.8	42.9	42.9
Effective Green, g (s)	11.6	36.3		45.0	69.7	69.7	8.9	40.0	40.0	11.8	42.9	42.9
Actuated g/C Ratio	0.07	0.23		0.29	0.45	0.45	0.06	0.26	0.26	0.08	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	256	1188		513	2286	711	101	421	388	261	483	416
v/s Ratio Prot	0.07	c0.45		c0.23	c0.39		0.05	c0.26		c0.21	c0.19	
v/s Ratio Perm						0.38			0.07			0.09
v/c Ratio	0.89	1.92		0.79	0.87	0.84	0.79	1.01	0.28	2.81	0.67	0.32
Uniform Delay, d1	71.0	59.4		50.6	38.7	37.7	72.1	57.5	45.9	71.6	49.8	44.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	28.5	417.6		7.8	4.0	8.6	33.3	46.1	0.4	824.4	3.6	0.5
Delay (s)	99.6	477.0		58.4	42.7	46.3	105.5	103.6	46.3	896.0	53.4	44.9
Level of Service	F	F		E	D	D	F	F	D	F	D	D
Approach Delay (s)		442.8			45.6			78.6			521.4	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay	256.1			HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio	1.36											
Actuated Cycle Length (s)	155.0			Sum of lost time (s)				21.9				
Intersection Capacity Utilization	139.1%			ICU Level of Service				H				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕	↕↕
Volume (vph)	0	581	971	0	504	1904
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	653	1033	0	554	2092
RTOR Reduction (vph)	0	0	0	0	0	2
Lane Group Flow (vph)	0	653	1033	0	554	2090
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.18	c0.29		0.31	c0.75
v/s Ratio Perm						
v/c Ratio		0.37	1.20		0.84	1.18
Uniform Delay, d1		12.0	30.3		22.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	102.8		9.0	85.9
Delay (s)		12.1	133.1		31.7	100.4
Level of Service		B	F		C	F
Approach Delay (s)		12.1	133.1		86.0	
Approach LOS		B	F		F	
Intersection Summary						
HCM 2000 Control Delay	86.1		HCM 2000 Level of Service		F	
HCM 2000 Volume to Capacity ratio	1.27					
Actuated Cycle Length (s)	80.0		Sum of lost time (s)		14.2	
Intersection Capacity Utilization	97.3%		ICU Level of Service		F	
Analysis Period (min)	15					
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	1078	0	0	604	287	492	3	123	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	1123	0	0	679	322	529	3	132	0	0	0
RTOR Reduction (vph)	0	0	0	0	96	0	0	22	0	0	0	0
Lane Group Flow (vph)	0	1123	0	0	905	0	339	303	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases						2						
Actuated Green, G (s)		21.1			21.1		15.5	15.5				
Effective Green, g (s)		21.1			21.1		15.5	15.5				
Actuated g/C Ratio		0.47			0.47		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)	1674			1593			584	561				
v/s Ratio Prot	c0.32			0.27								
v/s Ratio Perm							c0.20	0.19				
v/c Ratio	0.67			0.57			0.58	0.54				
Uniform Delay, d1	9.1			8.5			11.9	11.7				
Progression Factor	1.00			1.00			1.00	1.00				
Incremental Delay, d2	1.1			0.5			1.5	1.0				
Delay (s)	10.1			8.9			13.4	12.7				
Level of Service	B			A			B					
Approach Delay (s)	10.1			8.9			13.0			0.0		
Approach LOS	B			A			B			A		
Intersection Summary												
HCM 2000 Control Delay		10.4					HCM 2000 Level of Service	B				
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		44.6				Sum of lost time (s)		8.0				
Intersection Capacity Utilization		53.9%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	11	9	139	578	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	18	10	151	838	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1008	838	838			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1008	838	838			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	95	99			
cM capacity (veh/h)	263	366	797			
Direction, Lane #						
Volume Total	18	161	838			
Volume Left	0	10	0			
Volume Right	18	0	0			
cSH	366	797	1700			
Volume to Capacity	0.05	0.01	0.49			
Queue Length 95th (ft)	4	1	0			
Control Delay (s)	15.3	0.7	0.0			
Lane LOS	C	A				
Approach Delay (s)	15.3	0.7	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		40.4%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (1 CVN) with Alternative 1 Mitigated

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (vph)	49	3	1471	421	0	460
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Flt Protected	0.96		1.00	1.00		1.00
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1755		3539	1519		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	65	4	1548	443	0	719
RTOR Reduction (vph)	4	0	0	131	0	0
Lane Group Flow (vph)	65	0	1548	312	0	719
Confl. Peds. (#/hr)	20	20			20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.1		30.9	30.9		30.9
Effective Green, g (s)	3.1		30.9	30.9		30.9
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	123		2491	1069		2491
v/s Ratio Prot	c0.04		c0.44			0.20
v/s Ratio Perm				0.21		
v/c Ratio	0.53		0.62	0.29		0.29
Uniform Delay, d1	19.7		3.4	2.4		2.4
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.3		0.5	0.2		0.1
Delay (s)	24.0		3.9	2.6		2.5
Level of Service	C		A	A		A
Approach Delay (s)	24.0		3.6			2.5
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.8		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.61				
Actuated Cycle Length (s)		43.9		Sum of lost time (s)		9.9
Intersection Capacity Utilization		53.1%		ICU Level of Service		A
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (1 CVN) with Alternative 1 Mitigated









Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↗
Volume (vph)	26	47	426	1792	0	191	229
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt Protected	1.00	0.85	1.00	1.00		1.00	0.85
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.96	0.96	0.92	0.79	0.79
Adj. Flow (vph)	28	51	444	1867	0	242	290
RTOR Reduction (vph)	0	0	0	0	0	0	181
Lane Group Flow (vph)	28	51	444	1867	0	242	109
Turn Type	Perm	Prot	Prot	NA	Prot	NA	Perm
Protected Phases		4	5	2	1	6	
Permitted Phases	4						6
Actuated Green, G (s)	14.9	14.9	24.7	63.2		33.5	33.5
Effective Green, g (s)	14.9	14.9	24.7	63.2		33.5	33.5
Actuated g/C Ratio	0.17	0.17	0.28	0.71		0.38	0.38
Clearance Time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	296	265	491	2513		1332	595
v/s Ratio Prot		c0.03	c0.25	c0.53		0.07	
v/s Ratio Perm	0.02						0.07
v/c Ratio	0.09	0.19	0.90	0.74		0.18	0.18
Uniform Delay, d1	31.3	31.9	31.0	7.9		18.6	18.6
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	0.4	19.9	1.2		0.1	0.1
Delay (s)	31.5	32.2	50.9	9.1		18.6	18.7
Level of Service	C	C	D	A		B	B
Approach Delay (s)	32.0			17.2		18.7	
Approach LOS	C			B		B	
Intersection Summary							
HCM 2000 Control Delay			17.8		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio			0.71				
Actuated Cycle Length (s)			89.0		Sum of lost time (s)		15.9
Intersection Capacity Utilization			71.1%		ICU Level of Service		C
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (1 CVN) with Alternative 1 Mitigated









Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	459	2	45	50	8	21	30	2075	11	4	185	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	0.95	0.95		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.97		1.00	0.89		1.00	1.00		1.00	0.97	
Flt Protected	0.95	0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1655		1770	1661		1770	3536		1770	3424	
Flt Permitted	0.95	0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1655		1770	1661		1770	3536		1770	3424	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	522	2	51	161	26	68	32	2184	12	6	268	74
RTOR Reduction (vph)	0	0	0	0	62	0	0	0	0	0	16	0
Lane Group Flow (vph)	292	283	0	161	32	0	32	2196	0	6	326	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	28.0	28.0		11.5	11.5		4.0	73.7		1.0	70.7	
Effective Green, g (s)	28.0	28.0		11.5	11.5		4.0	73.7		1.0	70.7	
Actuated g/C Ratio	0.21	0.21		0.09	0.09		0.03	0.55		0.01	0.53	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	353	348		152	143		53	1957		13	1818	
v/s Ratio Prot	c0.17	0.17		c0.09	0.02		c0.02	c0.62		0.00	0.10	
v/s Ratio Perm												
v/c Ratio	0.83	0.81		1.06	0.22		0.60	1.12		0.46	0.18	
Uniform Delay, d1	50.2	50.1		60.8	56.6		63.8	29.7		65.8	16.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	14.6	13.5		89.6	0.8		17.9	62.3		23.8	0.0	
Delay (s)	64.9	63.6		150.4	57.4		81.6	92.0		89.6	16.2	
Level of Service	E	E		F	E		F	F		F	B	
Approach Delay (s)		64.2			116.1			91.9			17.5	
Approach LOS		E			F			F			B	
Intersection Summary												
HCM 2000 Control Delay		81.4								F		
HCM 2000 Volume to Capacity ratio		1.05										
Actuated Cycle Length (s)		133.1			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		86.9%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (1 CVN) with Alternative 1 Mitigated

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	252	20	0	1907	20	47	27	2	23	48	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99			1.00		1.00	0.99		1.00	0.92	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5030			5077		1770	1846		1770	1707	
Flt Permitted	0.95	1.00			1.00		0.67	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5030			5077		1244	1846		248	1707	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	10	283	22	0	2096	22	56	32	2	30	62	78
RTOR Reduction (vph)	0	5	0	0	1	0	0	2	0	0	25	0
Lane Group Flow (vph)	10	300	0	0	2117	0	56	32	0	30	115	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1903			2061		241	358		41	284	
v/s Ratio Prot	c0.01	0.06			c0.42			0.02			0.07	
v/s Ratio Perm							c0.05			c0.12		
v/c Ratio	0.05	0.16			1.03		0.23	0.09		0.73	0.40	
Uniform Delay, d1	71.5	37.0			53.5		61.2	59.4		71.2	67.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.2			25.5		0.5	0.1		49.4	0.9	
Delay (s)	71.6	37.2			79.0		61.7	59.6		120.6	68.0	
Level of Service	E	D			E		E	E		F	E	
Approach Delay (s)		38.3			79.0			60.9			77.3	
Approach LOS		D			E			E			E	
Intersection Summary												
HCM 2000 Control Delay		73.5								E		
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		75.7%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1 Mitigated
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	24	769	40	27	2043	50	188	42	58	102	52	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00		1.00	0.91		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5047		1770	5067		1770	1701		1770	1765	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5047		1770	5067		1770	1701		1770	1765	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	29	915	48	30	2245	55	227	51	70	124	63	34
RTOR Reduction (vph)	0	3	0	0	1	0	0	27	0	0	11	0
Lane Group Flow (vph)	29	960	0	30	2299	0	227	94	0	124	86	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	12.0	88.9		12.0	88.9		22.8	42.8		18.0	38.0	
Effective Green, g (s)	12.0	88.9		12.0	88.9		22.8	42.8		18.0	38.0	
Actuated g/C Ratio	0.07	0.49		0.07	0.49		0.13	0.24		0.10	0.21	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	118	2492		118	2502		224	404		177	372	
v/s Ratio Prot	0.02	0.19		c0.02	c0.45		c0.13	c0.05		0.07	0.05	
v/s Ratio Perm												
v/c Ratio	0.25	0.39		0.25	0.92		1.01	0.23		0.70	0.23	
Uniform Delay, d1	79.7	28.5		79.8	42.2		78.6	55.3		78.4	58.9	
Progression Factor	1.00	1.00		1.03	0.84		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.1	0.5		0.8	5.3		63.6	0.3		11.8	0.3	
Delay (s)	80.8	28.9		83.2	40.7		142.2	55.6		90.2	59.2	
Level of Service	F	C		F	D		F	E		F	E	
Approach Delay (s)		30.4			41.2			112.1			76.6	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		46.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		77.7%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1 Mitigated
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	4	1113	72	110	2075	59	168	22	104	192	41	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1251	81	133	2500	71	189	25	117	256	55	23
RTOR Reduction (vph)	0	4	0	0	0	27	0	0	105	0	3	0
Lane Group Flow (vph)	4	1328	0	133	2500	44	0	214	12	0	331	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Effective Green, g (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Actuated g/C Ratio	0.02	0.48		0.11	0.57	0.57		0.10	0.10		0.20	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2427		196	2901	903		184	163		682	
v/s Ratio Prot	0.00	0.26		c0.08	c0.49			c0.12			c0.10	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.10	0.55		0.68	0.86	0.05		1.16	0.07		0.49	
Uniform Delay, d1	86.2	32.8		76.9	32.7	17.1		80.7	72.9		63.5	
Progression Factor	1.15	0.66		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.9		9.0	3.7	0.1		117.1	0.2		0.5	
Delay (s)	100.4	22.6		85.9	36.3	17.2		197.8	73.1		64.1	
Level of Service	F	C		F	D	B		F	E		E	
Approach Delay (s)		22.9			38.2			153.7			64.1	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		43.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		94.0%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1 Mitigated

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	105	1431	34	280	2151	246	87	83	884	269	106	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		3433	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		3433	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	122	1664	40	298	2288	262	97	92	982	320	126	105
RTOR Reduction (vph)	0	2	0	0	0	49	0	114	133	0	2	67
Lane Group Flow (vph)	122	1702	0	298	2288	213	97	430	397	320	135	27
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	6.2	59.5		17.4	70.7	70.7	11.3	41.4	41.4	14.8	44.9	44.9
Effective Green, g (s)	6.2	59.5		17.4	70.7	70.7	11.3	41.4	41.4	14.8	44.9	44.9
Actuated g/C Ratio	0.04	0.38		0.11	0.46	0.46	0.07	0.27	0.27	0.10	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	137	1945		385	2319	722	129	413	401	327	506	435
v/s Ratio Prot	0.04	0.34		c0.09	c0.45		0.05	c0.28		c0.09	c0.08	
v/s Ratio Perm						0.13			0.26			0.02
v/c Ratio	0.89	0.88		0.77	0.99	0.29	0.75	1.04	0.99	0.98	0.27	0.06
Uniform Delay, d1	74.1	44.3		66.9	41.7	26.5	70.5	56.8	56.6	69.9	42.4	39.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	45.7	4.7		9.4	15.5	0.2	21.6	55.2	42.4	43.5	0.3	0.1
Delay (s)	119.7	49.0		76.2	57.2	26.7	92.1	112.0	99.0	113.4	42.7	39.9
Level of Service	F	D		E	E	C	F	F	F	F	D	D
Approach Delay (s)		53.8			56.4			104.4			83.3	
Approach LOS		D			E			F			F	
Intersection Summary												
HCM 2000 Control Delay		66.7			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		1.00										
Actuated Cycle Length (s)		155.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		94.2%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (1 CVN) with Alternative 1 Mitigated

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	↔
Volume (vph)	0	326	1244	0	178	1435
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	366	1338	0	198	1594
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	366	1338	0	198	1591
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.10	c0.38		0.11	c0.57
v/s Ratio Perm						
v/c Ratio		0.14	1.15		0.96	1.04
Uniform Delay, d1		2.5	26.8		35.1	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	76.4		49.7	33.6
Delay (s)		2.5	103.2		84.8	51.6
Level of Service		A	F		F	D
Approach Delay (s)		2.5	103.2		55.3	
Approach LOS		A	F		E	
Intersection Summary						
HCM 2000 Control Delay		68.1			HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio		1.15				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		73.9%			ICU Level of Service	D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (1 CVN) with Alternative 1 Mitigated

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	318	4	918	57	0	1795
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.92		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Flt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1772		3539	1452		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1772		3539	1452		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	403	5	1020	63	0	2017
RTOR Reduction (vph)	1	0	0	28	0	0
Lane Group Flow (vph)	407	0	1020	35	0	2017
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		75.1	75.1		75.1
Effective Green, g (s)	50.0		75.1	75.1		75.1
Actuated g/C Ratio	0.37		0.56	0.56		0.56
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	656		1968	807		1968
v/s Ratio Prot	c0.23		0.29			c0.57
v/s Ratio Perm				0.02		
v/c Ratio	0.62		0.52	0.04		1.02
Uniform Delay, d1	34.8		18.7	13.6		30.0
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	1.8		0.2	0.0		26.9
Delay (s)	36.6		18.9	13.6		56.8
Level of Service	D		B	B		E
Approach Delay (s)	36.6		18.6			56.8
Approach LOS	D		B			E

Intersection Summary			
HCM 2000 Control Delay	42.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	9.9
Intersection Capacity Utilization	99.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (1 CVN) with Alternative 1 Mitigated

Timing Plan: PM PEAK









Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↖	↖	↖	↗	↖	↗	↗
Volume (vph)	226	421	105	509	0	1675	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.92	0.90	0.90
Adj. Flow (vph)	246	458	119	578	0	1861	63
RTOR Reduction (vph)	0	0	0	0	0	0	29
Lane Group Flow (vph)	246	458	119	578	0	1861	34
Turn Type	Perm	Prot	Prot	NA	Prot	NA	Perm
Protected Phases		4	5	2	1	6	
Permitted Phases	4						6
Actuated Green, G (s)	38.0	38.0	9.0	86.1		72.1	72.1
Effective Green, g (s)	38.0	38.0	9.0	86.1		72.1	72.1
Actuated g/C Ratio	0.28	0.28	0.07	0.64		0.53	0.53
Clearance Time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	498	445	118	2257		1890	845
v/s Ratio Prot		c0.29	c0.07	0.16		c0.53	
v/s Ratio Perm	0.14						0.02
v/c Ratio	0.49	1.03	1.01	0.26		0.98	0.04
Uniform Delay, d1	40.5	48.5	63.0	10.6		30.9	15.0
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.8	50.4	85.1	0.1		17.1	0.0
Delay (s)	41.2	98.9	148.1	10.6		48.0	15.0
Level of Service	D	F	F	B		D	B
Approach Delay (s)	78.7			34.1		46.9	
Approach LOS	E			C		D	

Intersection Summary			
HCM 2000 Control Delay	50.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	15.9
Intersection Capacity Utilization	81.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (1 CVN) with Alternative 1 Mitigated









Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	102	7	79	19	4	7	85	447	58	19	1578	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	0.95	0.95		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.88		1.00	0.90		1.00	0.98		1.00	0.98	
Flt Protected	0.95	0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1543		1770	1685		1770	3478		1770	3473	
Flt Permitted	0.95	0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1543		1770	1685		1770	3478		1770	3473	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	136	9	105	38	8	14	93	491	64	21	1753	251
RTOR Reduction (vph)	0	0	0	0	14	0	0	0	0	0	7	0
Lane Group Flow (vph)	122	128	0	38	8	0	93	555	0	21	1997	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	24.9	24.9		4.1	4.1		8.5	84.5		3.3	79.3	
Effective Green, g (s)	24.9	24.9		4.1	4.1		8.5	84.5		3.3	79.3	
Actuated g/C Ratio	0.18	0.18		0.03	0.03		0.06	0.62		0.02	0.58	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	308	283		53	50		110	2165		43	2029	
v/s Ratio Prot	0.07	c0.08		c0.02	0.00		c0.05	0.16		0.01	c0.58	
v/s Ratio Perm												
v/c Ratio	0.40	0.45		0.72	0.17		0.85	0.26		0.49	0.98	
Uniform Delay, d1	48.8	49.3		65.2	64.1		62.9	11.5		65.4	27.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.8	1.2		36.9	1.6		41.7	0.1		8.5	16.3	
Delay (s)	49.6	50.5		102.2	65.7		104.6	11.6		73.8	43.9	
Level of Service	D	D		F	E		F	B		E	D	
Approach Delay (s)		50.1			88.8			24.9			44.2	
Approach LOS		D			F			C			D	
Intersection Summary												
HCM 2000 Control Delay		41.4										
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		135.7			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		79.5%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)









Horizon Year (1 CVN) with Alternative 1 Mitigated

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	1523	69	0	489	40	20	46	5	28	30	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99			0.99		1.00	0.99		1.00	0.93	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5052			5027		1770	1836		1770	1739	
Flt Permitted	0.95	1.00			1.00		0.72	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5052			5027		1334	1836		248	1739	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	75	1731	78	0	520	43	29	66	7	33	35	28
RTOR Reduction (vph)	0	2	0	0	5	0	0	2	0	0	16	0
Lane Group Flow (vph)	75	1807	0	0	558	0	29	71	0	33	47	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4					
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1911			2041		259	357		41	289	
v/s Ratio Prot	c0.04	c0.36			c0.11			c0.04			0.03	
v/s Ratio Perm							0.02			c0.13		
v/c Ratio	0.38	0.95			0.27		0.11	0.20		0.80	0.16	
Uniform Delay, d1	74.3	54.1			35.7		59.7	60.7		72.2	64.2	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.2	11.2			0.3		0.2	0.3		69.0	0.3	
Delay (s)	75.5	65.3			36.0		59.9	61.0		141.2	64.5	
Level of Service	E	E			D		E	E		F	E	
Approach Delay (s)		65.7			36.0			60.7			90.9	
Approach LOS		E			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		60.1										
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			22.3				
Intersection Capacity Utilization		69.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	1863	143	66	958	149	112	102	71	197	90	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99		1.00	0.98		1.00	0.94		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5031		1770	4982		1770	1748		1770	1794	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5031		1770	4982		1770	1748		1770	1794	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	50	1982	152	67	968	151	123	112	78	221	101	33
RTOR Reduction (vph)	0	4	0	0	10	0	0	14	0	0	6	0
Lane Group Flow (vph)	50	2130	0	67	1109	0	123	176	0	221	128	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	12.0	83.3		15.4	86.7		25.0	38.0		25.0	38.0	
Effective Green, g (s)	12.0	83.3		15.4	86.7		25.0	38.0		25.0	38.0	
Actuated g/C Ratio	0.07	0.46		0.09	0.48		0.14	0.21		0.14	0.21	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	118	2328		151	2399		245	369		245	378	
v/s Ratio Prot	0.03	c0.42		c0.04	c0.22		0.07	c0.10		c0.12	0.07	
v/s Ratio Perm												
v/c Ratio	0.42	0.91		0.44	0.46		0.50	0.48		0.90	0.34	
Uniform Delay, d1	80.7	45.0		78.2	31.1		71.7	62.3		76.3	60.3	
Progression Factor	1.00	1.00		0.95	1.24		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.4	6.1		1.9	0.6		1.6	1.0		32.6	0.5	
Delay (s)	83.1	51.2		76.2	39.2		73.4	63.2		108.9	60.8	
Level of Service	F	D		E	D		E	E		F	E	
Approach Delay (s)		51.9			41.3			67.2			90.8	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		53.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		116.6%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	2051	227	179	1505	93	148	46	146	176	51	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.85	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5009		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5009		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	32	2182	241	185	1552	96	161	50	159	238	69	31
RTOR Reduction (vph)	0	7	0	0	0	32	0	0	146	0	4	0
Lane Group Flow (vph)	32	2416	0	185	1552	64	0	211	13	0	334	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	8.4	85.7		20.0	97.7	97.7		15.0	15.0		40.0	
Effective Green, g (s)	8.4	85.7		20.0	97.7	97.7		15.0	15.0		40.0	
Actuated g/C Ratio	0.05	0.48		0.11	0.54	0.54		0.08	0.08		0.22	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	82	2384		196	2760	859		149	131		749	
v/s Ratio Prot	0.02	c0.48		c0.10	0.31			c0.12			c0.10	
v/s Ratio Perm						0.04			0.01			
v/c Ratio	0.39	1.01		0.94	0.56	0.07		1.42	0.10		0.45	
Uniform Delay, d1	83.3	47.1		79.4	27.1	19.6		82.5	76.3		60.4	
Progression Factor	1.17	0.46		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	2.4	19.8		48.1	0.8	0.2		221.9	0.3		1.9	
Delay (s)	99.9	41.4		127.5	27.9	19.8		304.4	76.6		62.4	
Level of Service	F	D		F	C	B		F	E		E	
Approach Delay (s)		42.2			37.5			206.5			62.4	
Approach LOS		D			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		54.0			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.90										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		95.3%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 1 Mitigated

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	216	2127	30	376	1854	636	76	203	611	674	274	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	227	2239	32	404	1994	684	81	216	650	733	298	284
RTOR Reduction (vph)	0	1	0	0	0	87	0	25	153	0	2	133
Lane Group Flow (vph)	227	2270	0	404	1994	597	81	425	263	733	324	123
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2			4				8
Actuated Green, G (s)	10.2	48.9		20.4	59.1	59.1	11.5	40.0	40.0	23.8	52.3	52.3
Effective Green, g (s)	10.2	48.9		20.4	59.1	59.1	11.5	40.0	40.0	23.8	52.3	52.3
Actuated g/C Ratio	0.07	0.32		0.13	0.38	0.38	0.07	0.26	0.26	0.15	0.34	0.34
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	225	1601		451	1938	603	131	421	388	527	589	507
v/s Ratio Prot	0.07	c0.45		c0.12	c0.39		0.05	c0.26		c0.21	0.19	
v/s Ratio Perm						0.38		0.17				0.08
v/c Ratio	1.01	1.42		0.90	1.03	0.99	0.62	1.01	0.68	1.39	0.55	0.24
Uniform Delay, d1	72.4	53.0		66.3	48.0	47.6	69.6	57.5	51.7	65.6	41.8	37.1
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	62.3	191.9		19.9	28.2	33.6	8.4	46.1	4.7	187.3	1.1	0.2
Delay (s)	134.7	244.9		86.1	76.2	81.3	78.0	103.6	56.4	252.9	42.9	37.3
Level of Service	F	F		F	E	F	E	F	E	F	D	D
Approach Delay (s)		234.9			78.6			80.7			158.9	
Approach LOS		F			E			F			F	
Intersection Summary												
HCM 2000 Control Delay		142.1			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.22										
Actuated Cycle Length (s)		155.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		113.1%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (1 CVN) with Alternative 1 Mitigated

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	↔
Volume (vph)	0	581	971	0	504	1901
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	653	1033	0	554	2089
RTOR Reduction (vph)	0	0	0	0	0	2
Lane Group Flow (vph)	0	653	1033	0	554	2087
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.18	c0.29		0.31	c0.75
v/s Ratio Perm						
v/c Ratio		0.37	1.20		0.84	1.18
Uniform Delay, d1		12.0	30.3		22.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	102.8		9.0	85.1
Delay (s)		12.1	133.1		31.7	99.6
Level of Service		B	F		C	F
Approach Delay (s)		12.1	133.1		85.4	
Approach LOS		B	F		F	
Intersection Summary						
HCM 2000 Control Delay		85.7			HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio		1.27				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		97.2%			ICU Level of Service	F
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus Mitigated Horizon Year (1 CVN) with Alternative 1 No Hooper
10: SR-75 (Silver Strand Blvd) & Tulagi Rd Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	49	3	1462	421	0	395
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1755		3539	1519		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1755		3539	1519		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	65	4	1539	443	0	617
RTOR Reduction (vph)	4	0	0	131	0	0
Lane Group Flow (vph)	65	0	1539	312	0	617
Confl. Peds. (#/hr)	20	20			20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.1		30.9	30.9		30.9
Effective Green, g (s)	3.1		30.9	30.9		30.9
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	123		2491	1069		2491
v/s Ratio Prot	c0.04		c0.43			0.17
v/s Ratio Perm				0.21		
v/c Ratio	0.53		0.62	0.29		0.25
Uniform Delay, d1	19.7		3.4	2.4		2.3
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.3		0.5	0.2		0.1
Delay (s)	24.0		3.9	2.6		2.4
Level of Service	C		A	A		A
Approach Delay (s)	24.0		3.6			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.8		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.61			
Actuated Cycle Length (s)			43.9		Sum of lost time (s)	9.9
Intersection Capacity Utilization			52.8%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus Mitigated Horizon Year (1 CVN) with Alternative 1 No Hooper
19: 7th St & SR-75 (Silver Strand Blvd) Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↗		↗	↗	↖	↖		↖	↖	↖
Volume (vph)	9	206	19	0	1494	20	40	27		23	48	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99			1.00		1.00	0.99		1.00	0.92	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5022			5075		1770	1846		1770	1707	
Flt Permitted	0.95	1.00			1.00		0.67	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5022			5075		1244	1846		248	1707	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	10	231	21	0	1642	22	48	32	2	30	62	78
RTOR Reduction (vph)	0	6	0	0	1	0	0	2	0	0	25	0
Lane Group Flow (vph)	10	246	0	0	1663	0	48	32	0	30	115	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1899			2061		241	358		41	284	
v/s Ratio Prot	c0.01	0.05			c0.33			0.02			0.07	
v/s Ratio Perm							c0.04			c0.12		
v/c Ratio	0.05	0.13			0.81		0.20	0.09		0.73	0.40	
Uniform Delay, d1	71.5	36.6			47.2		60.8	59.4		71.2	67.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1			3.2		0.4	0.1		49.4	0.9	
Delay (s)	71.6	36.7			50.4		61.2	59.6		120.6	68.0	
Level of Service	E	D			D		E	E		F	E	
Approach Delay (s)		38.0			50.4			60.5			77.3	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		51.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		67.7%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

Mitigated Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	238	0	0	131	755	0	0	0	121	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00				1.00	1.00	
Frt		1.00			1.00	0.85				1.00	0.85	
Flt Protected		1.00			1.00	1.00				0.95	1.00	
Satd. Flow (prot)		1857			1863	1583				1770	1583	
Flt Permitted		0.98			1.00	1.00				0.76	1.00	
Satd. Flow (perm)		1825			1863	1583				1410	1583	
Peak-hour factor, PHF	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Adj. Flow (vph)	20	283	0	0	141	812	0	0	0	133	0	7
RTOR Reduction (vph)	0	0	0	0	0	454	0	0	0	0	5	0
Lane Group Flow (vph)	0	303	0	0	141	358	0	0	0	133	2	0
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		4			8		2				6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)		14.2			14.2	14.2				10.0	10.0	
Effective Green, g (s)		14.2			14.2	14.2				10.0	10.0	
Actuated g/C Ratio		0.44			0.44	0.44				0.31	0.31	
Clearance Time (s)		4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)		804			821	698				437	491	
v/s Ratio Prot					0.08						0.00	
v/s Ratio Perm		0.17				c0.23				c0.09		
v/c Ratio		0.38			0.17	0.51				0.30	0.00	
Uniform Delay, d1		6.0			5.4	6.5				8.5	7.7	
Progression Factor		1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2		0.3			0.1	0.6				0.4	0.0	
Delay (s)		6.3			5.5	7.1				8.8	7.7	
Level of Service		A			A	A				A	A	
Approach Delay (s)		6.3			6.9		0.0				8.8	
Approach LOS		A			A		A				A	
Intersection Summary												
HCM 2000 Control Delay		7.0			HCM 2000 Level of Service					A		
HCM 2000 Volume to Capacity ratio		0.43										
Actuated Cycle Length (s)		32.2			Sum of lost time (s)					8.0		
Intersection Capacity Utilization		66.9%			ICU Level of Service					C		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
22: 3rd St & Palm Ave

Mitigated Horizon Year (1 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	350	5	27	862	25	12	15	129	12	11	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.89			0.95	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.98	
Satd. Flow (prot)	1770	1859		1770	1855			1649			1736	
Flt Permitted	0.17	1.00		0.50	1.00			0.98			0.91	
Satd. Flow (perm)	314	1859		938	1855			1615			1610	
Peak-hour factor, PHF	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Adj. Flow (vph)	9	407	6	29	927	27	15	19	159	15	14	19
RTOR Reduction (vph)	0	1	0	0	1	0	0	130	0	0	16	0
Lane Group Flow (vph)	9	412	0	29	953	0	0	63	0	0	32	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	32.4	32.4		32.4	32.4			8.9			8.9	
Effective Green, g (s)	32.4	32.4		32.4	32.4			8.9			8.9	
Actuated g/C Ratio	0.66	0.66		0.66	0.66			0.18			0.18	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	206	1221		616	1219			291			290	
v/s Ratio Prot		0.22			c0.51							
v/s Ratio Perm	0.03			0.03				c0.04			0.02	
v/c Ratio	0.04	0.34		0.05	0.78			0.22			0.11	
Uniform Delay, d1	3.0	3.7		3.0	6.0			17.2			16.9	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	0.2		0.0	3.3			0.4			0.2	
Delay (s)	3.1	3.9		3.0	9.3			17.6			17.1	
Level of Service	A	A		A	A			B			B	
Approach Delay (s)		3.9			9.1			17.6			17.1	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay		9.0			HCM 2000 Level of Service					A		
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		49.3			Sum of lost time (s)					8.0		
Intersection Capacity Utilization		63.4%			ICU Level of Service					B		
Analysis Period (min)		15										
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis
KHA

Synchro 8 Report
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HCM Signalized Intersection Capacity Analysis
KHA

Synchro 8 Report
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NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Mitigated Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰		↰↰	↰
Volume (vph)	4	1120	72	110	2140	59	168	22	104	192	41	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1258	81	133	2578	71	189	25	117	256	55	23
RTOR Reduction (vph)	0	4	0	0	0	27	0	0	105	0	3	0
Lane Group Flow (vph)	4	1335	0	133	2578	44	0	214	12	0	331	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Effective Green, g (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Actuated g/C Ratio	0.02	0.48		0.11	0.57	0.57		0.10	0.10		0.20	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2427		196	2901	903		184	163		682	
v/s Ratio Prot	0.00	0.26		c0.08	c0.51			c0.12			c0.10	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.10	0.55		0.68	0.89	0.05		1.16	0.07		0.49	
Uniform Delay, d1	86.2	32.9		76.9	33.7	17.1		80.7	72.9		63.5	
Progression Factor	1.14	0.66		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.9		9.0	4.5	0.1		117.1	0.2		0.5	
Delay (s)	99.0	22.6		85.9	38.2	17.2		197.8	73.1		64.1	
Level of Service	F	C		F	D	B		F	E		E	
Approach Delay (s)		22.8			40.0			153.7			64.1	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		44.7			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		95.3%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)











Mitigated Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰		↰↰	↰
Volume (vph)	105	1438	34	280	2217	246	87	83	884	269	106	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9		5.2	5.6		5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00		1.00	0.95	0.95	0.97	0.95
Flt	1.00	1.00		1.00	1.00	0.85		1.00	0.88	0.85	1.00	0.99
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	5067		3433	5085	1583		1770	1549	1504	3433	1748
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	5067		3433	5085	1583		1770	1549	1504	3433	1748
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.90	0.90	0.90	0.90	0.90	0.84	0.84
Adj. Flow (vph)	122	1672	40	298	2359	262	97	92	982	320	126	105
RTOR Reduction (vph)	0	2	0	0	0	61	0	133	162	0	2	66
Lane Group Flow (vph)	122	1710	0	298	2359	201	97	411	368	320	135	28
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	5.1	45.1		16.3	56.3	56.3	9.5	38.0	38.0	11.8	40.3	40.3
Effective Green, g (s)	5.1	45.1		16.3	56.3	56.3	9.5	38.0	38.0	11.8	40.3	40.3
Actuated g/C Ratio	0.04	0.34		0.12	0.42	0.42	0.07	0.29	0.29	0.09	0.30	0.30
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	131	1716		420	2150	669	126	442	429	304	529	455
v/s Ratio Prot	0.04	0.34		c0.09	c0.46		0.05	c0.27		c0.09	0.08	
v/s Ratio Perm						0.13			0.24			0.02
v/c Ratio	0.93	1.00		0.71	1.10	0.30	0.77	0.93	0.86	1.05	0.26	0.06
Uniform Delay, d1	63.8	43.9		56.1	38.4	25.4	60.7	46.3	45.0	60.6	35.1	33.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	57.7	20.7		5.4	51.7	0.3	24.2	26.2	15.4	66.1	0.3	0.1
Delay (s)	121.5	64.7		61.6	90.1	25.6	84.9	72.5	60.4	126.8	35.3	33.0
Level of Service	F	E		E	F	C	F	E	E	F	D	C
Approach Delay (s)		68.4			81.4			68.1			88.0	
Approach LOS		E			F			E			F	
Intersection Summary												
HCM 2000 Control Delay		75.9			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		1.03										
Actuated Cycle Length (s)		133.1			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		95.4%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus Mitigated Horizon Year (1 CVN) with Alternative 1 No Hooper
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	326	1244	0	178	1500
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	366	1338	0	198	1667
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	366	1338	0	198	1664
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.10	c0.38		0.11	c0.60
v/s Ratio Perm						
v/c Ratio		0.14	1.15		0.96	1.09
Uniform Delay, d1		2.5	26.8		35.1	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	76.4		49.7	50.2
Delay (s)		2.5	103.2		84.8	68.2
Level of Service		A	F		F	E
Approach Delay (s)		2.5	103.2		69.9	
Approach LOS		A	F		E	
Intersection Summary						
HCM 2000 Control Delay		75.5			HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio		1.19				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		76.2%			ICU Level of Service	D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus Mitigated Horizon Year (1 CVN) with Alternative 1 No Hooper
10: SR-75 (Silver Strand Blvd) & Tulagi Rd Timing Plan: PM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	318	4	840	57	0	1779
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1772		3539	1467		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1772		3539	1467		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	403	5	933	63	0	1999
RTOR Reduction (vph)	1	0	0	33	0	0
Lane Group Flow (vph)	407	0	933	30	0	1999
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		55.1	55.1		55.1
Effective Green, g (s)	50.0		55.1	55.1		55.1
Actuated g/C Ratio	0.43		0.48	0.48		0.48
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	770		1695	702		1695
v/s Ratio Prot	c0.23		0.26			c0.56
v/s Ratio Perm				0.02		
v/c Ratio	0.53		0.55	0.04		1.18
Uniform Delay, d1	23.9		21.2	15.9		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.7		0.4	0.0		87.2
Delay (s)	24.5		21.6	16.0		117.1
Level of Service	C		C	B		F
Approach Delay (s)	24.5		21.2			117.1
Approach LOS	C		C			F
Intersection Summary						
HCM 2000 Control Delay			78.0	HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio			0.87			
Actuated Cycle Length (s)			115.0	Sum of lost time (s)		9.9
Intersection Capacity Utilization			99.1%	ICU Level of Service		F
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus Mitigated Horizon Year (1 CVN) with Alternative 1 No Hooper
19: 7th St & SR-75 (Silver Strand Blvd) Timing Plan: PM PEAK







Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔↔↔			↔↔↔		↔	↔		↔	↔	
Volume (vph)	66	1115	63	0	387	40	18	46	5	28	30	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99			0.99		1.00	0.99		1.00	0.93	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5044			5013		1770	1836		1770	1739	
Flt Permitted	0.95	1.00			1.00		0.72	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5044			5013		1334	1836		248	1739	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	75	1267	72	0	412	43	26	66	7	33	35	28
RTOR Reduction (vph)	0	4	0	0	7	0	0	2	0	0	16	0
Lane Group Flow (vph)	75	1335	0	0	448	0	26	71	0	33	47	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1908			2035		259	357		41	289	
v/s Ratio Prot	c0.04	c0.26			c0.09		c0.04			0.03		
v/s Ratio Perm							0.02			c0.13		
v/c Ratio	0.38	0.70			0.22		0.10	0.20		0.80	0.16	
Uniform Delay, d1	74.3	47.3			34.9		59.6	60.7		72.2	64.2	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.2	2.2			0.2		0.2	0.3		69.0	0.3	
Delay (s)	75.5	49.5			35.1		59.7	61.0		141.2	64.5	
Level of Service	E	D			D		E	E		F	E	
Approach Delay (s)		50.9			35.1			60.7			90.9	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		49.7			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			22.3				
Intersection Capacity Utilization		67.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus Mitigated Horizon Year (1 CVN) with Alternative 1 No Hooper
21: Dwy/Silver Strand Blvd & Palm Ave Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔			↔↔	↔↔		↔↔		↔↔	↔↔	
Volume (vph)	6	218	0	0	313	202	0	0	0	748	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00				1.00	1.00	
Flt		1.00			1.00	0.85				1.00	0.85	
Flt Protected		1.00			1.00	1.00				0.95	1.00	
Satd. Flow (prot)		1860			1863	1583				1770	1583	
Flt Permitted		0.99			1.00	1.00				0.76	1.00	
Satd. Flow (perm)		1842			1863	1583				1410	1583	
Peak-hour factor, PHF	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.92	0.66	0.66
Adj. Flow (vph)	7	253	0	0	356	230	0	0	0	813	0	23
RTOR Reduction (vph)	0	0	0	0	0	170	0	0	0	0	9	0
Lane Group Flow (vph)	0	260	0	0	356	60	0	0	0	813	14	0
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)		18.4			18.4	18.4				44.7	44.7	
Effective Green, g (s)		18.4			18.4	18.4				44.7	44.7	
Actuated g/C Ratio		0.26			0.26	0.26				0.63	0.63	
Clearance Time (s)		4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)		476			482	409				886	995	
v/s Ratio Prot					c0.19						0.01	
v/s Ratio Perm		0.14				0.04				c0.58		
v/c Ratio		0.55			0.74	0.15				0.92	0.01	
Uniform Delay, d1		22.7			24.1	20.3				11.6	4.9	
Progression Factor		1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2		1.3			5.8	0.2				14.0	0.0	
Delay (s)		24.0			30.0	20.5				25.6	5.0	
Level of Service		C			C	C				C	A	
Approach Delay (s)		24.0			26.3			0.0			25.1	
Approach LOS		C			C			A			C	
Intersection Summary												
HCM 2000 Control Delay		25.3			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		71.1			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		64.6%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												







NBC Coastal Campus
22: 3rd St & Palm Ave

Mitigated Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	942	13	87	487	25	15	40	70	29	34	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.92			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1770	1859		1770	1849			1711			1784	
Flt Permitted	0.40	1.00		0.09	1.00			0.94			0.57	
Satd. Flow (perm)	748	1859		160	1849			1624			1045	
Peak-hour factor, PHF	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Adj. Flow (vph)	10	1208	17	98	547	28	26	70	123	63	74	30
RTOR Reduction (vph)	0	0	0	0	1	0	0	43	0	0	7	0
Lane Group Flow (vph)	10	1225	0	98	574	0	0	176	0	0	160	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	80.1	80.1		80.1	80.1			18.2			18.2	
Effective Green, g (s)	80.1	80.1		80.1	80.1			18.2			18.2	
Actuated g/C Ratio	0.75	0.75		0.75	0.75			0.17			0.17	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	563	1400		120	1393			278			178	
v/s Ratio Prot		c0.66			0.31							
v/s Ratio Perm	0.01			0.61				0.11			c0.15	
v/c Ratio	0.02	0.87		0.82	0.41			0.63			0.90	
Uniform Delay, d1	3.3	9.5		8.4	4.7			40.9			43.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	6.4		33.2	0.2			4.6			39.2	
Delay (s)	3.3	15.9		41.6	4.9			45.6			82.3	
Level of Service	A	B		D	A			D			F	
Approach Delay (s)		15.8			10.2			45.6			82.3	
Approach LOS		B			B			D			F	
Intersection Summary												
HCM 2000 Control Delay		21.8			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		106.3			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		75.1%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Mitigated Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	236	911	586	41	0	236
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	243	939	681	48	0	278
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	729				2131	365
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	729				2131	365
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	72				100	56
cM capacity (veh/h)	871				31	632
Direction, Lane #						
Volume Total	243	939	454	275	278	
Volume Left	243	0	0	0	0	
Volume Right	0	0	0	48	278	
cSH	871	1700	1700	1700	632	
Volume to Capacity	0.28	0.55	0.27	0.16	0.44	
Queue Length 95th (ft)	29	0	0	0	56	
Control Delay (s)	10.7	0.0	0.0	0.0	15.1	
Lane LOS	B				C	
Approach Delay (s)	2.2		0.0		15.1	
Approach LOS					C	
Intersection Summary						
Average Delay			3.1			
Intersection Capacity Utilization			51.3%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Mitigated Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑↑↑	↔	↔	↑↑↑	↔	↔	↑	↔	↔	↑	↔
Volume (vph)	47	1928	143	66	975	149	112	102	71	197	90	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99		1.00	0.98		1.00	0.94		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5033		1770	4984		1770	1748		1770	1794	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5033		1770	4984		1770	1748		1770	1794	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	50	2051	152	67	985	151	123	112	78	221	101	33
RTOR Reduction (vph)	0	4	0	0	9	0	0	14	0	0	7	0
Lane Group Flow (vph)	50	2199	0	67	1127	0	123	176	0	221	127	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	9.5	87.6		12.7	90.8		17.2	38.0		23.4	44.2	
Effective Green, g (s)	9.5	87.6		12.7	90.8		17.2	38.0		23.4	44.2	
Actuated g/C Ratio	0.05	0.49		0.07	0.50		0.10	0.21		0.13	0.25	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	93	2449		124	2514		169	369		230	440	
v/s Ratio Prot	0.03	c0.44		c0.04	c0.23		0.07	c0.10		c0.12	0.07	
v/s Ratio Perm												
v/c Ratio	0.54	0.90		0.54	0.45		0.73	0.48		0.96	0.29	
Uniform Delay, d1	83.1	42.1		80.8	28.6		79.1	62.3		77.8	55.1	
Progression Factor	1.00	1.00		0.94	1.18		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.9	4.8		4.4	0.5		14.5	1.0		48.2	0.4	
Delay (s)	89.0	46.9		80.3	34.3		93.6	63.2		126.0	55.5	
Level of Service	F	D		F	C		F	E		F	E	
Approach Delay (s)		47.9			36.8			75.2			99.4	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		51.2			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		104.1%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Mitigated Horizon Year (1 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑↑↑	↔	↔	↑↑↑	↔	↔	↑	↔	↔	↑	↔
Volume (vph)	30	2115	227	179	1521	93	148	46	146	176	51	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.85			1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5011		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5011		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	32	2250	241	185	1568	96	161	50	159	238	69	31
RTOR Reduction (vph)	0	7	0	0	0	32	0	0	146	0	4	0
Lane Group Flow (vph)	32	2484	0	185	1568	64	0	211	13	0	334	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	7.6	89.3		16.4	98.5	98.5		15.0	15.0		40.0	
Effective Green, g (s)	7.6	89.3		16.4	98.5	98.5		15.0	15.0		40.0	
Actuated g/C Ratio	0.04	0.50		0.09	0.55	0.55		0.08	0.08		0.22	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	74	2486		161	2782	866		149	131		749	
v/s Ratio Prot	0.02	c0.50		c0.10	0.31			c0.12			c0.10	
v/s Ratio Perm						0.04			0.01			
v/c Ratio	0.43	1.00		1.15	0.56	0.07		1.42	0.10		0.45	
Uniform Delay, d1	84.1	45.3		81.8	26.7	19.2		82.5	76.3		60.4	
Progression Factor	1.14	0.48		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	3.1	15.8		116.6	0.8	0.2		221.9	0.3		1.9	
Delay (s)	99.3	37.4		198.4	27.5	19.4		304.4	76.6		62.4	
Level of Service	F	D		F	C	B		F	E		E	
Approach Delay (s)		38.2			44.2			206.5			62.4	
Approach LOS		D			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		54.2			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.92										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		93.7%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus Mitigated Horizon Year (1 CVN) with Alternative 1 No Hooper
30: Saturn Blvd/19th St & SR-75 (Palm Ave) Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↔↔↔		↔↔	↔↔↔	↔	↔	↔	↔	↔↔	↔	↔
Volume (vph)	216	2192	30	376	1870	636	76	203	611	674	274	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	227	2307	32	404	2011	684	81	216	650	733	298	284
RTOR Reduction (vph)	0	1	0	0	0	86	0	25	153	0	2	129
Lane Group Flow (vph)	227	2338	0	404	2011	598	81	425	263	733	324	127
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	10.2	48.9		20.4	59.1	59.1	11.2	40.0	40.0	23.8	52.6	52.6
Effective Green, g (s)	10.2	48.9		20.4	59.1	59.1	11.2	40.0	40.0	23.8	52.6	52.6
Actuated g/C Ratio	0.07	0.32		0.13	0.38	0.38	0.07	0.26	0.26	0.15	0.34	0.34
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	225	1601		451	1938	603	127	421	388	527	592	510
v/s Ratio Prot	0.07	c0.46		c0.12	c0.40		0.05	c0.26		c0.21	0.19	
v/s Ratio Perm						0.38		0.17				0.08
v/c Ratio	1.01	1.46		0.90	1.04	0.99	0.64	1.01	0.68	1.39	0.55	0.25
Uniform Delay, d1	72.4	53.0		66.3	48.0	47.7	69.9	57.5	51.7	65.6	41.5	36.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	62.3	210.7		19.9	31.0	34.4	10.1	46.1	4.7	187.3	1.0	0.3
Delay (s)	134.7	263.8		86.1	78.9	82.1	80.0	103.6	56.4	252.9	42.6	37.2
Level of Service	F	F		F	E	F	E	F	E	F	D	D
Approach Delay (s)		252.4			80.6			80.8			158.8	
Approach LOS		F			F			F			F	
Intersection Summary												
HCM 2000 Control Delay		149.2			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.23										
Actuated Cycle Length (s)		155.0			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		114.4%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus Mitigated Horizon Year (1 CVN) with Alternative 1 No Hooper
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔↔	↔↔		↔	↔↔
Volume (vph)	0	581	971	0	504	1917
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	653	1033	0	554	2107
RTOR Reduction (vph)	0	0	0	0	0	2
Lane Group Flow (vph)	0	653	1033	0	554	2105
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.18	c0.29		0.31	c0.76
v/s Ratio Perm						
v/c Ratio		0.37	1.20		0.84	1.19
Uniform Delay, d1		12.0	30.3		22.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	102.8		9.0	89.5
Delay (s)		12.1	133.1		31.7	104.0
Level of Service		B	F		C	F
Approach Delay (s)		12.1	133.1		88.9	
Approach LOS		B	F		F	
Intersection Summary						
HCM 2000 Control Delay		87.9			HCM 2000 Level of Service	
HCM 2000 Volume to Capacity ratio		1.27				F
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	
Intersection Capacity Utilization		97.8%			ICU Level of Service	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (1 CVN) with Alternative 3 Mitigated

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↕
Volume (vph)	47	3	1474	440	0	426
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Flt Protected	0.96		1.00	1.00		1.00
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1755		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	63	4	1552	463	0	666
RTOR Reduction (vph)	4	0	0	137	0	0
Lane Group Flow (vph)	63	0	1552	326	0	666
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		30.6	30.6		30.6
Effective Green, g (s)	3.0		30.6	30.6		30.6
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	121		2489	1069		2489
v/s Ratio Prot	c0.04		c0.44			0.19
v/s Ratio Perm				0.21		
v/c Ratio	0.52		0.62	0.30		0.27
Uniform Delay, d1	19.6		3.4	2.4		2.4
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.0		0.5	0.2		0.1
Delay (s)	23.6		3.9	2.6		2.4
Level of Service	C		A	A		A
Approach Delay (s)	23.6		3.6			2.4
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	3.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	43.5	Sum of lost time (s)	9.9
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (1 CVN) with Alternative 3 Mitigated

Timing Plan: AM PEAK









Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↔	↔	↔	↕	↔	↕	↕
Volume (vph)	21	40	355	1819	0	194	191
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt Protected	1.00	0.85	1.00	1.00		1.00	0.85
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.96	0.96	0.92	0.79	0.79
Adj. Flow (vph)	23	43	370	1895	0	246	242
RTOR Reduction (vph)	0	0	0	0	0	0	156
Lane Group Flow (vph)	23	43	370	1895	0	246	86
Turn Type	Perm	Prot	Prot	NA	Prot	NA	Perm
Protected Phases		4	5	2	1	6	
Permitted Phases	4						6
Actuated Green, G (s)	14.1	14.1	24.8	59.9		30.1	30.1
Effective Green, g (s)	14.1	14.1	24.8	59.9		30.1	30.1
Actuated g/C Ratio	0.17	0.17	0.29	0.71		0.35	0.35
Clearance Time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	293	262	517	2496		1254	561
v/s Ratio Prot		c0.03	0.21	c0.54		0.07	
v/s Ratio Perm	0.01						0.05
v/c Ratio	0.08	0.16	0.72	0.76		0.20	0.15
Uniform Delay, d1	29.9	30.3	26.9	7.9		19.0	18.7
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	0.3	4.7	1.4		0.1	0.1
Delay (s)	30.0	30.6	31.6	9.3		19.1	18.8
Level of Service	C	C	C	A		B	B
Approach Delay (s)	30.4			12.9		19.0	
Approach LOS	C			B		B	

Intersection Summary			
HCM 2000 Control Delay	14.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	84.9	Sum of lost time (s)	15.9
Intersection Capacity Utilization	71.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (1 CVN) with Alternative 3 Mitigated









Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	458	2	45	50	8	21	30	2031	11	4	180	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	0.95	0.95		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.97		1.00	0.89		1.00	1.00		1.00	0.97	
Flt Protected	0.95	0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1654		1770	1661		1770	3536		1770	3422	
Flt Permitted	0.95	0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1654		1770	1661		1770	3536		1770	3422	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	520	2	51	161	26	68	32	2138	12	6	261	74
RTOR Reduction (vph)	0	0	0	0	62	0	0	0	0	0	17	0
Lane Group Flow (vph)	291	282	0	161	32	0	32	2150	0	6	318	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	28.0	28.0		11.5	11.5		4.0	73.7		1.0	70.7	
Effective Green, g (s)	28.0	28.0		11.5	11.5		4.0	73.7		1.0	70.7	
Actuated g/C Ratio	0.21	0.21		0.09	0.09		0.03	0.55		0.01	0.53	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	353	347		152	143		53	1957		13	1817	
v/s Ratio Prot	c0.17	0.17		c0.09	0.02		c0.02	c0.61		0.00	0.09	
v/s Ratio Perm												
v/c Ratio	0.82	0.81		1.06	0.22		0.60	1.10		0.46	0.18	
Uniform Delay, d1	50.2	50.1		60.8	56.6		63.8	29.7		65.8	16.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	14.4	13.5		89.6	0.8		17.9	52.9		23.8	0.0	
Delay (s)	64.6	63.6		150.4	57.4		81.6	82.6		89.6	16.2	
Level of Service	E	E		F	E		F	F		F	B	
Approach Delay (s)		64.1			116.1			82.6			17.5	
Approach LOS		E			F			F			B	
Intersection Summary												
HCM 2000 Control Delay		75.3										
HCM 2000 Volume to Capacity ratio		1.03										
Actuated Cycle Length (s)		133.1			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		85.7%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (1 CVN) with Alternative 3 Mitigated

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	247	20	0	1863	20	46	27	2	23	48	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99			1.00		1.00	0.99		1.00	0.92	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5029			5077		1770	1846		1770	1707	
Flt Permitted	0.95	1.00			1.00		0.67	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5029			5077		1244	1846		248	1707	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	10	278	22	0	2047	22	55	32	2	30	62	78
RTOR Reduction (vph)	0	5	0	0	1	0	0	2	0	0	25	0
Lane Group Flow (vph)	10	295	0	0	2068	0	55	32	0	30	115	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1902			2061		241	358		41	284	
v/s Ratio Prot	c0.01	0.06			c0.41			0.02			0.07	
v/s Ratio Perm							c0.04			c0.12		
v/c Ratio	0.05	0.16			1.00		0.23	0.09		0.73	0.40	
Uniform Delay, d1	71.5	37.0			53.5		61.1	59.4		71.2	67.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.2			19.1		0.5	0.1		49.4	0.9	
Delay (s)	71.6	37.1			72.6		61.6	59.6		120.6	68.0	
Level of Service	E	D			E		E	E		F	E	
Approach Delay (s)		38.2			72.6			60.8			77.3	
Approach LOS		D			E			E			E	
Intersection Summary												
HCM 2000 Control Delay		68.4										
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		74.9%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3 Mitigated
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	24	764	40	27	2000	50	187	42	58	102	52	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00		1.00	0.91		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5047		1770	5067		1770	1701		1770	1765	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5047		1770	5067		1770	1701		1770	1765	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	29	910	48	30	2198	55	225	51	70	124	63	34
RTOR Reduction (vph)	0	3	0	0	1	0	0	26	0	0	11	0
Lane Group Flow (vph)	29	955	0	30	2252	0	225	95	0	124	86	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	12.0	87.2		12.0	87.2		24.5	43.9		18.6	38.0	
Effective Green, g (s)	12.0	87.2		12.0	87.2		24.5	43.9		18.6	38.0	
Actuated g/C Ratio	0.07	0.48		0.07	0.48		0.14	0.24		0.10	0.21	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	118	2444		118	2454		240	414		182	372	
v/s Ratio Prot	0.02	0.19		c0.02	c0.44		c0.13	c0.06		0.07	0.05	
v/s Ratio Perm												
v/c Ratio	0.25	0.39		0.25	0.92		0.94	0.23		0.68	0.23	
Uniform Delay, d1	79.7	29.5		79.8	43.1		77.0	54.5		77.8	58.9	
Progression Factor	1.00	1.00		1.06	0.81		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.1	0.5		0.9	5.4		40.8	0.3		10.0	0.3	
Delay (s)	80.8	30.0		85.5	40.4		117.8	54.8		87.9	59.2	
Level of Service	F	C		F	D		F	D		F	E	
Approach Delay (s)		31.5			41.0			95.7			75.3	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		45.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		76.8%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												






























NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3 Mitigated
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	4	1107	72	110	2031	59	167	22	104	192	41	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1244	81	133	2447	71	188	25	117	256	55	23
RTOR Reduction (vph)	0	4	0	0	0	27	0	0	105	0	3	0
Lane Group Flow (vph)	4	1321	0	133	2447	44	0	213	12	0	331	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Effective Green, g (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Actuated g/C Ratio	0.02	0.48		0.11	0.57	0.57		0.10	0.10		0.20	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2427		196	2901	903		184	163		682	
v/s Ratio Prot	0.00	0.26		c0.08	c0.48			c0.12			c0.10	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.10	0.54		0.68	0.84	0.05		1.16	0.07		0.49	
Uniform Delay, d1	86.2	32.8		76.9	32.0	17.1		80.7	72.9		63.5	
Progression Factor	1.15	0.66		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.8		9.0	3.2	0.1		115.2	0.2		0.5	
Delay (s)	100.6	22.5		85.9	35.2	17.2		195.9	73.1		64.1	
Level of Service	F	C		F	D	B		F	E		E	
Approach Delay (s)		22.8			37.3			152.3			64.1	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		43.2			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.80										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		93.2%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3 Mitigated
Timing Plan: AM PEAK

															
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR			
Lane Configurations															
Volume (vph)	105	1427	34	280	2108	246	86	83	884	269	106	88			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6			
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95			
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85			
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	3433	5067		3433	5085	1583	1770	1549	1504	3433	1748	1504			
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	3433	5067		3433	5085	1583	1770	1549	1504	3433	1748	1504			
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84			
Adj. Flow (vph)	122	1659	40	298	2243	262	96	92	982	320	126	105			
RTOR Reduction (vph)	0	2	0	0	0	49	0	114	132	0	2	67			
Lane Group Flow (vph)	122	1697	0	298	2243	213	96	430	398	320	135	27			
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm			
Protected Phases	1	6		5	2		7	4		3	8				
Permitted Phases					2			4				8			
Actuated Green, G (s)	6.2	59.5		17.4	70.7	70.7	11.5	41.4	41.4	14.8	44.7	44.7			
Effective Green, g (s)	6.2	59.5		17.4	70.7	70.7	11.5	41.4	41.4	14.8	44.7	44.7			
Actuated g/C Ratio	0.04	0.38		0.11	0.46	0.46	0.07	0.27	0.27	0.10	0.29	0.29			
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6			
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	137	1945		385	2319	722	131	413	401	327	504	433			
v/s Ratio Prot	0.04	0.33		c0.09	c0.44		0.05	c0.28		c0.09	c0.08				
v/s Ratio Perm						0.13		0.26				0.02			
v/c Ratio	0.89	0.87		0.77	0.97	0.29	0.73	1.04	0.99	0.98	0.27	0.06			
Uniform Delay, d1	74.1	44.2		66.9	41.0	26.5	70.2	56.8	56.6	69.9	42.5	40.0			
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	45.7	4.6		9.4	11.9	0.2	18.9	55.2	42.8	43.5	0.3	0.1			
Delay (s)	119.7	48.9		76.2	52.9	26.7	89.2	112.0	99.5	113.4	42.8	40.0			
Level of Service	F	D		E	D	C	F	F	F	F	D	D			
Approach Delay (s)		53.6			52.9			104.4			83.3				
Approach LOS		D			D			F			F				
Intersection Summary															
HCM 2000 Control Delay			65.3		HCM 2000 Level of Service					E					
HCM 2000 Volume to Capacity ratio			0.99												
Actuated Cycle Length (s)			155.0		Sum of lost time (s)					21.9					
Intersection Capacity Utilization			93.3%		ICU Level of Service					F					
Analysis Period (min)			15												
c Critical Lane Group															

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (1 CVN) with Alternative 3 Mitigated
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↖	↖↖
Volume (vph)	0	326	1245	0	178	1392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	366	1339	0	198	1547
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	366	1339	0	198	1544
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.10	c0.38		0.11	c0.55
v/s Ratio Perm						
v/c Ratio		0.14	1.15		0.96	1.01
Uniform Delay, d1		2.5	26.8		35.1	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	76.7		49.7	24.9
Delay (s)		2.5	103.5		84.8	42.9
Level of Service		A	F		F	D
Approach Delay (s)		2.5	103.5		47.6	
Approach LOS		A	F		D	
Intersection Summary						
HCM 2000 Control Delay		64.5		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		1.13				
Actuated Cycle Length (s)		80.0		Sum of lost time (s)		14.2
Intersection Capacity Utilization		72.4%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (1 CVN) with Alternative 3 Mitigated

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	337	5	884	58	0	1787
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.92		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1771		3539	1452		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1771		3539	1452		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	427	6	982	64	0	2008
RTOR Reduction (vph)	1	0	0	28	0	0
Lane Group Flow (vph)	432	0	982	36	0	2008
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		75.1	75.1		75.1
Effective Green, g (s)	50.0		75.1	75.1		75.1
Actuated g/C Ratio	0.37		0.56	0.56		0.56
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	655		1968	807		1968
v/s Ratio Prot	c0.24		0.28			c0.57
v/s Ratio Perm				0.02		
v/c Ratio	0.66		0.50	0.04		1.02
Uniform Delay, d1	35.4		18.4	13.6		30.0
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	2.5		0.2	0.0		25.6
Delay (s)	37.9		18.6	13.6		55.5
Level of Service	D		B	B		E
Approach Delay (s)	37.9		18.3			55.5
Approach LOS	D		B			E

Intersection Summary			
HCM 2000 Control Delay	42.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	9.9
Intersection Capacity Utilization	99.3%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (1 CVN) with Alternative 3 Mitigated

Timing Plan: PM PEAK









Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↖	↖	↖	↗	↖	↗	↗
Volume (vph)	189	351	88	516	0	1702	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Frt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.92	0.90	0.90
Adj. Flow (vph)	205	382	100	586	0	1891	52
RTOR Reduction (vph)	0	0	0	0	0	0	16
Lane Group Flow (vph)	205	382	100	586	0	1891	36
Turn Type	Perm	Prot	Prot	NA	Prot	NA	Perm
Protected Phases		4	5	2	1	6	
Permitted Phases	4						6
Actuated Green, G (s)	32.4	32.4	7.0	77.3		65.3	65.3
Effective Green, g (s)	32.4	32.4	7.0	77.3		65.3	65.3
Actuated g/C Ratio	0.27	0.27	0.06	0.64		0.54	0.54
Clearance Time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	475	425	102	2268		1916	857
v/s Ratio Prot		c0.24	c0.06	0.17		c0.53	
v/s Ratio Perm	0.12						0.02
v/c Ratio	0.43	0.90	0.98	0.26		0.99	0.04
Uniform Delay, d1	36.5	42.5	56.7	9.3		27.2	13.0
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.6	21.2	82.5	0.1		17.4	0.0
Delay (s)	37.1	63.7	139.2	9.4		44.6	13.0
Level of Service	D	E	F	A		D	B
Approach Delay (s)	54.4			28.3		43.8	
Approach LOS	D			C		D	

Intersection Summary			
HCM 2000 Control Delay	42.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	120.6	Sum of lost time (s)	15.9
Intersection Capacity Utilization	77.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (1 CVN) with Alternative 3 Mitigated









Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	101	7	79	19	4	7	85	436	58	19	1536	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	0.95	0.95		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.88		1.00	0.90		1.00	0.98		1.00	0.98	
Flt Protected	0.95	0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1543		1770	1685		1770	3477		1770	3471	
Flt Permitted	0.95	0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1543		1770	1685		1770	3477		1770	3471	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	135	9	105	38	8	14	93	479	64	21	1707	251
RTOR Reduction (vph)	0	0	0	0	14	0	0	6	0	0	7	0
Lane Group Flow (vph)	121	128	0	38	8	0	93	537	0	21	1951	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	24.9	24.9		4.1	4.1		8.5	84.5		3.3	79.3	
Effective Green, g (s)	24.9	24.9		4.1	4.1		8.5	84.5		3.3	79.3	
Actuated g/C Ratio	0.18	0.18		0.03	0.03		0.06	0.62		0.02	0.58	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	308	283		53	50		110	2165		43	2028	
v/s Ratio Prot	0.07	c0.08		c0.02	0.00		c0.05	0.15		0.01	c0.56	
v/s Ratio Perm												
v/c Ratio	0.39	0.45		0.72	0.17		0.85	0.25		0.49	0.96	
Uniform Delay, d1	48.7	49.3		65.2	64.1		62.9	11.4		65.4	26.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.8	1.2		36.9	1.6		41.7	0.1		8.5	12.3	
Delay (s)	49.6	50.5		102.2	65.7		104.6	11.5		73.8	39.0	
Level of Service	D	D		F	E		F	B		E	D	
Approach Delay (s)		50.0			88.8			25.1			39.4	
Approach LOS		D			F			C			D	
Intersection Summary												
HCM 2000 Control Delay		38.2										
HCM 2000 Volume to Capacity ratio		0.84										
Actuated Cycle Length (s)		135.7			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		78.4%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)









Horizon Year (1 CVN) with Alternative 3 Mitigated

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	1480	69	0	478	40	19	46	5	28	30	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99			0.99		1.00	0.99		1.00	0.93	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5051			5026		1770	1836		1770	1739	
Flt Permitted	0.95	1.00			1.00		0.72	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5051			5026		1334	1836		248	1739	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	75	1682	78	0	509	43	27	66	7	33	35	28
RTOR Reduction (vph)	0	2	0	0	5	0	0	2	0	0	16	0
Lane Group Flow (vph)	75	1758	0	0	547	0	27	71	0	33	47	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4					
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1910			2041		259	357		41	289	
v/s Ratio Prot	c0.04	c0.35			c0.11			c0.04			0.03	
v/s Ratio Perm							0.02			c0.13		
v/c Ratio	0.38	0.92			0.27		0.10	0.20		0.80	0.16	
Uniform Delay, d1	74.3	53.4			35.6		59.6	60.7		72.2	64.2	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.2	8.7			0.3		0.2	0.3		69.0	0.3	
Delay (s)	75.5	62.1			35.9		59.8	61.0		141.2	64.5	
Level of Service	E	E			D		E	E		F	E	
Approach Delay (s)		62.6			35.9			60.7			90.9	
Approach LOS		E			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		57.9										
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			22.3				
Intersection Capacity Utilization		69.5%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	1821	143	66	948	149	111	102	71	197	90	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99		1.00	0.98		1.00	0.94		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5030		1770	4981		1770	1748		1770	1794	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5030		1770	4981		1770	1748		1770	1794	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	50	1937	152	67	958	151	122	112	78	221	101	33
RTOR Reduction (vph)	0	5	0	0	10	0	0	14	0	0	6	0
Lane Group Flow (vph)	50	2084	0	67	1099	0	122	176	0	221	128	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	9.5	83.3		15.4	89.2		25.0	38.0		25.0	38.0	
Effective Green, g (s)	9.5	83.3		15.4	89.2		25.0	38.0		25.0	38.0	
Actuated g/C Ratio	0.05	0.46		0.09	0.50		0.14	0.21		0.14	0.21	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	93	2327		151	2468		245	369		245	378	
v/s Ratio Prot	c0.03	c0.41		c0.04	0.22		0.07	c0.10		c0.12	0.07	
v/s Ratio Perm												
v/c Ratio	0.54	0.90		0.44	0.45		0.50	0.48		0.90	0.34	
Uniform Delay, d1	83.1	44.4		78.2	29.4		71.7	62.3		76.3	60.3	
Progression Factor	1.00	1.00		0.95	1.26		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.9	4.9		1.9	0.5		1.6	1.0		32.6	0.5	
Delay (s)	89.0	49.3		76.3	37.6		73.3	63.2		108.9	60.8	
Level of Service	F	D		E	D		E	E		F	E	
Approach Delay (s)		50.2			39.8			67.2			90.8	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		52.1			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		116.1%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)






























Horizon Year (1 CVN) with Alternative 3 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	2008	227	179	1494	93	147	46	146	176	51	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5008		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5008		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	32	2136	241	185	1540	96	160	50	159	238	69	31
RTOR Reduction (vph)	0	8	0	0	0	33	0	0	146	0	4	0
Lane Group Flow (vph)	32	2369	0	185	1540	63	0	210	13	0	334	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	8.4	85.7		20.0	97.7	97.7		15.0	15.0		40.0	
Effective Green, g (s)	8.4	85.7		20.0	97.7	97.7		15.0	15.0		40.0	
Actuated g/C Ratio	0.05	0.48		0.11	0.54	0.54		0.08	0.08		0.22	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	82	2384		196	2760	859		149	131		749	
v/s Ratio Prot	0.02	c0.47		c0.10	0.30			c0.12			c0.10	
v/s Ratio Perm						0.04			0.01			
v/c Ratio	0.39	0.99		0.94	0.56	0.07		1.41	0.10		0.45	
Uniform Delay, d1	83.3	46.9		79.4	27.0	19.6		82.5	76.3		60.4	
Progression Factor	1.18	0.46		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	2.5	15.2		48.1	0.8	0.2		219.2	0.3		1.9	
Delay (s)	100.4	36.6		127.5	27.8	19.8		301.7	76.6		62.4	
Level of Service	F	D		F	C	B		F	E		E	
Approach Delay (s)		37.4			37.5			204.7			62.4	
Approach LOS		D			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		51.7			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.89										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		91.6%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (1 CVN) with Alternative 3 Mitigated
















Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		 	  				 	 		
Volume (vph)	216	2084	30	376	1844	636	75	203	611	674	274	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5074		3433	5085	1583	1770	1632	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5074		3433	5085	1583	1770	1632	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	227	2194	32	404	1983	684	80	216	650	733	298	284
RTOR Reduction (vph)	0	1	0	0	0	88	0	25	153	0	2	127
Lane Group Flow (vph)	227	2225	0	404	1983	596	80	425	263	733	324	129
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	9.5	48.9		20.4	59.8	59.8	11.5	40.0	40.0	23.8	52.3	52.3
Effective Green, g (s)	9.5	48.9		20.4	59.8	59.8	11.5	40.0	40.0	23.8	52.3	52.3
Actuated g/C Ratio	0.06	0.32		0.13	0.39	0.39	0.07	0.26	0.26	0.15	0.34	0.34
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	210	1600		451	1961	610	131	421	388	527	589	507
v/s Ratio Prot	0.07	c0.44		c0.12	c0.39		0.05	c0.26		c0.21	0.19	
v/s Ratio Perm						0.38			0.17			0.09
v/c Ratio	1.08	1.39		0.90	1.01	0.98	0.61	1.01	0.68	1.39	0.55	0.25
Uniform Delay, d1	72.8	53.0		66.3	47.6	46.9	69.6	57.5	51.7	65.6	41.8	37.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	85.3	179.8		19.9	23.1	30.4	8.2	46.1	4.7	187.3	1.1	0.3
Delay (s)	158.1	232.8		86.1	70.7	77.3	77.7	103.6	56.4	252.9	42.9	37.5
Level of Service	F	F		F	E	E	E	F	E	F	D	D
Approach Delay (s)		225.9			74.2			80.7			158.9	
Approach LOS		F			E			F			F	
Intersection Summary												
HCM 2000 Control Delay			137.1		HCM 2000 Level of Service					F		
HCM 2000 Volume to Capacity ratio			1.21									
Actuated Cycle Length (s)			155.0		Sum of lost time (s)					21.9		
Intersection Capacity Utilization			112.3%		ICU Level of Service					H		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (1 CVN) with Alternative 3 Mitigated

Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		 	 		 	  
Volume (vph)	0	581	971	0	504	1891
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	653	1033	0	554	2078
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	653	1033	0	554	2075
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		39.0	19.4		30.0	49.6
Effective Green, g (s)		39.0	19.4		30.0	49.6
Actuated g/C Ratio		0.50	0.25		0.38	0.63
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1755	873		675	1758
v/s Ratio Prot		0.18	c0.29		0.31	c0.74
v/s Ratio Perm						
v/c Ratio		0.37	1.18		0.82	1.18
Uniform Delay, d1		12.2	29.6		21.9	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	94.1		7.9	87.4
Delay (s)		12.4	123.7		29.8	101.9
Level of Service		B	F		C	F
Approach Delay (s)		12.4	123.7		86.7	
Approach LOS		B	F		F	
Intersection Summary						
HCM 2000 Control Delay		84.3		HCM 2000 Level of Service		F
HCM 2000 Volume to Capacity ratio		1.26				
Actuated Cycle Length (s)		78.6		Sum of lost time (s)		14.2
Intersection Capacity Utilization		96.9%		ICU Level of Service		F
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus Mitigated Horizon Year (1 CVN) with Alternative 3 No Hooper
10: SR-75 (Silver Strand Blvd) & Tulagi Rd Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	47	3	1467	440	0	372
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.99		1.00	0.96		1.00
Flt Protected	0.99		1.00	0.85		1.00
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1755		3539	1520		3539
Satd. Flow (perm)	0.96		1.00	1.00		1.00
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	63	4	1544	463	0	581
RTOR Reduction (vph)	4	0	0	137	0	0
Lane Group Flow (vph)	63	0	1544	326	0	581
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		30.6	30.6		30.6
Effective Green, g (s)	3.0		30.6	30.6		30.6
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	121		2489	1069		2489
v/s Ratio Prot	c0.04		c0.44			0.16
v/s Ratio Perm				0.21		
v/c Ratio	0.52		0.62	0.30		0.23
Uniform Delay, d1	19.6		3.4	2.4		2.3
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.0		0.5	0.2		0.0
Delay (s)	23.6		3.9	2.6		2.3
Level of Service	C		A	A		A
Approach Delay (s)	23.6		3.6			2.3
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.8		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.61			
Actuated Cycle Length (s)			43.5		Sum of lost time (s)	9.9
Intersection Capacity Utilization			53.0%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus Mitigated Horizon Year (1 CVN) with Alternative 3 No Hooper
19: 7th St & SR-75 (Silver Strand Blvd) Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↗	↖	↗	↗	↖	↗	↗	↖	↗	↗
Volume (vph)	9	209	19	0	1519	20	41	27		23	48	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99			1.00		1.00	0.99		1.00	0.92	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5023			5075		1770	1846		1770	1707	
Flt Permitted	0.95	1.00			1.00		0.67	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5023			5075		1244	1846		248	1707	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	10	235	21	0	1669	22	49	32	2	30	62	78
RTOR Reduction (vph)	0	6	0	0	1	0	0	2	0	0	25	0
Lane Group Flow (vph)	10	250	0	0	1690	0	49	32	0	30	115	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1900			2061		241	358		41	284	
v/s Ratio Prot	c0.01	0.05			c0.33			0.02			0.07	
v/s Ratio Perm							c0.04			c0.12		
v/c Ratio	0.05	0.13			0.82		0.20	0.09		0.73	0.40	
Uniform Delay, d1	71.5	36.6			47.6		60.8	59.4		71.2	67.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1			3.5		0.4	0.1		49.4	0.9	
Delay (s)	71.6	36.8			51.1		61.2	59.6		120.6	68.0	
Level of Service	E	D			D		E	E		F	E	
Approach Delay (s)		38.1			51.1			60.5			77.3	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		51.9								D		
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		68.2%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

Mitigated Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	15	238	0	0	131	648	0	0	0	109	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00				1.00	1.00	
Frt		1.00			1.00	0.85				1.00	0.85	
Flt Protected		1.00			1.00	1.00				0.95	1.00	
Satd. Flow (prot)		1857			1863	1583				1770	1583	
Flt Permitted		0.98			1.00	1.00				0.76	1.00	
Satd. Flow (perm)		1826			1863	1583				1410	1583	
Peak-hour factor, PHF	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Adj. Flow (vph)	18	283	0	0	141	697	0	0	0	120	0	7
RTOR Reduction (vph)	0	0	0	0	0	485	0	0	0	0	3	0
Lane Group Flow (vph)	0	301	0	0	141	212	0	0	0	120	4	0
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		4			8		2				6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)		14.2			14.2	14.2				24.5	24.5	
Effective Green, g (s)		14.2			14.2	14.2				24.5	24.5	
Actuated g/C Ratio		0.30			0.30	0.30				0.52	0.52	
Clearance Time (s)		4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)		555			566	481				739	830	
v/s Ratio Prot					0.08						0.00	
v/s Ratio Perm	c0.16					0.13				c0.09		
v/c Ratio	0.54				0.25	0.44				0.16	0.00	
Uniform Delay, d1	13.5				12.2	13.1				5.8	5.3	
Progression Factor	1.00				1.00	1.00				1.00	1.00	
Incremental Delay, d2	1.1				0.2	0.6				0.5	0.0	
Delay (s)	14.6				12.5	13.7				6.2	5.3	
Level of Service	B				B	B				A	A	
Approach Delay (s)	14.6				13.5		0.0			6.2		
Approach LOS	B				B		A			A		
Intersection Summary												
HCM 2000 Control Delay		13.0			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.30										
Actuated Cycle Length (s)		46.7			Sum of lost time (s)				8.0			
Intersection Capacity Utilization		60.1%			ICU Level of Service				B			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
22: 3rd St & Palm Ave

Mitigated Horizon Year (1 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	338	5	27	755		25	12	15	129	12	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0			4.0
Lane Util. Factor	1.00	1.00		1.00	1.00				1.00			1.00
Frt	1.00	1.00		1.00	1.00				0.89			0.95
Flt Protected	0.95	1.00		0.95	1.00				1.00			0.98
Satd. Flow (prot)	1770	1859		1770	1854				1649			1736
Flt Permitted	0.20	1.00		0.51	1.00				0.98			0.91
Satd. Flow (perm)	378	1859		950	1854				1617			1596
Peak-hour factor, PHF	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Adj. Flow (vph)	9	393	6	29	812	27	15	19	159	15	14	19
RTOR Reduction (vph)	0	1	0	0	2	0	0	126	0	0	15	0
Lane Group Flow (vph)	9	398	0	29	837	0	0	67	0	0	33	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	25.6	25.6		25.6	25.6			8.9			8.9	
Effective Green, g (s)	25.6	25.6		25.6	25.6			8.9			8.9	
Actuated g/C Ratio	0.60	0.60		0.60	0.60			0.21			0.21	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	227	1119		572	1116			338			334	
v/s Ratio Prot		0.21			c0.45							
v/s Ratio Perm	0.02			0.03				c0.04			0.02	
v/c Ratio	0.04	0.36		0.05	0.75			0.20			0.10	
Uniform Delay, d1	3.4	4.3		3.5	6.1			13.9			13.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	0.2		0.0	2.9			0.3			0.1	
Delay (s)	3.5	4.5		3.5	9.0			14.2			13.7	
Level of Service	A	A		A	A			B			B	
Approach Delay (s)		4.5			8.8			14.2			13.7	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay		8.5			HCM 2000 Level of Service				A			
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		42.5			Sum of lost time (s)				8.0			
Intersection Capacity Utilization		57.8%			ICU Level of Service				B			
Analysis Period (min)		15										
c Critical Lane Group												

Mitigated Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

HCM Unsignalized Intersection Capacity Analysis
KHA










Synchro 8 Report
Page 5

HCM Signalized Intersection Capacity Analysis
KHA

Synchro 8 Report
Page 6










NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Mitigated Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	1113	72	110	2086	59	167	22	104	192	41	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1251	81	133	2513	71	188	25	117	256	55	23
RTOR Reduction (vph)	0	4	0	0	0	27	0	0	105	0	3	0
Lane Group Flow (vph)	4	1328	0	133	2513	44	0	213	12	0	331	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Effective Green, g (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Actuated g/C Ratio	0.02	0.48		0.11	0.57	0.57		0.10	0.10		0.20	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2427		196	2901	903		184	163		682	
v/s Ratio Prot	0.00	0.26		c0.08	c0.49			c0.12			c0.10	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.10	0.55		0.68	0.87	0.05		1.16	0.07		0.49	
Uniform Delay, d1	86.2	32.8		76.9	32.8	17.1		80.7	72.9		63.5	
Progression Factor	1.13	0.66		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.9		9.0	3.8	0.1		115.2	0.2		0.5	
Delay (s)	98.6	22.6		85.9	36.6	17.2		195.9	73.1		64.1	
Level of Service	F	C		F	D	B		F	E		E	
Approach Delay (s)		22.8			38.5			152.3			64.1	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		43.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		94.2%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)











Mitigated Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	105	1433	34	280	2162	246	86	83	884	269	106	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		3433	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		3433	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	122	1666	40	298	2300	262	96	92	982	320	126	105
RTOR Reduction (vph)	0	2	0	0	0	61	0	133	162	0	2	65
Lane Group Flow (vph)	122	1704	0	298	2300	201	96	411	368	320	135	29
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	5.1	45.1		16.3	56.3	56.3	9.5	38.1	38.1	11.8	40.4	40.4
Effective Green, g (s)	5.1	45.1		16.3	56.3	56.3	9.5	38.1	38.1	11.8	40.4	40.4
Actuated g/C Ratio	0.04	0.34		0.12	0.42	0.42	0.07	0.29	0.29	0.09	0.30	0.30
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	131	1715		420	2149	669	126	443	430	304	530	456
v/s Ratio Prot	0.04	0.34		c0.09	c0.45		0.05	c0.27		c0.09	0.08	
v/s Ratio Perm						0.13			0.24			0.02
v/c Ratio	0.93	0.99		0.71	1.07	0.30	0.76	0.93	0.86	1.05	0.25	0.06
Uniform Delay, d1	63.9	43.9		56.2	38.4	25.4	60.7	46.2	45.0	60.7	35.0	33.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	57.7	20.1		5.4	41.4	0.3	23.4	25.6	15.3	66.1	0.3	0.1
Delay (s)	121.6	64.0		61.6	79.8	25.7	84.1	71.8	60.2	126.8	35.3	33.0
Level of Service	F	E		E	E	C	F	E	E	F	D	C
Approach Delay (s)		67.8			73.0			67.6			88.1	
Approach LOS		E			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		71.8			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		1.02										
Actuated Cycle Length (s)		133.2			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		94.4%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus Mitigated Horizon Year (1 CVN) with Alternative 3 No Hooper
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	326	1245	0	178	1446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	366	1339	0	198	1607
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	366	1339	0	198	1604
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.10	c0.38		0.11	c0.58
v/s Ratio Perm						
v/c Ratio		0.14	1.15		0.96	1.05
Uniform Delay, d1		2.5	26.8		35.1	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	76.7		49.7	36.3
Delay (s)		2.5	103.5		84.8	54.3
Level of Service		A	F		F	D
Approach Delay (s)		2.5	103.5		57.7	
Approach LOS		A	F		E	
Intersection Summary						
HCM 2000 Control Delay		69.4			HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio		1.16				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		74.3%			ICU Level of Service	D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus Mitigated Horizon Year (1 CVN) with Alternative 3 No Hooper
10: SR-75 (Silver Strand Blvd) & Tulagi Rd Timing Plan: PM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	337	5	819	58	0	1773
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1771		3539	1467		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1771		3539	1467		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	427	6	910	64	0	1992
RTOR Reduction (vph)	1	0	0	33	0	0
Lane Group Flow (vph)	432	0	910	31	0	1992
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		55.1	55.1		55.1
Effective Green, g (s)	50.0		55.1	55.1		55.1
Actuated g/C Ratio	0.43		0.48	0.48		0.48
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	770		1695	702		1695
v/s Ratio Prot	c0.24		0.26			c0.56
v/s Ratio Perm				0.02		
v/c Ratio	0.56		0.54	0.04		1.18
Uniform Delay, d1	24.3		21.0	15.9		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.9		0.3	0.0		85.4
Delay (s)	25.2		21.3	16.0		115.4
Level of Service	C		C	B		F
Approach Delay (s)	25.2		21.0			115.4
Approach LOS	C		C			F
Intersection Summary						
HCM 2000 Control Delay			76.8	HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio			0.88			
Actuated Cycle Length (s)			115.0	Sum of lost time (s)		9.9
Intersection Capacity Utilization			98.9%	ICU Level of Service		F
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus Mitigated Horizon Year (1 CVN) with Alternative 3 No Hooper
19: 7th St & SR-75 (Silver Strand Blvd) Timing Plan: PM PEAK







	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔↔↔			↔↔↔		↔	↔		↔	↔	
Volume (vph)	66	1140	64	0	393	40	18	46	5	28	30	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99			1.00		0.99	1.00		1.00	0.93	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5045			5014		1770	1836		1770	1739	
Flt Permitted	0.95	1.00			1.00		0.72	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5045			5014		1334	1836		248	1739	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	75	1295	73	0	418	43	26	66	7	33	35	28
RTOR Reduction (vph)	0	3	0	0	7	0	0	2	0	0	16	0
Lane Group Flow (vph)	75	1365	0	0	454	0	26	71	0	33	47	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1908			2036		259	357		41	289	
v/s Ratio Prot	c0.04	c0.27			c0.09			c0.04			0.03	
v/s Ratio Perm							0.02			c0.13		
v/c Ratio	0.38	0.72			0.22		0.10	0.20		0.80	0.16	
Uniform Delay, d1	74.3	47.7			34.9		59.6	60.7		72.2	64.2	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.2	2.3			0.3		0.2	0.3		69.0	0.3	
Delay (s)	75.5	50.0			35.2		59.7	61.0		141.2	64.5	
Level of Service	E	D			D		E	E		F	E	
Approach Delay (s)		51.3			35.2			60.7			90.9	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		50.0			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			22.3				
Intersection Capacity Utilization		67.9%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus Mitigated Horizon Year (1 CVN) with Alternative 3 No Hooper
21: Dwy/Silver Strand Blvd & Palm Ave Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔			↔↔	↔↔		↔↔		↔↔	↔↔	
Volume (vph)	5	218	0	0	313	176	0	0	0	642	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00				1.00	1.00	
Frt		1.00			1.00	0.85				1.00	0.85	
Flt Protected		1.00			1.00	1.00				0.95	1.00	
Satd. Flow (prot)		1861			1863	1583				1770	1583	
Flt Permitted		0.99			1.00	1.00				0.76	1.00	
Satd. Flow (perm)		1845			1863	1583				1410	1583	
Peak-hour factor, PHF	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.92	0.66	0.66
Adj. Flow (vph)	6	253	0	0	356	200	0	0	0	698	0	21
RTOR Reduction (vph)	0	0	0	0	0	145	0	0	0	0	8	0
Lane Group Flow (vph)	0	259	0	0	356	55	0	0	0	698	13	0
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8		2			6	
Actuated Green, G (s)		17.9			17.9	17.9				39.2	39.2	
Effective Green, g (s)		17.9			17.9	17.9				39.2	39.2	
Actuated g/C Ratio		0.27			0.27	0.27				0.60	0.60	
Clearance Time (s)		4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)		507			512	435				849	953	
v/s Ratio Prot					c0.19						0.01	
v/s Ratio Perm		0.14				0.03				c0.49		
v/c Ratio		0.51			0.70	0.13				0.82	0.01	
Uniform Delay, d1		19.9			21.2	17.7				10.2	5.2	
Progression Factor		1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2		0.9			4.1	0.1				6.5	0.0	
Delay (s)		20.8			25.2	17.9				16.7	5.2	
Level of Service		C			C	B				B	A	
Approach Delay (s)		20.8			22.6			0.0			16.3	
Approach LOS		C			C			A			B	
Intersection Summary												
HCM 2000 Control Delay		19.3			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		65.1			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		58.7%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												







NBC Coastal Campus
22: 3rd St & Palm Ave

Mitigated Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	836	13	87	461	25	15	40	70	29	34	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.92			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1770	1858		1770	1848			1711			1784	
Flt Permitted	0.41	1.00		0.13	1.00			0.96			0.66	
Satd. Flow (perm)	767	1858		236	1848			1646			1199	
Peak-hour factor, PHF	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Adj. Flow (vph)	10	1072	17	98	518	28	26	70	123	63	74	30
RTOR Reduction (vph)	0	1	0	0	2	0	0	55	0	0	10	0
Lane Group Flow (vph)	10	1088	0	98	544	0	0	164	0	0	157	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	57.8	57.8		57.8	57.8			15.1			15.1	
Effective Green, g (s)	57.8	57.8		57.8	57.8			15.1			15.1	
Actuated g/C Ratio	0.71	0.71		0.71	0.71			0.19			0.19	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	547	1327		168	1320			307			223	
v/s Ratio Prot		c0.59			0.29							
v/s Ratio Perm	0.01			0.42				0.10			c0.13	
v/c Ratio	0.02	0.82		0.58	0.41			0.53			0.71	
Uniform Delay, d1	3.3	8.0		5.7	4.7			29.7			30.8	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	4.2		5.1	0.2			1.8			9.7	
Delay (s)	3.4	12.2		10.7	4.9			31.5			40.5	
Level of Service	A	B		B	A			C			D	
Approach Delay (s)		12.1			5.8			31.5			40.5	
Approach LOS		B			A			C			D	
Intersection Summary												
HCM 2000 Control Delay		14.4			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.80										
Actuated Cycle Length (s)		80.9			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		69.6%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Mitigated Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	209	832	566	41	0	229
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	215	858	658	48	0	269
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	706				1971	353
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	706				1971	353
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	76				100	58
cM capacity (veh/h)	888				41	643
Direction, Lane #						
Volume Total	215	858	439	267	269	
Volume Left	215	0	0	0	0	
Volume Right	0	0	0	48	269	
cSH	888	1700	1700	1700	643	
Volume to Capacity	0.24	0.50	0.26	0.16	0.42	
Queue Length 95th (ft)	24	0	0	0	52	
Control Delay (s)	10.3	0.0	0.0	0.0	14.6	
Lane LOS	B				B	
Approach Delay (s)	2.1		0.0		14.6	
Approach LOS					B	
Intersection Summary						
Average Delay			3.0			
Intersection Capacity Utilization			47.1%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Mitigated Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	47	1875	143	66	961	149	111	102	71	197	90	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99		1.00	0.98		1.00	0.94		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5031		1770	4983		1770	1748		1770	1794	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5031		1770	4983		1770	1748		1770	1794	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	50	1995	152	67	971	151	122	112	78	221	101	33
RTOR Reduction (vph)	0	4	0	0	10	0	0	14	0	0	7	0
Lane Group Flow (vph)	50	2143	0	67	1112	0	122	176	0	221	127	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	9.5	87.6		12.7	90.8		17.2	38.0		23.4	44.2	
Effective Green, g (s)	9.5	87.6		12.7	90.8		17.2	38.0		23.4	44.2	
Actuated g/C Ratio	0.05	0.49		0.07	0.50		0.10	0.21		0.13	0.25	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	93	2448		124	2513		169	369		230	440	
v/s Ratio Prot	0.03	c0.43		c0.04	c0.22		0.07	c0.10		c0.12	0.07	
v/s Ratio Perm												
v/c Ratio	0.54	0.88		0.54	0.44		0.72	0.48		0.96	0.29	
Uniform Delay, d1	83.1	41.3		80.8	28.5		79.1	62.3		77.8	55.1	
Progression Factor	1.00	1.00		0.94	1.17		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.9	3.8		4.4	0.5		14.1	1.0		48.2	0.4	
Delay (s)	89.0	45.1		80.4	33.9		93.2	63.2		126.0	55.5	
Level of Service	F	D		F	C		F	E		F	E	
Approach Delay (s)		46.1			36.5			75.0			99.4	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		50.2			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		103.1%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Mitigated Horizon Year (1 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰	↰	↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	30	2062	227	179	1508	93	147	46	146	176	51	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.85			1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5010		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5010		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	32	2194	241	185	1555	96	160	50	159	238	69	31
RTOR Reduction (vph)	0	8	0	0	0	32	0	0	146	0	4	0
Lane Group Flow (vph)	32	2427	0	185	1555	64	0	210	13	0	334	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	7.6	89.3		16.4	98.5	98.5		15.0	15.0		40.0	
Effective Green, g (s)	7.6	89.3		16.4	98.5	98.5		15.0	15.0		40.0	
Actuated g/C Ratio	0.04	0.50		0.09	0.55	0.55		0.08	0.08		0.22	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	74	2485		161	2782	866		149	131		749	
v/s Ratio Prot	0.02	c0.48		c0.10	0.31			c0.12			c0.10	
v/s Ratio Perm						0.04			0.01			
v/c Ratio	0.43	0.98		1.15	0.56	0.07		1.41	0.10		0.45	
Uniform Delay, d1	84.1	44.3		81.8	26.6	19.2		82.5	76.3		60.4	
Progression Factor	1.15	0.46		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	3.2	11.5		116.6	0.8	0.2		219.2	1.5		1.9	
Delay (s)	100.2	32.0		198.4	27.4	19.4		301.7	77.8		62.4	
Level of Service	F	C		F	C	B		F	E		E	
Approach Delay (s)		32.9			44.2			205.2			62.4	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		51.7			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.90										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		92.6%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus Mitigated Horizon Year (1 CVN) with Alternative 3 No Hooper
30: Saturn Blvd/19th St & SR-75 (Palm Ave) Timing Plan: PM PEAK















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↔↔↔		↔↔	↔↔↔	↔	↔	↔	↔	↔↔	↔	↔
Volume (vph)	216	2138	30	376	1858	636	75	203	611	674	274	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	227	2251	32	404	1998	684	80	216	650	733	298	284
RTOR Reduction (vph)	0	1	0	0	0	87	0	25	153	0	2	130
Lane Group Flow (vph)	227	2282	0	404	1998	597	80	425	263	733	324	126
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	10.2	48.9		20.4	59.1	59.1	11.2	40.0	40.0	23.8	52.6	52.6
Effective Green, g (s)	10.2	48.9		20.4	59.1	59.1	11.2	40.0	40.0	23.8	52.6	52.6
Actuated g/C Ratio	0.07	0.32		0.13	0.38	0.38	0.07	0.26	0.26	0.15	0.34	0.34
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	225	1601		451	1938	603	127	421	388	527	592	510
v/s Ratio Prot	0.07	c0.45		c0.12	c0.39		0.05	c0.26		c0.21	0.19	
v/s Ratio Perm						0.38			0.17			0.08
v/c Ratio	1.01	1.43		0.90	1.03	0.99	0.63	1.01	0.68	1.39	0.55	0.25
Uniform Delay, d1	72.4	53.0		66.3	48.0	47.7	69.9	57.5	51.7	65.6	41.5	36.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	62.3	195.2		19.9	28.9	34.2	9.4	46.1	4.7	187.3	1.0	0.3
Delay (s)	134.7	248.2		86.1	76.8	81.8	79.3	103.6	56.4	252.9	42.6	37.2
Level of Service	F	F		F	E	F	E	F	E	F	D	D
Approach Delay (s)		238.0			79.1			80.8			158.8	
Approach LOS		F			E			F			F	
Intersection Summary												
HCM 2000 Control Delay		143.4			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.22										
Actuated Cycle Length (s)		155.0			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		113.3%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus Mitigated Horizon Year (1 CVN) with Alternative 3 No Hooper
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↖	↖↖
Volume (vph)	0	581	971	0	504	1904
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	653	1033	0	554	2092
RTOR Reduction (vph)	0	0	0	0	0	2
Lane Group Flow (vph)	0	653	1033	0	554	2090
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.18	c0.29		0.31	c0.75
v/s Ratio Perm						
v/c Ratio		0.37	1.20		0.84	1.18
Uniform Delay, d1		12.0	30.3		22.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	102.8		9.0	85.9
Delay (s)		12.1	133.1		31.7	100.4
Level of Service		B	F		C	F
Approach Delay (s)		12.1	133.1		86.0	
Approach LOS		B	F		F	
Intersection Summary						
HCM 2000 Control Delay			86.1		HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio			1.27			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			97.3%		ICU Level of Service	F
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
1: Glorietta Blvd & Fourth St










Horizon Year (2 CVN)
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1419	35	0	3822	557	0	0	480	0	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1710	42	0	4154	605	0	0	600	0	0	13
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4780			1772			3169	6531	631	5067	6249	1728
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4780			1772			3169	6531	631	5067	6249	1728
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	82
cM capacity (veh/h)	20			342			3	0	1359	0	0	75
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	684	684	384	1662	1662	1436	600	13				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	42	0	0	605	600	13				
cSH	1700	1700	1700	1700	1700	1700	1359	75				
Volume to Capacity	0.40	0.40	0.23	0.98	0.98	0.84	0.44	0.18				
Queue Length 95th (ft)	0	0	0	0	0	0	58	15				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	63.1				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	63.1				
Approach LOS							A	F				
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			101.4%	ICU Level of Service					G			
Analysis Period (min)			15									

* User Entered Value



















NBC Coastal Campus
2: Pomona Ave & Fourth St

Horizon Year (2 CVN)
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1280	204	0	3721	0	234	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1455	232	0	4134	0	254	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1706	2989		641	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1706	2989		641	
tC, single (s)			4.1	6.8		6.9	
tC, 2 stage (s)							
tF (s)			2.2	3.5		3.3	
p0 queue free %			100	100		37	
cM capacity (veh/h)			362	10		404	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	582	582	523	1378	1378	1378	254
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	232	0	0	0	254
cSH	1700	1700	1700	1700	1700	1700	404
Volume to Capacity	0.34	0.34	0.31	0.81	0.81	0.81	0.63
Queue Length 95th (ft)	0	0	0	0	0	0	104
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.9
Lane LOS							D
Approach Delay (s)	0.0			0.0			27.9
Approach LOS							D
Intersection Summary							
Average Delay	1.2						
Intersection Capacity Utilization	86.8%			ICU Level of Service		E	
Analysis Period (min)	15						













NBC Coastal Campus
3: Orange Ave & Third St

Horizon Year (2 CVN)
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1591	1957	345	106	103	0	0	280	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4640		1770	3539			3505	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4640		1770	3539			3505	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1711	2104	371	143	139	0	0	322	15
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1027	3151	0	143	139	0	0	335	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3212		186	872			397	
v/s Ratio Prot				0.67	c0.68		c0.08	0.04			c0.10	
v/s Ratio Perm												
v/c Ratio				0.98	0.98		0.77	0.16			0.84	
Uniform Delay, d1				27.6	27.9		82.5	56.0			82.4	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				21.7	11.8		17.2	0.1			15.1	
Delay (s)				49.4	39.7		99.7	56.1			97.4	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			42.1			78.2			97.4	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay			48.1	HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio			0.94									
Actuated Cycle Length (s)			189.5	Sum of lost time (s)				16.8				
Intersection Capacity Utilization			201.0%	ICU Level of Service				H				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (2 CVN)
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑		↑↑	↑↑	↑↑
Volume (vph)	1	587	65	0	0	0	0	199	221	455	1474	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3243	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3243	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	638	71	0	0	0	0	231	240	495	1535	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	23	48	0	0	0
Lane Group Flow (vph)	0	639	42	0	0	0	0	302	98	495	1535	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1171	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.43	
v/s Ratio Perm		0.13	0.03						0.07			
v/c Ratio		0.36	0.08					0.26	0.19	0.70	0.74	
Uniform Delay, d1		41.5	37.3					38.6	37.6	63.3	26.4	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.2	1.5	
Delay (s)		41.6	37.3					38.7	37.7	66.5	27.9	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.4			37.3	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.3		HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		201.0%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Horizon Year (2 CVN)

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗		↖	↗
Volume (vph)	253	8	1330	704	0	1293
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3313			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3313			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	294	9	1430	757	0	1361
RTOR Reduction (vph)	1	0	57	0	0	0
Lane Group Flow (vph)	302	0	2130	0	0	1361
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	19.9		44.8			44.8
Effective Green, g (s)	19.9		44.8			44.8
Actuated g/C Ratio	0.27		0.61			0.61
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	429		2011			2040
v/s Ratio Prot	c0.19		c0.64			0.40
v/s Ratio Perm						
v/c Ratio	0.70		1.06			0.67
Uniform Delay, d1	24.3		14.5			9.6
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	5.2		38.0			0.8
Delay (s)	29.4		52.5			10.4
Level of Service	C		D			B
Approach Delay (s)	29.4		52.5			10.4
Approach LOS	C		D			B
Intersection Summary						
HCM 2000 Control Delay			35.8		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			1.00			
Actuated Cycle Length (s)			73.8		Sum of lost time (s)	12.1
Intersection Capacity Utilization			86.8%		ICU Level of Service	E
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Horizon Year (2 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘		↖	↗	↖	↗	↘	↖	↗	↘
Volume (vph)	55	3	12	9	0	7	23	1580	30	46	1458	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1692	1583		1705		1770	3529		1770	3524	
Frt Permitted	0.74	0.77	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1303	1358	1583		1508		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	64	3	14	18	0	14	27	1881	36	50	1585	47
RTOR Reduction (vph)	0	0	12	0	27	0	0	1	0	0	1	0
Lane Group Flow (vph)	33	34	2	0	5	0	27	1916	0	50	1631	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	16.2	16.2	16.2		16.2		3.0	69.9		4.1	71.0	
Effective Green, g (s)	16.2	16.2	16.2		16.2		3.0	69.9		4.1	71.0	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.67		0.04	0.68	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	210	245		234		50	2365		69	2398	
v/s Ratio Prot							0.02	c0.54		c0.03	0.46	
v/s Ratio Perm	c0.03	0.03	0.00		0.00							
v/c Ratio	0.16	0.16	0.01		0.02		0.54	0.81		0.72	0.68	
Uniform Delay, d1	38.2	38.2	37.3		37.3		50.0	12.4		49.5	9.9	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4	0.0		0.0		11.4	2.2		31.2	0.8	
Delay (s)	38.6	38.5	37.3		37.4		61.3	14.6		80.7	10.7	
Level of Service	D	D	D		D		E	B		F	B	
Approach Delay (s)		38.3			37.4			15.3			12.8	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			14.8		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.69									
Actuated Cycle Length (s)			104.3		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			62.1%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Horizon Year (2 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	27	0	1516	9	499	950	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	41	0	1666	10	509	969	0
RTOR Reduction (vph)	0	0	0	0	37	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	4	0	0	1666	5	509	969	0
Turn Type					NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.47		c0.29	0.27	
v/s Ratio Perm								0.00				
v/c Ratio					0.03			1.00	0.01	0.83	0.32	
Uniform Delay, d1					60.6			38.5	20.5	43.7	2.4	
Progression Factor					1.00			0.42	1.00	1.00	1.00	
Incremental Delay, d2					0.1			15.6	0.0	9.6	0.3	
Delay (s)					60.7			31.9	20.5	53.3	2.7	
Level of Service					E			C	C	D	A	
Approach Delay (s)		0.0			60.7			31.9			20.1	
Approach LOS		A			E			C			C	
Intersection Summary												
HCM 2000 Control Delay		26.8			HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		88.4%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd











Horizon Year (2 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	59	17	2	76	151	160	1326	7	340	293	364
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.98	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3192	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3192	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	55	91	26	2	86	172	178	1473	8	391	337	418
RTOR Reduction (vph)	0	0	24	0	0	145	0	0	4	0	155	0
Lane Group Flow (vph)	55	91	2	0	88	27	178	1473	4	391	600	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1047	
v/s Ratio Prot	0.03	c0.05			c0.05		0.10	c0.42		c0.22	0.19	
v/s Ratio Perm			0.00			0.02			0.00			
v/c Ratio	0.45	0.71	0.02		0.30	0.11	0.32	0.93	0.01	1.15	0.57	
Uniform Delay, d1	64.9	66.1	62.9		53.9	52.3	38.3	38.2	22.3	58.5	40.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.91	
Incremental Delay, d2	2.6	17.0	0.1		0.6	0.2	0.3	11.7	0.0	94.2	2.2	
Delay (s)	67.5	83.0	63.0		54.4	52.5	38.7	49.9	22.4	150.5	38.9	
Level of Service	E	F	E		D	D	D	D	C	F	D	
Approach Delay (s)		75.0			53.1			48.5			77.0	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		60.4			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		91.3%			ICU Level of Service				F			
Analysis Period (min)		15										
c Critical Lane Group												











NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Horizon Year (2 CVN)
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	27	232	5	102	381	10
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	32	273	6	128	414	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked	0.98					
vC, conflicting volume	909	70			134	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	897	70			134	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	85	73			71	
cM capacity (veh/h)	217	993			1451	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	305	134	425			
Volume Left	32	0	414			
Volume Right	273	128	0			
cSH	1108	1700	1451			
Volume to Capacity	0.27	0.08	0.29			
Queue Length 95th (ft)	28	0	30			
Control Delay (s)	11.5	0.0	8.3			
Lane LOS	B		A			
Approach Delay (s)	11.5	0.0	8.3			
Approach LOS	B					
Intersection Summary						
Average Delay		8.1				
Intersection Capacity Utilization		38.3%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (2 CVN)
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	30	4	1506	478	0	264
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.98		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.98		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1729		3539	1519		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1729		3539	1519		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	40	5	1585	503	0	412
RTOR Reduction (vph)	5	0	0	135	0	0
Lane Group Flow (vph)	40	0	1585	368	0	412
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	2.0		32.6	32.6		32.6
Effective Green, g (s)	2.0		32.6	32.6		32.6
Actuated g/C Ratio	0.04		0.73	0.73		0.73
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	77		2592	1112		2592
v/s Ratio Prot	c0.02		c0.45			0.12
v/s Ratio Perm				0.24		
v/c Ratio	0.52		0.61	0.33		0.16
Uniform Delay, d1	20.8		2.9	2.1		1.8
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	6.3		0.4	0.2		0.0
Delay (s)	27.0		3.3	2.3		1.8
Level of Service	C		A	A		A
Approach Delay (s)	27.0		3.1			1.8
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.3		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.61			
Actuated Cycle Length (s)			44.5		Sum of lost time (s)	9.9
Intersection Capacity Utilization			54.0%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Horizon Year (2 CVN)

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖↗		↖	↖↗
Volume (veh/h)	0	18	2466	7	7	296
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	31	2652	8	10	435
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2894	1330			2659	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2894	1330			2659	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	79			93	
cM capacity (veh/h)	12	145			155	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	31	1768	891	10	218	218
Volume Left	0	0	0	10	0	0
Volume Right	31	0	8	0	0	0
cSH	145	1700	1700	155	1700	1700
Volume to Capacity	0.21	1.04	0.52	0.07	0.13	0.13
Queue Length 95th (ft)	19	0	0	5	0	0
Control Delay (s)	36.5	0.0	0.0	29.9	0.0	0.0
Lane LOS	E			D		
Approach Delay (s)	36.5	0.0		0.7		
Approach LOS	E					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		78.4%		ICU Level of Service	D	
Analysis Period (min)		15				

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

Horizon Year (2 CVN)

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖↗	↖	↖	↖↗
Volume (vph)	20	101	2365	14	44	252
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	25	125	2543	15	64	365
RTOR Reduction (vph)	0	2	0	1	0	0
Lane Group Flow (vph)	25	123	2543	14	64	365
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	16.4	26.5	68.2	68.2	5.0	82.0
Effective Green, g (s)	16.4	21.4	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.20	0.63	0.63	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	269	314	2241	1002	82	2694
v/s Ratio Prot	0.01	c0.08	c0.72		c0.04	0.10
v/s Ratio Perm				0.01		
v/c Ratio	0.09	0.39	1.13	0.01	0.78	0.14
Uniform Delay, d1	39.3	37.5	19.8	7.3	50.8	3.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.8	66.8	0.0	37.0	0.0
Delay (s)	39.4	38.3	86.5	7.3	87.8	3.4
Level of Service	D	D	F	A	F	A
Approach Delay (s)	38.5		86.1			16.0
Approach LOS	D		F			B
Intersection Summary						
HCM 2000 Control Delay		74.2		HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio		0.98				
Actuated Cycle Length (s)		107.7		Sum of lost time (s)	18.1	
Intersection Capacity Utilization		82.5%		ICU Level of Service	E	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Horizon Year (2 CVN)
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↕	↕	↕	↕
Volume (veh/h)	0	38	2339	30	0	270
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	61	2462	32	0	365
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2660	1247			2494	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2660	1247			2494	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	63			100	
cM capacity (veh/h)	18	165			180	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	61	1641	852	182	182	
Volume Left	0	0	0	0	0	
Volume Right	61	0	32	0	0	
cSH	165	1700	1700	1700	1700	
Volume to Capacity	0.37	0.97	0.50	0.11	0.11	
Queue Length 95th (ft)	40	0	0	0	0	
Control Delay (s)	39.2	0.0	0.0	0.0	0.0	
Lane LOS	E					
Approach Delay (s)	39.2	0.0		0.0		
Approach LOS	E					
Intersection Summary						
Average Delay		0.8				
Intersection Capacity Utilization		75.6%		ICU Level of Service	D	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Horizon Year (2 CVN)
Timing Plan: AM PEAK











	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↕	↕	↖	↕
Volume (vph)	12	8	2369	38	18	243
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	19	13	2468	40	22	300
RTOR Reduction (vph)	0	2	0	10	0	0
Lane Group Flow (vph)	19	11	2468	30	22	300
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.5	4.6	58.8	58.8	3.1	69.4
Effective Green, g (s)	1.5	4.6	58.8	58.8	3.1	69.4
Actuated g/C Ratio	0.02	0.06	0.76	0.76	0.04	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	34	93	2685	1201	70	3169
v/s Ratio Prot	c0.01	0.00	c0.70		c0.01	0.08
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.56	0.12	0.92	0.03	0.31	0.09
Uniform Delay, d1	37.7	34.5	7.5	2.3	36.2	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	18.4	0.6	5.6	0.0	2.6	0.0
Delay (s)	56.1	35.1	13.1	2.3	38.7	0.5
Level of Service	E	D	B	A	D	A
Approach Delay (s)	47.6		12.9			3.1
Approach LOS	D		B			A
Intersection Summary						
HCM 2000 Control Delay		12.2		HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio		0.88				
Actuated Cycle Length (s)		77.5		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		78.3%		ICU Level of Service	D	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (2 CVN)

Timing Plan: AM PEAK

										
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	3	0	53	2	0	51	3	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	12	0	98	4	0	81	5	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	12	0	102	81	5					
Volume Left (vph)	0	0	98	0	0					
Volume Right (vph)	0	0	0	0	5					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.2	3.2					
Degree Utilization, x	0.01	0.00	0.12	0.09	0.00					
Capacity (veh/h)	822	1121	809	828	1121					
Control Delay (s)	7.3	6.2	7.9	7.6	6.2					
Approach Delay (s)	7.3		7.9	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.7							
Level of Service			A							
Intersection Capacity Utilization			19.7%	ICU Level of Service					A	
Analysis Period (min)			15							

NBC Coastal Campus

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (2 CVN)

Timing Plan: AM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑	↑	↑	↑			
Volume (vph)	3	43	0	0	38	262	4	2142	59	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.72	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1346	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	4	57	0	0	53	364	4	2279	63	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	54	0	0	27	0	0	0
Lane Group Flow (vph)	4	57	0	0	53	310	4	2279	36	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	18.5	18.5			18.5	18.5	47.7	43.6	43.6			
Effective Green, g (s)	18.5	18.5			18.5	18.5	47.7	43.6	43.6			
Actuated g/C Ratio	0.25	0.25			0.25	0.25	0.63	0.58	0.58			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	329	456			456	387	1118	2043	914			
v/s Ratio Prot		0.03			0.03		0.00	c0.64				
v/s Ratio Perm	0.00					c0.20			0.02			
v/c Ratio	0.01	0.12			0.12	0.80	0.00	1.12	0.04			
Uniform Delay, d1	21.6	22.2			22.1	26.8	5.1	15.9	6.9			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	11.3	0.0	59.4	0.0			
Delay (s)	21.6	22.3			22.3	38.0	5.1	75.4	6.9			
Level of Service	C	C			C	D	A	E	A			
Approach Delay (s)		22.3				36.0		73.4			0.0	
Approach LOS		C				D		E			A	
Intersection Summary												
HCM 2000 Control Delay		66.8				HCM 2000 Level of Service		E				
HCM 2000 Volume to Capacity ratio		1.02										
Actuated Cycle Length (s)		75.5				Sum of lost time (s)		13.4				
Intersection Capacity Utilization		95.0%				ICU Level of Service		F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (2 CVN)

Timing Plan: AM PEAK





















							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	0	1910	0	207	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	0	1990	0	262	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked				0.00			
vC, conflicting volume	1257	131	262		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1257	131	262		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	163	894	1299		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	995	995	175	87	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.59	0.59	0.10	0.05	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay		0.0					
Intersection Capacity Utilization		56.1%		ICU Level of Service		B	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (2 CVN)

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	456	2	45	50	8	21	30	1771	11	4	154	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	1.00		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1594		1770	1661		1770	3536		1770	3407	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1594		1770	1661		1770	3536		1770	3407	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	518	2	51	161	26	68	32	1864	12	6	223	74
RTOR Reduction (vph)	0	34	0	0	64	0	0	1	0	0	30	0
Lane Group Flow (vph)	518	19	0	161	30	0	32	1875	0	6	267	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	31.2	31.2		5.0	5.0		3.2	40.0		1.0	37.8	
Effective Green, g (s)	31.2	31.2		5.0	5.0		3.2	40.0		1.0	37.8	
Actuated g/C Ratio	0.32	0.32		0.05	0.05		0.03	0.42		0.01	0.39	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	574	517		92	86		58	1471		18	1340	
v/s Ratio Prot	c0.29	0.01		c0.09	0.02		c0.02	c0.53		0.00	0.08	
v/s Ratio Perm												
v/c Ratio	0.90	0.04		1.75	0.34		0.55	1.27		0.33	0.20	
Uniform Delay, d1	31.0	22.2		45.5	44.0		45.7	28.0		47.2	19.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	17.4	0.0		378.2	2.4		10.9	129.2		10.6	0.1	
Delay (s)	48.4	22.2		423.8	46.4		56.6	157.2		57.8	19.3	
Level of Service	D	C		F	D		E	F		E	B	
Approach Delay (s)		46.0			284.7			155.5			20.0	
Approach LOS		D			F			F			C	
Intersection Summary												
HCM 2000 Control Delay		132.3						HCM 2000 Level of Service		F		
HCM 2000 Volume to Capacity ratio		1.16										
Actuated Cycle Length (s)		96.1			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		89.7%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (2 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	9	222	20	0	1606	20	44	27	1900	23	48	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5023			5076		1770	1846			1732	
Flt Permitted	0.95	1.00			1.00		0.65	1.00			0.14	
Satd. Flow (perm)	1770	5023			5076		1210	1846			250	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	10	249	22	0	1765	22	52	32	2	30	62	78
RTOR Reduction (vph)	0	6	0	0	1	0	0	2	0	0	17	0
Lane Group Flow (vph)	10	265	0	0	1786	0	52	32	0	0	153	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1900			2061		235	358			41	
v/s Ratio Prot	c0.01	0.05			c0.35			0.02				
v/s Ratio Perm							c0.04				c0.61	
v/c Ratio	0.05	0.14			0.87		0.22	0.09			3.74	
Uniform Delay, d1	71.5	36.7			49.0		61.0	59.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.2			4.7		0.5	0.1			1290.2	
Delay (s)	71.6	36.9			53.7		61.5	59.6			1365.2	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		38.1			53.7			60.7			1365.2	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		148.0			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.15										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		69.9%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

Horizon Year (2 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	239	0	457	1616	10	0	0	0	0	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	291	0	486	1719	11	0	0	0	0	0	20
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	291	0	486	1730	0	0	0	0	0	0	8
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.06		0.14	c0.49							
v/s Ratio Perm												0.00
v/c Ratio		0.15		0.28	0.54							0.01
Uniform Delay, d1		36.9		26.2	1.5							34.9
Progression Factor		0.40		1.00	1.00							1.00
Incremental Delay, d2		0.2		0.1	0.2							0.0
Delay (s)		15.1		26.3	1.6							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.1			7.0		0.0					35.0
Approach LOS		B			A		A					C
Intersection Summary												
HCM 2000 Control Delay		8.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		66.7%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

Horizon Year (2 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	10	238	0	0	131	107	0	0	0	49	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	12	283	0	0	141	115	0	0	0	54	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	256			283			511	563	283	506	506	198
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	256			283			511	563	283	506	506	198
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1309			1279			467	431	756	474	465	843
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	295	256	0	59								
Volume Left	12	0	0	54								
Volume Right	0	115	0	5								
cSH	1309	1279	1700	494								
Volume to Capacity	0.01	0.00	0.00	0.12								
Queue Length 95th (ft)	1	0	0	10								
Control Delay (s)	0.4	0.0	0.0	13.3								
Lane LOS	A			A	B							
Approach Delay (s)	0.4	0.0	0.0	13.3								
Approach LOS				A	B							
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				30.6%								
Analysis Period (min)				15								
ICU Level of Service												
A												

NBC Coastal Campus

22: 3rd St & Palm Ave

Horizon Year (2 CVN)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕	↕		↕	↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	278	5	27	214	25	12	15	129	12	11	15
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	9	323	6	29	230	27	15	19	159	15	14	19
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	329	29	257	193	48						
Volume Left (vph)	9	0	29	0	15	15						
Volume Right (vph)	0	6	0	27	159	19						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.1	5.5	6.1	5.5	5.1	5.7						
Degree Utilization, x	0.02	0.51	0.05	0.40	0.27	0.08						
Capacity (veh/h)	573	629	560	623	628	539						
Control Delay (s)	8.0	12.9	8.2	10.9	10.1	9.2						
Approach Delay (s)	12.7		10.6		10.1	9.2						
Approach LOS	B		B		B	A						
Intersection Summary												
Delay				11.3								
Level of Service				B								
Intersection Capacity Utilization				38.1%								
Analysis Period (min)				15								
ICU Level of Service												
A												

HCM Unsignalized Intersection Capacity Analysis
KHA

Synchro 8 Report
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HCM Signalized Intersection Capacity Analysis
KHA

Synchro 8 Report
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NBC Coastal Campus
25: Delaware St & Palm Ave

Horizon Year (2 CVN)
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑	↗			↙		
Volume (veh/h)	514	5	0	0	3	6	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	559	5	0	0	3	7	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)				767			
pX, platoon unblocked							
vC, conflicting volume			564		559	559	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			564		559	559	
tC, single (s)			4.1		6.4	6.2	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		99	99	
cM capacity (veh/h)			1007		490	529	
Direction, Lane #	EB 1	EB 2	NB 1				
Volume Total	559	5	10				
Volume Left	0	0	3				
Volume Right	0	5	7				
cSH	1700	1700	515				
Volume to Capacity	0.33	0.00	0.02				
Queue Length 95th (ft)	0	0	1				
Control Delay (s)	0.0	0.0	12.1				
Lane LOS			B				
Approach Delay (s)	0.0		12.1				
Approach LOS			B				
Intersection Summary							
Average Delay			0.2				
Intersection Capacity Utilization			37.1%		ICU Level of Service	A	
Analysis Period (min)			15				

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (2 CVN)
Timing Plan: AM PEAK





















	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑↑	↘	↙	↑↑↑			↙			↑↑	
Volume (vph)	24	739	40	27	1746		185	42	58	102	52	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5046		1770	5064			3323			3363	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5046		1770	5064			3323			3363	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	29	880	48	30	1919	55	223	51	70	124	63	34
RTOR Reduction (vph)	0	3	0	0	2	0	0	13	0	0	8	0
Lane Group Flow (vph)	29	925	0	30	1972	0	0	331	0	0	213	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2122		157	2017			646			653	
v/s Ratio Prot	0.02	c0.18		c0.02	c0.39			c0.10			c0.06	
v/s Ratio Perm												
v/c Ratio	0.15	0.44		0.19	0.98			0.51			0.33	
Uniform Delay, d1	72.3	37.0		76.0	53.4			64.9			62.4	
Progression Factor	1.00	1.00		1.26	0.68			1.00			1.00	
Incremental Delay, d2	0.4	0.7		0.5	13.7			0.7			0.3	
Delay (s)	72.7	37.7		96.5	50.2			65.6			62.6	
Level of Service	E	D		F	D			E			E	
Approach Delay (s)		38.7			50.9			65.6			62.6	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		49.7			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		71.9%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

27: Florida St & SR-75 (Palm Ave)

Horizon Year (2 CVN)

Timing Plan: AM PEAK






















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	1002	40	23	1944		21	5	35	63	12	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5056		1770	5080			1690		1770	1699	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.63	1.00	
Satd. Flow (perm)	1770	5056		1770	5080			1535		1182	1699	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	3	1126	45	26	2209	16	29	7	48	90	17	24
RTOR Reduction (vph)	0	2	0	0	0	0	0	27	0	0	20	0
Lane Group Flow (vph)	3	1169	0	26	2225	0	0	57	0	90	21	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3474		118	3716			255		197	283	
v/s Ratio Prot	0.00	0.23		c0.01	c0.44						0.01	
v/s Ratio Perm								0.04		c0.08		
v/c Ratio	0.08	0.34		0.22	0.60			0.22		0.46	0.07	
Uniform Delay, d1	86.2	11.5		79.6	11.5			64.9		67.7	63.3	
Progression Factor	1.60	0.27		1.39	0.36			1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.2		0.6	0.5			0.4		1.7	0.1	
Delay (s)	139.0	3.3		111.1	4.7			65.4		69.3	63.4	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.7			5.9			65.4			67.5	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		71.3%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

28: 13th St & SR-75 (Palm Ave)

Horizon Year (2 CVN)

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	1083	72	110	1780	59	165	22	104	192	41	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.91	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5038		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5038		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1217	81	133	2145	71	185	25	117	256	55	23
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	97	0	3	0
Lane Group Flow (vph)	4	1294	0	133	2145	41	0	210	20	0	331	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.26		c0.08	c0.42			c0.12			c0.10	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.10	0.58		0.68	0.79	0.05		0.68	0.07		0.57	
Uniform Delay, d1	86.2	37.6		76.9	34.1	20.3		69.9	62.5		68.4	
Progression Factor	1.18	0.61		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	1.1		9.0	2.5	0.1		6.2	0.1		1.4	
Delay (s)	103.0	24.1		85.9	36.6	20.4		76.1	62.6		69.7	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		24.3			38.9			71.3			69.7	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		39.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		88.3%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Horizon Year (2 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	16	1386	29	50	1928	14	18	8	56	44	3	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5069		1770	5080			1673			1724	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.79	
Satd. Flow (perm)	1770	5069		1770	5080			1563			1402	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	17	1507	32	58	2242	16	21	10	67	58	4	32
RTOR Reduction (vph)	0	2	0	0	0	0	0	53	0	0	25	0
Lane Group Flow (vph)	17	1537	0	58	2258	0	0	45	0	0	69	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	1.5	37.4		2.8	38.7			15.3			15.3	
Effective Green, g (s)	1.5	37.4		2.8	38.7			15.3			15.3	
Actuated g/C Ratio	0.02	0.53		0.04	0.54			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	37	2662		69	2761			335			301	
v/s Ratio Prot	0.01	0.30		c0.03	c0.44							
v/s Ratio Perm								0.03			c0.05	
v/c Ratio	0.46	0.58		0.84	0.82			0.14			0.23	
Uniform Delay, d1	34.4	11.5		34.0	13.4			22.6			23.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	8.8	0.3		57.0	2.0			0.2			0.4	
Delay (s)	43.2	11.8		91.0	15.3			22.8			23.5	
Level of Service	D	B		F	B			C			C	
Approach Delay (s)		12.2			17.2			22.8			23.5	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		15.6			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		71.2			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		60.0%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (2 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰		↰	↰	↰	↰	↰	↰
Volume (vph)	105	1402	34	280	1860	246	84	83	884	269	106	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	122	1630	40	298	1979	262	93	92	982	320	126	105
RTOR Reduction (vph)	0	2	0	0	0	69	0	147	173	0	3	65
Lane Group Flow (vph)	122	1668	0	298	1979	193	93	397	357	320	134	29
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.1		17.9	47.0	47.0	8.5	35.4	35.4	10.3	37.2	37.2
Effective Green, g (s)	6.0	35.1		17.9	47.0	47.0	8.5	35.4	35.4	10.3	37.2	37.2
Actuated g/C Ratio	0.05	0.29		0.15	0.39	0.39	0.07	0.29	0.29	0.09	0.31	0.31
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	170	1474		262	1981	616	124	454	441	293	539	463
v/s Ratio Prot	0.04	c0.33		c0.17	0.39		0.05	c0.26		c0.09	0.08	
v/s Ratio Perm						0.12			0.24			0.02
v/c Ratio	0.72	1.13		1.14	1.00	0.31	0.75	0.87	0.81	1.09	0.25	0.06
Uniform Delay, d1	56.5	42.8		51.4	36.8	25.6	55.0	40.5	39.5	55.1	31.2	29.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.5	68.3		97.8	19.8	0.3	22.2	16.9	10.5	79.5	0.2	0.1
Delay (s)	69.9	111.0		149.1	56.6	25.9	77.2	57.3	50.0	134.6	31.5	29.5
Level of Service	E	F		F	E	C	E	E	D	F	C	C
Approach Delay (s)		108.2			64.3			55.6			91.0	
Approach LOS		F			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		78.1			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		1.04										
Actuated Cycle Length (s)		120.6			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		91.8%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (2 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	326	1232	0	178	1157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	366	1325	0	198	1286
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	366	1325	0	198	1283
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.10	c0.37		0.11	c0.46
v/s Ratio Perm						
v/c Ratio		0.14	1.14		0.96	0.84
Uniform Delay, d1		2.5	26.8		35.1	15.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	71.9		49.7	4.2
Delay (s)		2.5	98.7		84.8	19.2
Level of Service		A	F		F	B
Approach Delay (s)		2.5	98.7		27.9	
Approach LOS		A	F		C	
Intersection Summary						
HCM 2000 Control Delay			54.5		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			1.01			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			64.2%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						










NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Horizon Year (2 CVN)
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	504	0	0	483	600	866	2	165	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3245		1681	1628				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3245		1681	1628				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	579	0	0	525	652	941	2	179	0	0	0
RTOR Reduction (vph)	0	0	0	0	403	0	0	32	0	0	0	0
Lane Group Flow (vph)	0	579	0	0	774	0	574	516	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		18.4			18.4		21.7	21.7				
Effective Green, g (s)		18.4			18.4		21.7	21.7				
Actuated g/C Ratio		0.38			0.38		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1353			1241		758	734				
v/s Ratio Prot		0.16			c0.24							
v/s Ratio Perm							c0.34	0.32				
v/c Ratio		0.43			0.62		0.76	0.70				
Uniform Delay, d1		11.0			12.0		11.0	10.6				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			1.0		4.3	3.1				
Delay (s)		11.2			13.0		15.4	13.7				
Level of Service		B			B		B	B				
Approach Delay (s)		11.2			13.0		14.5				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					13.2					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.70							
Actuated Cycle Length (s)					48.1					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					75.1%					ICU Level of Service	D	
Analysis Period (min)					15							
c Critical Lane Group												


















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Horizon Year (2 CVN)
Timing Plan: AM PEAK

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	4	5	67	14	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	16	7	93	34	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	141	34	34			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	141	34	34			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	848	1039	1577			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	16	100	34			
Volume Left	0	7	0			
Volume Right	16	0	0			
cSH	1039	1577	1700			
Volume to Capacity	0.02	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.5	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		1.3				
Intersection Capacity Utilization		17.6%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Horizon Year (2 CVN)
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	4076	18	0	1813	246	0	0	915	0	0	56
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4246	19	0	1869	254	0	0	1017	0	0	85
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2143			4285			5003	6418	1465	3451	6300	790
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2143			4285			5003	6418	1465	3451	6300	790
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	245			33			0	0	1835	1	0	322
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1698	1698	868	748	748	627	1017	85				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	19	0	0	254	1017	85				
cSH	1700	1700	1700	1700	1700	1700	1835	322				
Volume to Capacity	1.00	1.00	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	90	26				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.4	20.1				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.4	20.1				
Approach LOS							A	C				
Intersection Summary												
Average Delay			1.5									
Intersection Capacity Utilization			144.4%		ICU Level of Service		H					
Analysis Period (min)			15									

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Horizon Year (2 CVN)
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3839	132	0	1851	0	202	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3958	136	0	1928	0	246	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4114		4708	1427	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4114		4708	1427	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			39		1	120	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1583	1583	928	643	643	643	246
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	136	0	0	0	246
cSH	1700	1700	1700	1700	1700	1700	120
Volume to Capacity	0.93	0.93	0.55	0.38	0.38	0.38	2.05
Queue Length 95th (ft)	0	0	0	0	0	0	507
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	558.4
Lane LOS							F
Approach Delay (s)	0.0			0.0			558.4
Approach LOS							F
Intersection Summary							
Average Delay			21.9				
Intersection Capacity Utilization			98.3%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Horizon Year (2 CVN)
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	↗
Volume (vph)	0	0	0	994	639	110	87	254			867	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3526	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3526	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1046	673	116	90	262	0	0	894	18
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	523	1300	0	90	262	0	0	910	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1432		98	1989			1567	
v/s Ratio Prot				c0.34	0.28		c0.05	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.11	0.99d1		0.92	0.13			0.58	
Uniform Delay, d1				31.1	29.9		42.3	9.3			18.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				76.0	8.6		64.3	0.0			0.6	
Delay (s)				107.1	38.5		106.6	9.3			19.3	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			58.0			34.2			19.3	
Approach LOS		A			E			C			B	
Intersection Summary												
HCM 2000 Control Delay			43.9			HCM 2000 Level of Service		D				
HCM 2000 Volume to Capacity ratio			0.81									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)		17.2				
Intersection Capacity Utilization		136.0%				ICU Level of Service		H				
Analysis Period (min)			15									
d1 Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (2 CVN)
Timing Plan: PM PEAK

	↖	→	↗	↖	←	↖	↖	↑	↗	↗	↓	↖
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕↕	↗					↕↕	↗	↖↖	↕↕	
Volume (vph)	7	2123	107	0	0	0	0	341	461	766	1117	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3117	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3117	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2333	118	0	0	0	0	397	536	798	1164	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2341	89	0	0	0	0	638	260	798	1164	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm				NA	Perm	Prot	NA		
Protected Phases	4	4					2		1	6		
Permitted Phases			4					2				
Actuated Green, G (s)		63.4	63.4				53.0	53.0	44.2	100.0		
Effective Green, g (s)		63.4	63.4				53.0	53.0	44.2	100.0		
Actuated g/C Ratio		0.36	0.36				0.30	0.30	0.25	0.57		
Clearance Time (s)		5.6	5.6				4.6	4.6	4.2	6.0		
Vehicle Extension (s)		3.0	3.0				3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)		1841	573				944	408	867	2022		
v/s Ratio Prot		c0.46					c0.20		c0.23	0.33		
v/s Ratio Perm			0.06					0.19				
v/c Ratio		1.27	0.16				0.68	0.64	0.92	0.58		
Uniform Delay, d1		55.8	37.7				53.5	52.7	63.7	23.9		
Progression Factor		1.00	1.00				1.00	1.00	1.00	1.00		
Incremental Delay, d2		126.6	0.1				1.9	3.2	14.8	0.4		
Delay (s)		182.4	37.8				55.4	55.9	78.5	24.3		
Level of Service		F	D				E	E	E	C		
Approach Delay (s)		175.5		0.0			55.6			46.4		
Approach LOS		F		A			E			D		
Intersection Summary												
HCM 2000 Control Delay		107.3		HCM 2000 Level of Service			F					
HCM 2000 Volume to Capacity ratio		0.98										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)			14.4					
Intersection Capacity Utilization		136.0%		ICU Level of Service			H					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Horizon Year (2 CVN)
Timing Plan: PM PEAK

	↖	↖	↑	↗	↗	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↕↕			↕↕
Volume (vph)	203	14	1016	804	0	1413
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3257			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3257			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	260	18	1142	903	0	1519
RTOR Reduction (vph)	2	0	68	0	0	0
Lane Group Flow (vph)	276	0	1977	0	0	1519
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA		NA	
Protected Phases	8		2		6	
Permitted Phases						
Actuated Green, G (s)	30.0		120.9		120.9	
Effective Green, g (s)	30.0		120.9		120.9	
Actuated g/C Ratio	0.19		0.76		0.76	
Clearance Time (s)	4.1		5.0		5.0	
Vehicle Extension (s)	3.0		3.0		3.0	
Lane Grp Cap (vph)	296		2461		2540	
v/s Ratio Prot	c0.17		c0.61		0.45	
v/s Ratio Perm						
v/c Ratio	0.93		0.80		0.60	
Uniform Delay, d1	64.0		12.2		8.7	
Progression Factor	1.00		1.00		1.00	
Incremental Delay, d2	35.0		2.9		1.0	
Delay (s)	99.0		15.0		9.8	
Level of Service	F		B		A	
Approach Delay (s)	99.0		15.0		9.8	
Approach LOS	F		B		A	
Intersection Summary						
HCM 2000 Control Delay		19.0		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.85				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		87.3%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Horizon Year (2 CVN)

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	168	12	34	30	12	29	27	1724	58	79	1675	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1724		1770	3522		1770	3488	
Flt Permitted	0.65	0.65	1.00		0.81		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1153	1158	1583		1422		1770	3522		1770	3488	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	215	15	44	47	19	45	29	1854	62	86	1821	193
RTOR Reduction (vph)	0	0	36	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	114	116	8	0	89	0	29	1915	0	86	2011	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	19.7	19.7	19.7		19.7		4.7	70.9		8.1	74.3	
Effective Green, g (s)	19.7	19.7	19.7		19.7		4.7	70.9		8.1	74.3	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.04	0.62		0.07	0.65	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	200	200	274		246		73	2200		126	2283	
v/s Ratio Prot	0.10	c0.10	0.00		0.06		0.02	0.54		c0.05	c0.58	
v/s Ratio Perm	0.57	0.58	0.03		0.36		0.40	0.87		0.68	0.88	
v/c Ratio	0.17	0.17	0.17		0.17		0.04	0.62		0.07	0.65	
Uniform Delay, d1	43.0	43.1	38.9		41.3		53.0	17.5		51.4	16.0	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.7	4.0	0.0		0.9		3.5	4.1		14.2	4.4	
Delay (s)	46.7	47.1	39.0		42.3		56.5	21.6		65.6	20.4	
Level of Service	D	D	D		D		E	C		E	C	
Approach Delay (s)		45.7			42.3			22.1			22.2	
Approach LOS		D			D			C			C	
Intersection Summary												
HCM 2000 Control Delay		24.1			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		113.5			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		81.9%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Horizon Year (2 CVN)

Timing Plan: PM PEAK
























	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	0	0	9	0	169	0	1497	0	38	1837	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	13	0	245	0	1593	0	41	1975	0
RTOR Reduction (vph)	0	0	0	0	198	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	60	0	0	1593	0	41	1975	0
Turn Type				Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.0			42.2		2.8	49.2	
Effective Green, g (s)					14.0			42.2		2.8	49.2	
Actuated g/C Ratio					0.19			0.58		0.04	0.67	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					309			2037		67	2375	
v/s Ratio Prot					c0.04			0.45		0.02	c0.56	
v/s Ratio Perm												
v/c Ratio					0.19			0.78		0.61	0.83	
Uniform Delay, d1					24.9			12.0		34.7	9.0	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			2.0		15.4	2.6	
Delay (s)					25.2			14.0		50.1	11.6	
Level of Service					C			B		D	B	
Approach Delay (s)		0.0			25.2			14.0			12.4	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					13.9			HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio					0.80							
Actuated Cycle Length (s)					73.3			Sum of lost time (s)		18.9		
Intersection Capacity Utilization					70.1%			ICU Level of Service		C		
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Horizon Year (2 CVN)

Timing Plan: PM PEAK











												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	341	59	139	8	81	493	33	677	3	163	1630	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1514		1854	1509	1770	3539	1343	1770	3511	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1514		1854	1509	1770	3539	1343	1770	3511	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	449	78	183	9	88	536	36	744	3	173	1734	82
RTOR Reduction (vph)	0	0	149	0	0	199	0	0	2	0	2	0
Lane Group Flow (vph)	449	78	34	0	97	337	36	744	1	173	1814	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.6	27.6	27.6		27.6	27.6	4.0	54.6	54.6	18.9	69.5	
Effective Green, g (s)	27.6	27.6	27.6		27.6	27.6	4.0	54.6	54.6	18.9	69.5	
Actuated g/C Ratio	0.19	0.19	0.19		0.19	0.19	0.03	0.37	0.37	0.13	0.47	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	329	347	282		345	281	47	1304	495	225	1647	
v/s Ratio Prot	c0.25	0.04			0.05		0.02	0.21		c0.10	c0.52	
v/s Ratio Perm			0.02			c0.22			0.00			
v/c Ratio	1.36	0.22	0.12		0.28	1.20	0.77	0.57	0.00	0.77	1.10	
Uniform Delay, d1	60.2	51.2	50.2		51.7	60.2	71.6	37.4	29.5	62.5	39.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	182.5	0.3	0.2		0.4	118.3	52.3	1.8	0.0	14.6	55.4	
Delay (s)	242.8	51.5	50.3		52.2	178.6	123.9	39.2	29.5	77.1	94.7	
Level of Service	F	D	D		D	F	F	D	C	E	F	
Approach Delay (s)		172.2			159.2			43.0			93.1	
Approach LOS		F			F			D			F	
Intersection Summary												
HCM 2000 Control Delay		107.4							F			
HCM 2000 Volume to Capacity ratio		1.18										
Actuated Cycle Length (s)		148.1				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		89.7%				ICU Level of Service		E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

Horizon Year (2 CVN)

Timing Plan: PM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	368	578	4	43	210	4
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	409	642	6	61	239	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915				600
pX, platoon unblocked	0.99					
vC, conflicting volume	518	36			66	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	506	36			66	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	7	38			84	
cM capacity (veh/h)	439	1037			1536	
Direction, Lane #						
Volume Total	1051	66	243			
Volume Left	409	0	239			
Volume Right	642	61	0			
cSH	791	1700	1536			
Volume to Capacity	1.33	0.04	0.16			
Queue Length 95th (ft)	1049	0	14			
Control Delay (s)	174.4	0.0	7.7			
Lane LOS	F		A			
Approach Delay (s)	174.4	0.0	7.7			
Approach LOS	F					
Intersection Summary						
Average Delay		136.1				
Intersection Capacity Utilization		45.8%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (2 CVN)

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	371	8	719	46	0	1779
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	470	10	799	51	0	1999
RTOR Reduction (vph)	1	0	0	29	0	0
Lane Group Flow (vph)	479	0	799	22	0	1999
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.27		0.23			c0.56
v/s Ratio Perm				0.01		
v/c Ratio	0.57		0.53	0.03		1.32
Uniform Delay, d1	19.8		22.1	17.3		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.9		0.3	0.0		146.6
Delay (s)	20.7		22.4	17.4		176.5
Level of Service	C		C	B		F
Approach Delay (s)	20.7		22.1			176.5
Approach LOS	C		C			F
Intersection Summary						
HCM 2000 Control Delay		114.6		HCM 2000 Level of Service		F
HCM 2000 Volume to Capacity ratio		0.92				
Actuated Cycle Length (s)		105.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		99.1%		ICU Level of Service		F
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy







Horizon Year (2 CVN)

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗	↖	↗
Volume (veh/h)	5	8	545	4	18	1704
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	10	16	634	5	20	1873
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1612	319			638	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1612	319			638	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	98			98	
cM capacity (veh/h)	93	677			941	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	422	216	20	936	936
Volume Left	10	0	0	20	0	0
Volume Right	16	0	5	0	0	0
cSH	198	1700	1700	941	1700	1700
Volume to Capacity	0.13	0.25	0.13	0.02	0.55	0.55
Queue Length 95th (ft)	11	0	0	2	0	0
Control Delay (s)	25.9	0.0	0.0	8.9	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	25.9	0.0		0.1		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			57.1%		ICU Level of Service	B
Analysis Period (min)			15			




NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Horizon Year (2 CVN)
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	35	66	482	14	120	1589
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	38	72	548	16	132	1746
RTOR Reduction (vph)	0	50	0	9	0	0
Lane Group Flow (vph)	38	22	548	7	132	1746
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	11.4	25.2	26.3	26.3	8.7	43.8
Effective Green, g (s)	11.4	20.1	26.3	26.3	8.7	43.8
Actuated g/C Ratio	0.18	0.31	0.41	0.41	0.13	0.68
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	312	493	1443	645	238	2403
v/s Ratio Prot	c0.02	0.01	0.15		0.07	c0.49
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.05	0.38	0.01	0.55	0.73
Uniform Delay, d1	22.3	15.5	13.4	11.4	26.1	6.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.2	0.0	2.8	1.1
Delay (s)	22.5	15.5	13.6	11.4	28.9	7.7
Level of Service	C	B	B	B	C	A
Approach Delay (s)	17.9		13.5			9.2
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay		10.5		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.72				
Actuated Cycle Length (s)		64.5		Sum of lost time (s)	18.1	
Intersection Capacity Utilization		55.8%		ICU Level of Service		B
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Horizon Year (2 CVN)
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	27	471	22	0	1624
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	36	541	25	0	1765
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1437	283			567	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1437	283			567	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	124	714			1001	
Direction, Lane #						
Volume Total	36	361	206	883	883	
Volume Left	0	0	0	0	0	
Volume Right	36	0	25	0	0	
cSH	714	1700	1700	1700	1700	
Volume to Capacity	0.05	0.21	0.12	0.52	0.52	
Queue Length 95th (ft)	4	0	0	0	0	
Control Delay (s)	10.3	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.3	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay		0.2				
Intersection Capacity Utilization		48.2%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Horizon Year (2 CVN)

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	35	30	463	22	27	1596
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	49	42	493	23	30	1754
RTOR Reduction (vph)	0	36	0	10	0	0
Lane Group Flow (vph)	49	6	493	13	30	1754
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	4.2	7.0	29.3	29.3	2.8	39.6
Effective Green, g (s)	4.2	7.0	29.3	29.3	2.8	39.6
Actuated g/C Ratio	0.08	0.14	0.58	0.58	0.06	0.79
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	147	219	2057	920	98	2780
v/s Ratio Prot	c0.03	0.00	0.14		0.02	c0.50
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.33	0.03	0.24	0.01	0.31	0.63
Uniform Delay, d1	21.8	18.8	5.1	4.5	22.9	2.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	0.0	0.1	0.0	1.8	0.5
Delay (s)	23.1	18.8	5.2	4.5	24.6	2.8
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.1		5.2			3.1
Approach LOS	C		A			A

Intersection Summary

HCM 2000 Control Delay	4.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	50.4	Sum of lost time (s)	14.1
Intersection Capacity Utilization	55.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (2 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	13	17	98	9	0	208	15	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	14	18	127	12	0	234	17	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	14	18	139	251						
Volume Left (vph)	0	0	127	0						
Volume Right (vph)	0	18	0	17						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.1	3.2	4.1	3.2						
Degree Utilization, x	0.02	0.02	0.16	0.22						
Capacity (veh/h)	867	1121	860	1122						
Control Delay (s)	7.1	6.3	7.9	7.1						
Approach Delay (s)	6.6		7.9	7.1						
Approach LOS	A		A	A						

Intersection Summary

Delay	7.3		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

NBC Coastal Campus

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (2 CVN)

Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	215	0	0	95	160	14	372	80	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.69	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1279	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	14	244	0	0	109	184	15	409	88	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	135	0	53	0	0	0	0
Lane Group Flow (vph)	14	244	0	0	109	49	15	409	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	10.7	10.7			10.7	10.7	16.2	16.2	16.2			
Effective Green, g (s)	10.7	10.7			10.7	10.7	16.2	16.2	16.2			
Actuated g/C Ratio	0.27	0.27			0.27	0.27	0.40	0.40	0.40			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	339	494			494	420	711	1422	636			
v/s Ratio Prot		c0.13			0.06		0.01	c0.12				
v/s Ratio Perm	0.01					0.03			0.02			
v/c Ratio	0.04	0.49			0.22	0.12	0.02	0.29	0.06			
Uniform Delay, d1	11.0	12.5			11.5	11.2	7.3	8.1	7.4			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	0.8			0.2	0.1	0.0	0.1	0.0			
Delay (s)	11.0	13.3			11.8	11.3	7.3	8.3	7.4			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		13.2			11.5		8.1			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.3			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.37										
Actuated Cycle Length (s)		40.3			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		42.0%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (2 CVN)

Timing Plan: PM PEAK

							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	0	539	0	1790	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	0	0	612	0	1989	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2295	994	1989		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2295	994	1989		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	33	244	286		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	306	306	1326	663	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.18	0.18	0.78	0.39	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			52.8%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (2 CVN)

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	101	7	79	19	4	7	85	372	58	19	1276	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.86		1.00	0.90		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1605		1770	1685		1770	3467		1770	3460	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1605		1770	1685		1770	3467		1770	3460	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	135	9	105	38	8	14	93	409	64	21	1418	249
RTOR Reduction (vph)	0	84	0	0	14	0	0	9	0	0	11	0
Lane Group Flow (vph)	135	30	0	38	8	0	93	464	0	21	1656	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	18.4	18.4		2.7	2.7		5.8	48.4		1.6	44.2	
Effective Green, g (s)	18.4	18.4		2.7	2.7		5.8	48.4		1.6	44.2	
Actuated g/C Ratio	0.20	0.20		0.03	0.03		0.06	0.54		0.02	0.49	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	361	328		53	50		114	1864		31	1699	
v/s Ratio Prot	c0.08	0.02		c0.02	0.00		c0.05	c0.13		0.01	c0.48	
v/s Ratio Perm												
v/c Ratio	0.37	0.09		0.72	0.17		0.82	0.25		0.68	0.97	
Uniform Delay, d1	30.8	29.0		43.3	42.6		41.6	11.1		43.9	22.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.1		36.9	1.6		34.4	0.1		45.6	16.1	
Delay (s)	31.5	29.2		80.2	44.2		76.0	11.2		89.6	38.4	
Level of Service	C	C		F	D		E	B		F	D	
Approach Delay (s)		30.4			67.0			21.8			39.1	
Approach LOS		C			E			C			D	
Intersection Summary												
HCM 2000 Control Delay		35.1										
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		90.0										
Intersection Capacity Utilization		71.3%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (2 CVN)

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	66	1224	67	0	415	40	19	46	5	28	30	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.99			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5046			5018		1770	1836			1759	
Flt Permitted	0.95	1.00			1.00		0.69	1.00			0.12	
Satd. Flow (perm)	1770	5046			5018		1294	1836			217	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	75	1391	76	0	441	43	27	66	7	33	35	28
RTOR Reduction (vph)	0	3	0	0	7	0	0	2	0	0	8	0
Lane Group Flow (vph)	75	1464	0	0	477	0	27	71	0	0	88	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1909			2037		251	357			36	
v/s Ratio Prot	c0.04	c0.29			c0.10			c0.04				
v/s Ratio Perm							0.02				c0.40	
v/c Ratio	0.38	0.77			0.23		0.11	0.20			2.44	
Uniform Delay, d1	74.3	49.0			35.1		59.7	60.7			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.2	3.0			0.3		0.2	0.3			721.7	
Delay (s)	75.5	52.0			35.4		59.8	61.0			796.7	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		53.2			35.4			60.7			796.7	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		81.7										
HCM 2000 Volume to Capacity ratio		0.89										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		68.3%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

Horizon Year (2 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	1258	0	580	458	44	0	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3492							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3492							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1413	0	617	487	47	0	0	0	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	1413	0	617	534	0	0	0	0	0	0	4
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3173							609
v/s Ratio Prot		c0.28		c0.18	c0.15							
v/s Ratio Perm												0.00
v/c Ratio		0.73		0.32	0.17							0.01
Uniform Delay, d1		48.2		21.2	0.9							34.9
Progression Factor		0.18		1.00	1.00							1.00
Incremental Delay, d2		1.5		0.1	0.0							0.0
Delay (s)		10.1		21.3	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		10.1			11.9		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		11.0										B
HCM 2000 Volume to Capacity ratio		0.52										
Actuated Cycle Length (s)		180.0							22.3			
Intersection Capacity Utilization		50.0%							A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave




















Horizon Year (2 CVN)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	4	218	0	0	313	42	0	0	0	107	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	5	253	0	0	356	48	0	0	0	162	0	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	403			253			656	666	253	642	642	380
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	403			253			656	666	253	642	642	380
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	58	100	98
cM capacity (veh/h)	1155			1312			370	378	785	386	391	667
Direction, Lane #												
Volume Total	258	403	0	176								
Volume Left	5	0	0	162								
Volume Right	0	48	0	14								
cSH	1155	1312	1700	399								
Volume to Capacity	0.00	0.00	0.00	0.44								
Queue Length 95th (ft)	0	0	0	55								
Control Delay (s)	0.2	0.0	0.0	21.0								
Lane LOS	A			A								
Approach Delay (s)	0.2	0.0	0.0	21.0								
Approach LOS				A								
Intersection Summary												
Average Delay		4.5										
Intersection Capacity Utilization		32.2%								A		
Analysis Period (min)		15										













NBC Coastal Campus
22: 3rd St & Palm Ave

Horizon Year (2 CVN)
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	301	13	87	327	25	15	40	70	29	34	14
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	10	386	17	98	367	28	26	70	123	63	74	30
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	10	403	98	396	219	167						
Volume Left (vph)	10	0	98	0	26	63						
Volume Right (vph)	0	17	0	28	123	30						
Hadj (s)	0.53	0.01	0.53	-0.02	-0.28	0.00						
Departure Headway (s)	7.4	6.8	7.3	6.7	6.8	7.2						
Degree Utilization, x	0.02	0.76	0.20	0.74	0.41	0.34						
Capacity (veh/h)	463	508	475	519	468	424						
Control Delay (s)	9.3	27.2	10.8	24.8	14.5	13.8						
Approach Delay (s)	26.7		22.1		14.5	13.8						
Approach LOS	D		C		B	B						
Intersection Summary												
Delay			21.2									
Level of Service			C									
Intersection Capacity Utilization			42.0%		ICU Level of Service		A					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Horizon Year (2 CVN)
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	75	432	466	41	54	144
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	77	445	542	48	64	169
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)	908					
pX, platoon unblocked						
vC, conflicting volume	590				1166	295
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	590				1166	295
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	92				63	76
cM capacity (veh/h)	982				172	702
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	77	445	361	228	233	
Volume Left	77	0	0	0	64	
Volume Right	0	0	0	48	169	
cSH	982	1700	1700	1700	382	
Volume to Capacity	0.08	0.26	0.21	0.13	0.61	
Queue Length 95th (ft)	6	0	0	0	97	
Control Delay (s)	9.0	0.0	0.0	0.0	28.1	
Lane LOS	A				D	
Approach Delay (s)	1.3	0.0			28.1	
Approach LOS					D	
Intersection Summary						
Average Delay			5.4			
Intersection Capacity Utilization			41.3%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Horizon Year (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↱		↰	↰↱			↱			↱	↱
Volume (vph)	29	441	30	32	468	4	56	26	23	13	43	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3535			1761			1842	1583
Flt Permitted	0.46	1.00		0.44	1.00			0.79			0.89	1.00
Satd. Flow (perm)	858	3505		823	3535			1435			1660	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	35	525	36	35	514	4	68	32	28	17	57	41
RTOR Reduction (vph)	0	7	0	0	1	0	0	22	0	0	0	32
Lane Group Flow (vph)	35	554	0	35	517	0	0	106	0	0	74	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.9	14.9		14.9	14.9			6.5			6.5	6.5
Effective Green, g (s)	14.9	14.9		14.9	14.9			6.5			6.5	6.5
Actuated g/C Ratio	0.49	0.49		0.49	0.49			0.21			0.21	0.21
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	417	1706		400	1721			304			352	336
v/s Ratio Prot		c0.16			0.15							
v/s Ratio Perm	0.04			0.04				c0.07			0.04	0.01
v/c Ratio	0.08	0.32		0.09	0.30			0.35			0.21	0.03
Uniform Delay, d1	4.2	4.8		4.2	4.7			10.2			9.9	9.5
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.7			0.3	0.0
Delay (s)	4.3	4.9		4.3	4.8			10.9			10.2	9.6
Level of Service	A	A		A	A			B			B	A
Approach Delay (s)		4.9			4.8			10.9			10.0	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.33										
Actuated Cycle Length (s)		30.6			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		45.5%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Horizon Year (2 CVN)
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↱	↱			↰	↰
Volume (veh/h)	490	9	0	0	7	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	598	11	0	0	10	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			609		598	598
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			609		598	598
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			970		465	503
Direction, Lane #						
Volume Total	598	11	15			
Volume Left	0	0	10			
Volume Right	0	11	4			
cSH	1700	1700	476			
Volume to Capacity	0.35	0.01	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.8			
Lane LOS			B			
Approach Delay (s)	0.0		12.8			
Approach LOS			B			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			35.8%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	47	1568	141	66	885	149	111	102	71	197	90	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Flt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5022		1770	4975			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5022		1770	4975			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	50	1668	150	67	894	151	122	112	78	221	101	33
RTOR Reduction (vph)	0	6	0	0	13	0	0	19	0	0	4	0
Lane Group Flow (vph)	50	1812	0	67	1032	0	0	293	0	0	351	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2000		196	1981			649			658	
v/s Ratio Prot	0.03	c0.36		c0.04	0.21			c0.09			c0.10	
v/s Ratio Perm												
v/c Ratio	0.26	0.91		0.34	0.52			0.45			0.53	
Uniform Delay, d1	73.2	51.0		73.9	41.1			64.0			65.2	
Progression Factor	1.00	1.00		1.22	0.86			1.00			1.00	
Incremental Delay, d2	0.7	6.3		1.0	0.9			0.5			0.8	
Delay (s)	73.9	57.3		91.0	36.3			64.5			66.0	
Level of Service	E	E		F	D			E			E	
Approach Delay (s)		57.8			39.6			64.5			66.0	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		53.6			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		123.7%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Horizon Year (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	23	1890	65	56	1347	63	24	12	40	72	15	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5060		1770	5051			1703		1770	1719	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.59	1.00	
Satd. Flow (perm)	1770	5060		1770	5051			1541		1103	1719	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	23	1929	66	58	1389	65	29	14	48	85	18	19
RTOR Reduction (vph)	0	2	0	0	2	0	0	24	0	0	17	0
Lane Group Flow (vph)	23	1993	0	58	1452	0	0	67	0	85	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.3		16.0	130.3			22.5		22.5	22.5	
Effective Green, g (s)	12.0	126.3		16.0	130.3			22.5		22.5	22.5	
Actuated g/C Ratio	0.07	0.70		0.09	0.72			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3550		157	3656			192		137	214	
v/s Ratio Prot	0.01	c0.39		c0.03	c0.29						0.01	
v/s Ratio Perm								0.04		c0.08		
v/c Ratio	0.19	0.56		0.37	0.40			0.35		0.62	0.10	
Uniform Delay, d1	79.4	13.2		77.2	9.6			72.1		74.7	69.7	
Progression Factor	1.41	0.12		1.54	0.29			1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.3		1.1	0.3			1.1		8.4	0.2	
Delay (s)	112.8	1.9		120.2	3.0			73.2		83.1	69.9	
Level of Service	F	A		F	A			E		F	E	
Approach Delay (s)		3.2			7.5			73.2			79.1	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		9.1			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		66.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (2 CVN)
Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Volume (vph)	30	1759	225	179	1433	93	147	46	146	176	51	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	4999		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	4999		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	32	1871	239	185	1477	96	160	50	159	238	69	31
RTOR Reduction (vph)	0	9	0	0	0	37	0	0	132	0	4	0
Lane Group Flow (vph)	32	2101	0	185	1477	59	0	210	27	0	334	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2			4				
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2213		192	2364	736		305	269		575	
v/s Ratio Prot	0.02	c0.42		c0.10	c0.29			c0.12			c0.10	
v/s Ratio Perm						0.04			0.02			
v/c Ratio	0.20	0.95		0.96	0.62	0.08		0.69	0.10		0.58	
Uniform Delay, d1	76.1	48.2		79.8	36.3	26.7		70.2	63.0		68.7	
Progression Factor	1.01	0.95		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.6	9.3		54.0	1.3	0.2		12.0	0.7		4.2	
Delay (s)	77.8	55.0		133.9	37.6	27.0		82.2	63.8		73.0	
Level of Service	E	E		F	D	C		F	E		E	
Approach Delay (s)		55.3			47.1			74.2			73.0	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		55.0			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		102.9%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Horizon Year (2 CVN)
Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Volume (vph)	11	1904	57	195	1773	18	45	10	93	27	12	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5063		1770	5078			1680			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.88			0.80	
Satd. Flow (perm)	1770	5063		1770	5078			1503			1451	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.95	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	12	2116	63	205	1866	19	53	12	109	33	15	15
RTOR Reduction (vph)	0	3	0	0	1	0	0	78	0	0	12	0
Lane Group Flow (vph)	12	2176	0	205	1884	0	0	96	0	0	51	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.7			17.7	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.7			17.7	
Actuated g/C Ratio	0.01	0.47		0.13	0.60			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2403		233	3032			313			302	
v/s Ratio Prot	0.01	c0.43		c0.12	0.37							
v/s Ratio Perm								c0.06			0.04	
v/c Ratio	0.75	0.91		0.88	0.62			0.31			0.17	
Uniform Delay, d1	42.0	20.5		36.2	11.0			28.4			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	106.0	5.4		29.1	0.4			0.6			0.3	
Delay (s)	148.0	25.9		65.3	11.4			29.0			27.8	
Level of Service	F	C		E	B			C			C	
Approach Delay (s)		26.6			16.6			29.0			27.8	
Approach LOS		C			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		22.1			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		84.9			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		71.3%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	216	1838	28	376	1783	636	75	203	611	674	274	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	227	1935	29	404	1917	684	80	216	650	733	298	284
RTOR Reduction (vph)	0	1	0	0	0	90	0	25	309	0	2	123
Lane Group Flow (vph)	227	1963	0	404	1917	594	80	425	107	733	324	133
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.6	36.3		45.0	69.7	69.7	8.9	40.0	40.0	11.8	42.9	42.9
Effective Green, g (s)	11.6	36.3		45.0	69.7	69.7	8.9	40.0	40.0	11.8	42.9	42.9
Actuated g/C Ratio	0.07	0.23		0.29	0.45	0.45	0.06	0.26	0.26	0.08	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	256	1188		513	2286	711	101	421	388	261	483	416
v/s Ratio Prot	0.07	c0.39		c0.23	c0.38		0.05	c0.26		c0.21	c0.19	
v/s Ratio Perm						0.37		0.07				0.09
v/c Ratio	0.89	1.65		0.79	0.84	0.84	0.79	1.01	0.28	2.81	0.67	0.32
Uniform Delay, d1	71.0	59.4		50.6	37.7	37.6	72.1	57.5	45.9	71.6	49.8	44.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	28.5	297.4		7.8	2.9	8.4	33.3	46.1	0.4	824.4	3.6	0.4
Delay (s)	99.6	356.8		58.4	40.5	46.0	105.5	103.6	46.3	896.0	53.4	44.9
Level of Service	F	F		E	D	D	F	F	D	F	D	D
Approach Delay (s)		330.1			44.2			78.6			521.4	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		216.7										F
HCM 2000 Volume to Capacity ratio		1.28										
Actuated Cycle Length (s)		155.0							21.9			
Intersection Capacity Utilization		131.8%										H
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	↔
Volume (vph)	0	575	969	0	504	1833
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	646	1031	0	554	2014
RTOR Reduction (vph)	0	0	0	0	0	2
Lane Group Flow (vph)	0	646	1031	0	554	2012
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.18	c0.29		0.31	c0.72
v/s Ratio Perm						
v/c Ratio		0.36	1.20		0.84	1.13
Uniform Delay, d1		12.0	30.3		22.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	101.9		9.0	67.5
Delay (s)		12.1	132.2		31.7	82.0
Level of Service		B	F		C	F
Approach Delay (s)		12.1	132.2		71.2	
Approach LOS		B	F		E	
Intersection Summary						
HCM 2000 Control Delay			77.0			HCM 2000 Level of Service E
HCM 2000 Volume to Capacity ratio			1.23			
Actuated Cycle Length (s)			80.0			Sum of lost time (s) 14.2
Intersection Capacity Utilization			94.7%			ICU Level of Service F
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Horizon Year (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	1072	0	0	603	287	491	3	123	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.25	0.25	0.25	
Adj. Flow (vph)	0	1117	0	0	678	322	528	3	132	0	0	0
RTOR Reduction (vph)	0	0	0	0	96	0	0	22	0	0	0	0
Lane Group Flow (vph)	0	1117	0	0	904	0	338	303	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases						2						
Actuated Green, G (s)		21.1			21.1		15.5	15.5				
Effective Green, g (s)		21.1			21.1		15.5	15.5				
Actuated g/C Ratio		0.47			0.47		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)	1674			1593			584	561				
v/s Ratio Prot	c0.32			0.27								
v/s Ratio Perm							c0.20	0.19				
v/c Ratio	0.67			0.57			0.58	0.54				
Uniform Delay, d1	9.0			8.5			11.9	11.7				
Progression Factor	1.00			1.00			1.00	1.00				
Incremental Delay, d2	1.0			0.5			1.4	1.0				
Delay (s)	10.1			8.9			13.3	12.7				
Level of Service	B			A			B					
Approach Delay (s)	10.1			8.9			13.0			0.0		
Approach LOS	B			A			B			A		
Intersection Summary												
HCM 2000 Control Delay		10.4					HCM 2000 Level of Service	B				
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		44.6				Sum of lost time (s)		8.0				
Intersection Capacity Utilization		53.7%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Horizon Year (2 CVN)
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	11	9	4	38	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	18	10	4	55	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	79	55	55			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	79	55	55			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	918	1012	1550			
Direction, Lane #						
Volume Total	18	14	55			
Volume Left	0	10	0			
Volume Right	18	0	0			
cSH	1012	1550	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.6				
Intersection Capacity Utilization		17.4%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St






Horizon Year (2 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↗			↗
Volume (veh/h)	0	1417	35	0	3782	557	0	0	480	0	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1707	42	0	4111	605	0	0	600	0	0	13
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4736			1769			3152	6485	630	5023	6203	1713
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4736			1769			3152	6485	630	5023	6203	1713
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	83
cM capacity (veh/h)	21			342			3	0	1359	0	0	77
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	683	683	384	1644	1644	1428	600	13				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	42	0	0	605	600	13				
cSH	1700	1700	1700	1700	1700	1700	1359	77				
Volume to Capacity	0.40	0.40	0.23	0.97	0.97	0.84	0.44	0.17				
Queue Length 95th (ft)	0	0	0	0	0	0	58	15				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	61.5				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	61.5				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				100.6%			ICU Level of Service		G			
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Horizon Year (2 CVN) with Alternative 1
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	1278	204	0	3681	0	232	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1452	232	0	4090	0	252	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1704		2972	640	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1704		2972	640	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	38	
cM capacity (veh/h)			363		11	404	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	581	581	522	1363	1363	1363	252
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	232	0	0	0	252
cSH	1700	1700	1700	1700	1700	1700	404
Volume to Capacity	0.34	0.34	0.31	0.80	0.80	0.80	0.62
Queue Length 95th (ft)	0	0	0	0	0	0	102
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.6
Lane LOS							D
Approach Delay (s)	0.0			0.0			27.6
Approach LOS							D
Intersection Summary							
Average Delay			1.2				
Intersection Capacity Utilization			86.0%	ICU Level of Service			E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Horizon Year (2 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↔↔↔	↔↔↔		↔↔	↔↔			↔↔	
Volume (vph)	0	0	0	1551	1957	345	108	103	0	0	280	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4640		1770	3539			3505	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4640		1770	3539			3505	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1668	2104	371	146	139	0	0	322	15
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1017	3118	0	146	139	0	0	335	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3212		186	872			397	
v/s Ratio Prot				0.67	c0.67		c0.08	0.04			c0.10	
v/s Ratio Perm												
v/c Ratio				0.97	0.97		0.78	0.16			0.84	
Uniform Delay, d1				27.1	27.3		82.7	56.0			82.4	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				19.8	10.0		19.2	0.1			15.1	
Delay (s)				46.8	37.4		101.9	56.1			97.4	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			39.7			79.5			97.4	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay				46.2			HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio				0.93								
Actuated Cycle Length (s)				189.5			Sum of lost time (s)			16.8		
Intersection Capacity Utilization				201.0%			ICU Level of Service			H		
Analysis Period (min)				15								
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (2 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔↔	↔					↔↔	↔	↔↔	↔↔	↔↔
Volume (vph)	1	587	81		0	0	0	201	219	455	1434	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3246	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3246	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	638	88	0	0	0	0	234	238	495	1494	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	22	48	0	0	0
Lane Group Flow (vph)	0	639	59	0	0	0	0	305	97	495	1494	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1172	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.42	
v/s Ratio Perm		0.13	0.04						0.07			
v/c Ratio		0.36	0.11					0.26	0.19	0.70	0.72	
Uniform Delay, d1		41.5	37.7					38.6	37.5	63.3	25.9	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.2	1.3	
Delay (s)		41.6	37.8					38.7	37.7	66.5	27.1	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.4			36.9	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay			38.1				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.60									
Actuated Cycle Length (s)			171.6				Sum of lost time (s)			14.4		
Intersection Capacity Utilization			201.0%				ICU Level of Service			H		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Horizon Year (2 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗		↖	↗
Volume (vph)	253	8	1330	702	0	1276
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Flt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3314			3362
Flt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3314			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	294	9	1430	755	0	1343
RTOR Reduction (vph)	1	0	56	0	0	0
Lane Group Flow (vph)	302	0	2129	0	0	1343
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	19.9		44.6			44.6
Effective Green, g (s)	19.9		44.6			44.6
Actuated g/C Ratio	0.27		0.61			0.61
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	430		2008			2037
v/s Ratio Prot	c0.19		c0.64			0.40
v/s Ratio Perm						
v/c Ratio	0.70		1.06			0.66
Uniform Delay, d1	24.2		14.5			9.5
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	5.1		38.2			0.8
Delay (s)	29.3		52.7			10.3
Level of Service	C		D			B
Approach Delay (s)	29.3		52.7			10.3
Approach LOS	C		D			B
Intersection Summary						
HCM 2000 Control Delay			36.0		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			1.00			
Actuated Cycle Length (s)			73.6		Sum of lost time (s)	12.1
Intersection Capacity Utilization			86.7%		ICU Level of Service	E
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Horizon Year (2 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↗	↖	↗	↖	↖	↗	↖
Volume (vph)	55	3	12	9	0	7	23	1578	30	46	1441	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Flt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1692	1583		1705		1770	3529		1770	3524	
Flt Permitted	0.74	0.77	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1303	1358	1583		1508		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	64	3	14	18	0	14	27	1879	36	50	1566	47
RTOR Reduction (vph)	0	0	12	0	27	0	0	1	0	0	1	0
Lane Group Flow (vph)	33	34	2	0	5	0	27	1914	0	50	1612	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	16.2	16.2	16.2		16.2		3.0	69.9		4.1	71.0	
Effective Green, g (s)	16.2	16.2	16.2		16.2		3.0	69.9		4.1	71.0	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.67		0.04	0.68	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	210	245		234		50	2365		69	2398	
v/s Ratio Prot							0.02	c0.54		c0.03	0.46	
v/s Ratio Perm	c0.03	0.03	0.00		0.00							
v/c Ratio	0.16	0.16	0.01		0.02		0.54	0.81		0.72	0.67	
Uniform Delay, d1	38.2	38.2	37.3		37.3		50.0	12.4		49.5	9.8	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4	0.0		0.0		11.4	2.1		31.2	0.8	
Delay (s)	38.6	38.5	37.3		37.4		61.3	14.5		80.7	10.6	
Level of Service	D	D	D		D		E	B		F	B	
Approach Delay (s)		38.3			37.4			15.2			12.7	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			14.8							B		
HCM 2000 Volume to Capacity ratio			0.69									
Actuated Cycle Length (s)			104.3				Sum of lost time (s)		14.1			
Intersection Capacity Utilization			61.6%				ICU Level of Service			B		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Horizon Year (2 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔	↔	↔	↔	
Volume (vph)	0	0	0	0	0	27	0	1514	9	499	933	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	41	0	1664	10	509	952	0
RTOR Reduction (vph)	0	0	0	0	37	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	4	0	0	1664	5	509	952	0
Turn Type					NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.47		c0.29	0.27	
v/s Ratio Perm								0.00				
v/c Ratio					0.03			1.00	0.01	0.83	0.32	
Uniform Delay, d1					60.6			38.5	20.5	43.7	2.4	
Progression Factor					1.00			0.41	1.00	1.00	1.00	
Incremental Delay, d2					0.1			15.8	0.0	9.6	0.3	
Delay (s)					60.7			31.6	20.5	53.3	2.7	
Level of Service					E			C	C	D	A	
Approach Delay (s)		0.0			60.7			31.6			20.3	
Approach LOS		A			E			C			C	
Intersection Summary												
HCM 2000 Control Delay		26.8			HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		88.3%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Horizon Year (2 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔		↔	↔	↔	↔	
Volume (vph)	27	44	14	2	61	135	137	1349	7	172	496	311
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.88		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3297	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3297	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	42	68	22	2	69	153	152	1499	8	198	570	357
RTOR Reduction (vph)	0	0	21	0	0	129	0	0	4	0	66	0
Lane Group Flow (vph)	42	68	1	0	71	24	152	1499	4	198	861	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Effective Green, g (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Actuated g/C Ratio	0.06	0.06	0.06		0.16	0.16	0.31	0.46	0.46	0.19	0.34	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	97	102	77		295	239	549	1625	618	341	1127	
v/s Ratio Prot	0.02	c0.04			c0.04		0.09	c0.42		c0.11	0.26	
v/s Ratio Perm			0.00			0.02			0.00			
v/c Ratio	0.43	0.67	0.02		0.24	0.10	0.28	0.92	0.01	0.58	0.76	
Uniform Delay, d1	66.3	67.2	64.8		53.4	52.2	37.7	36.8	21.3	53.2	42.5	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.95	0.94	
Incremental Delay, d2	3.1	15.2	0.1		0.4	0.2	0.3	10.2	0.0	2.5	4.8	
Delay (s)	69.4	82.4	64.9		53.8	52.4	38.0	47.0	21.3	53.2	44.6	
Level of Service	E	F	E		D	D	D	D	C	D	D	
Approach Delay (s)		75.4			52.8			46.0			46.1	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay		47.8			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		94.2%			ICU Level of Service				F			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Horizon Year (2 CVN) with Alternative 1
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖			↖
Volume (veh/h)	46	215	5	45	200	10
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	54	253	6	56	217	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	480	34			62	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	480	34			62	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	88	76			86	
cM capacity (veh/h)	468	1039			1540	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	307	62	228			
Volume Left	54	0	217			
Volume Right	253	56	0			
cSH	1261	1700	1540			
Volume to Capacity	0.24	0.04	0.14			
Queue Length 95th (ft)	24	0	12			
Control Delay (s)	10.3	0.0	7.4			
Lane LOS	B		A			
Approach Delay (s)	10.3	0.0	7.4			
Approach LOS	B					
Intersection Summary						
Average Delay		8.1				
Intersection Capacity Utilization		28.3%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (2 CVN) with Alternative 1
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖	↖		↖
Volume (vph)	49	3	1507	421	0	467
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1755		3539	1519		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1755		3539	1519		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	65	4	1586	443	0	730
RTOR Reduction (vph)	4	0	0	131	0	0
Lane Group Flow (vph)	65	0	1586	312	0	730
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.1		31.0	31.0		31.0
Effective Green, g (s)	3.1		31.0	31.0		31.0
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	123		2493	1070		2493
v/s Ratio Prot	c0.04		c0.45			0.21
v/s Ratio Perm				0.21		
v/c Ratio	0.53		0.64	0.29		0.29
Uniform Delay, d1	19.7		3.5	2.4		2.4
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.3		0.5	0.2		0.1
Delay (s)	24.1		4.0	2.6		2.5
Level of Service	C		A	A		A
Approach Delay (s)	24.1		3.7			2.5
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.9		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.63				
Actuated Cycle Length (s)		44.0		Sum of lost time (s)	9.9	
Intersection Capacity Utilization		54.1%		ICU Level of Service	A	
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Horizon Year (2 CVN) with Alternative 1
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (veh/h)	0	18	2410	7	7	516
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	31	2591	8	10	759
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2995	1299			2599	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2995	1299			2599	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	80			94	
cM capacity (veh/h)	10	152			164	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	31	1728	871	10	379	379
Volume Left	0	0	0	10	0	0
Volume Right	31	0	8	0	0	0
cSH	152	1700	1700	164	1700	1700
Volume to Capacity	0.20	1.02	0.51	0.06	0.22	0.22
Queue Length 95th (ft)	18	0	0	5	0	0
Control Delay (s)	34.7	0.0	0.0	28.4	0.0	0.0
Lane LOS	D			D		
Approach Delay (s)	34.7	0.0		0.4		
Approach LOS	D					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		76.8%		ICU Level of Service		D
Analysis Period (min)		15				

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Horizon Year (2 CVN) with Alternative 1
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (vph)	20	101	2309	14	44	472
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	25	125	2483	15	64	684
RTOR Reduction (vph)	0	2	0	1	0	0
Lane Group Flow (vph)	25	123	2483	14	64	684
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases				2		
Actuated Green, G (s)	16.4	26.5	68.2	68.2	5.0	82.0
Effective Green, g (s)	16.4	21.4	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.20	0.63	0.63	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	269	314	2241	1002	82	2694
v/s Ratio Prot	0.01	c0.08	c0.70		c0.04	0.19
v/s Ratio Perm				0.01		
v/c Ratio	0.09	0.39	1.11	0.01	0.78	0.25
Uniform Delay, d1	39.3	37.5	19.8	7.3	50.8	3.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.8	55.8	0.0	37.0	0.1
Delay (s)	39.4	38.3	75.5	7.3	87.8	3.9
Level of Service	D	D	E	A	F	A
Approach Delay (s)	38.5		75.1			11.0
Approach LOS	D		E			B
Intersection Summary						
HCM 2000 Control Delay		59.4		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		0.96				
Actuated Cycle Length (s)		107.7		Sum of lost time (s)		18.1
Intersection Capacity Utilization		80.9%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Horizon Year (2 CVN) with Alternative 1
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↖↗			↖↗
Volume (veh/h)	0	38	2283	30	0	490
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	61	2403	32	0	662
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2750	1217			2435	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2750	1217			2435	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	65			100	
cM capacity (veh/h)	16	173			191	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	61	1602	833	331	331	
Volume Left	0	0	0	0	0	
Volume Right	61	0	32	0	0	
cSH	173	1700	1700	1700	1700	
Volume to Capacity	0.35	0.94	0.49	0.19	0.19	
Queue Length 95th (ft)	37	0	0	0	0	
Control Delay (s)	36.9	0.0	0.0	0.0	0.0	
Lane LOS	E					
Approach Delay (s)	36.9	0.0		0.0		
Approach LOS	E					
Intersection Summary						
Average Delay		0.7				
Intersection Capacity Utilization		74.1%		ICU Level of Service	D	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Horizon Year (2 CVN) with Alternative 1
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖↗	↖	↖	↖↗
Volume (vph)	12	8	2313	38	18	463
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	19	13	2409	40	22	572
RTOR Reduction (vph)	0	2	0	10	0	0
Lane Group Flow (vph)	19	11	2409	30	22	572
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.5	4.6	58.8	58.8	3.1	69.4
Effective Green, g (s)	1.5	4.6	58.8	58.8	3.1	69.4
Actuated g/C Ratio	0.02	0.06	0.76	0.76	0.04	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	34	93	2685	1201	70	3169
v/s Ratio Prot	c0.01	0.00	c0.68		c0.01	0.16
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.56	0.12	0.90	0.03	0.31	0.18
Uniform Delay, d1	37.7	34.5	7.1	2.3	36.2	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	18.4	0.6	4.4	0.0	2.6	0.0
Delay (s)	56.1	35.1	11.5	2.3	38.7	0.5
Level of Service	E	D	B	A	D	A
Approach Delay (s)	47.6		11.3			1.9
Approach LOS	D		B			A
Intersection Summary						
HCM 2000 Control Delay		9.9		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.86				
Actuated Cycle Length (s)		77.5		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		76.8%		ICU Level of Service	D	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (2 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	3	0	53	2	0	51	3	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	12	0	98	4	0	81	5	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	12	0	102	81	5					
Volume Left (vph)	0	0	98	0	0					
Volume Right (vph)	0	0	0	0	5					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.2	3.2					
Degree Utilization, x	0.01	0.00	0.12	0.09	0.00					
Capacity (veh/h)	822	1121	809	828	1121					
Control Delay (s)	7.3	6.2	7.9	7.6	6.2					
Approach Delay (s)	7.3		7.9	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.7							
Level of Service			A							
Intersection Capacity Utilization			19.7%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (2 CVN) with Alternative 1

Timing Plan: AM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑	↑	↑	↑			
Volume (vph)	3	43	0	0	38	262	4	2086	59	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.72	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1346	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	4	57	0	0	53	364	4	2219	63	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	54	0	0	27	0	0	0
Lane Group Flow (vph)	4	57	0	0	53	310	4	2219	36	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	18.5	18.5			18.5	18.5	47.7	43.6	43.6			
Effective Green, g (s)	18.5	18.5			18.5	18.5	47.7	43.6	43.6			
Actuated g/C Ratio	0.25	0.25			0.25	0.25	0.63	0.58	0.58			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	329	456			456	387	1118	2043	914			
v/s Ratio Prot		0.03			0.03		0.00	c0.63				
v/s Ratio Perm	0.00					c0.20			0.02			
v/c Ratio	0.01	0.12			0.12	0.80	0.00	1.09	0.04			
Uniform Delay, d1	21.6	22.2			22.1	26.8	5.1	15.9	6.9			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	11.3	0.0	47.8	0.0			
Delay (s)	21.6	22.3			22.3	38.0	5.1	63.7	6.9			
Level of Service	C	C			C	D	A	E	A			
Approach Delay (s)		22.3				36.0		62.1			0.0	
Approach LOS		C				D		E			A	
Intersection Summary												
HCM 2000 Control Delay		57.3				HCM 2000 Level of Service		E				
HCM 2000 Volume to Capacity ratio		1.00										
Actuated Cycle Length (s)		75.5				Sum of lost time (s)		13.4				
Intersection Capacity Utilization		93.5%				ICU Level of Service		F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (2 CVN) with Alternative 1

Timing Plan: AM PEAK





















							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	26	47	426	1828	0	198	229
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	104	188	444	1904	0	251	290
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None		None		
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2235	270	541		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2235	270	541		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	74	57		0		
cM capacity (veh/h)	20	728	1024		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	292	444	952	952	167	373	0
Volume Left	104	444	0	0	0	0	0
Volume Right	188	0	0	0	0	290	0
cSH	55	1024	1700	1700	1700	1700	1700
Volume to Capacity	5.35	0.43	0.56	0.56	0.10	0.22	0.00
Queue Length 95th (ft)	Err	56	0	0	0	0	0
Control Delay (s)	Err	11.2	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B					
Approach Delay (s)	Err	2.1			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay		919.6					
Intersection Capacity Utilization		68.2%		ICU Level of Service		C	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (2 CVN) with Alternative 1

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	459	2	45	50	8	21	30	2111	11	4	192	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.86		1.00	0.89		1.00	1.00		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1594		1770	1661		1770	3536		1770	3428	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1594		1770	1661		1770	3536		1770	3428	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	522	2	51	161	26	68	32	2222	12	6	278	74
RTOR Reduction (vph)	0	34	0	0	64	0	0	1	0	0	23	0
Lane Group Flow (vph)	522	19	0	161	30	0	32	2233	0	6	329	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	31.5	31.5		5.0	5.0		3.3	40.0		1.0	37.7	
Effective Green, g (s)	31.5	31.5		5.0	5.0		3.3	40.0		1.0	37.7	
Actuated g/C Ratio	0.33	0.33		0.05	0.05		0.03	0.41		0.01	0.39	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	578	520		91	86		60	1467		18	1340	
v/s Ratio Prot	c0.29	0.01		c0.09	0.02		c0.02	c0.63		0.00	0.10	
v/s Ratio Perm												
v/c Ratio	0.90	0.04		1.77	0.34		0.53	1.52		0.33	0.25	
Uniform Delay, d1	31.0	22.1		45.7	44.1		45.8	28.2		47.4	19.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	17.4	0.0		386.9	2.4		8.8	238.6		10.6	0.1	
Delay (s)	48.4	22.1		432.6	46.5		54.6	266.8		58.0	19.9	
Level of Service	D	C		F	D		D	F		E	B	
Approach Delay (s)		46.0			290.2			263.8			20.5	
Approach LOS		D			F			F			C	
Intersection Summary												
HCM 2000 Control Delay		204.3						HCM 2000 Level of Service		F		
HCM 2000 Volume to Capacity ratio		1.28										
Actuated Cycle Length (s)		96.4			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		99.2%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (2 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	9	259	20	0	1943	20	47	27	1900	23	48	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5032			5078		1770	1846			1732	
Flt Permitted	0.95	1.00			1.00		0.65	1.00			0.14	
Satd. Flow (perm)	1770	5032			5078		1210	1846			250	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	10	291	22	0	2135	22	56	32	2	30	62	78
RTOR Reduction (vph)	0	5	0	0	1	0	0	2	0	0	17	0
Lane Group Flow (vph)	10	308	0	0	2156	0	56	32	0	0	153	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2062		235	358			41	
v/s Ratio Prot	c0.01	0.06			c0.42			0.02				
v/s Ratio Perm							c0.05				c0.61	
v/c Ratio	0.05	0.16			1.05		0.24	0.09			3.74	
Uniform Delay, d1	71.5	37.1			53.5		61.2	59.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.2			31.4		0.5	0.1			1290.2	
Delay (s)	71.6	37.2			84.9		61.8	59.6			1365.2	
Level of Service	E	D			F		E	E			F	
Approach Delay (s)		38.3			84.9			60.9			1365.2	
Approach LOS		D			F			E			F	
Intersection Summary												
HCM 2000 Control Delay		158.0			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.24										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		76.4%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

Horizon Year (2 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	276	0	457	1953	10	0	0	0	0	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	337	0	486	2078	11	0	0	0	0	0	20
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	337	0	486	2089	0	0	0	0	0	0	8
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.07		0.14	c0.59							
v/s Ratio Perm												0.00
v/c Ratio		0.18		0.28	0.65							0.01
Uniform Delay, d1		37.3		26.2	1.8							34.9
Progression Factor		0.38		1.00	1.00							1.00
Incremental Delay, d2		0.2		0.1	0.5							0.0
Delay (s)		14.3		26.3	2.3							35.0
Level of Service		B		C	A							C
Approach Delay (s)		14.3			6.8		0.0				35.0	
Approach LOS		B			A		A				C	
Intersection Summary												
HCM 2000 Control Delay		7.9			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		76.0%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

Horizon Year (2 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	10	245	0	0	132	107	0	0	0	49	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	12	292	0	0	142	115	0	0	0	54	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	257			292			520	572	292	515	515	199
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	257			292			520	572	292	515	515	199
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	88	100	99
cM capacity (veh/h)	1308			1270			460	426	748	467	459	842

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	304	257	0	59
Volume Left	12	0	0	54
Volume Right	0	115	0	5
cSH	1308	1270	1700	487
Volume to Capacity	0.01	0.00	0.00	0.12
Queue Length 95th (ft)	1	0	0	10
Control Delay (s)	0.4	0.0	0.0	13.4
Lane LOS	A		A	B
Approach Delay (s)	0.4	0.0	0.0	13.4
Approach LOS			A	B

Intersection Summary

Average Delay	1.5			
Intersection Capacity Utilization	31.0%		ICU Level of Service	A
Analysis Period (min)	15			

NBC Coastal Campus

22: 3rd St & Palm Ave

Horizon Year (2 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	285	5	27	215	25	12	15	129	12	11	15
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	9	331	6	29	231	27	15	19	159	15	14	19
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	337	29	258	193	48						
Volume Left (vph)	9	0	29	0	15	15						
Volume Right (vph)	0	6	0	27	159	19						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.1	5.5	6.1	5.5	5.2	5.8						
Degree Utilization, x	0.02	0.52	0.05	0.40	0.28	0.08						
Capacity (veh/h)	573	629	559	621	625	535						
Control Delay (s)	8.0	13.2	8.2	11.0	10.1	9.2						
Approach Delay (s)	13.0		10.7		10.1	9.2						
Approach LOS	B		B		B	A						

Intersection Summary

Delay	11.4			
Level of Service	B			
Intersection Capacity Utilization	38.5%		ICU Level of Service	A
Analysis Period (min)	15			
























NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Horizon Year (2 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	233	435	340	156	18	71
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	295	551	415	190	25	100
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	605				1650	302
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	605				1650	302
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	70				59	86
cM capacity (veh/h)	969				62	694
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	295	551	276	328	125	
Volume Left	295	0	0	0	25	
Volume Right	0	0	0	190	100	
cSH	969	1700	1700	1700	228	
Volume to Capacity	0.30	0.32	0.16	0.19	0.55	
Queue Length 95th (ft)	32	0	0	0	75	
Control Delay (s)	10.3	0.0	0.0	0.0	38.7	
Lane LOS	B				E	
Approach Delay (s)	3.6		0.0		38.7	
Approach LOS					E	
Intersection Summary						
Average Delay			5.0			
Intersection Capacity Utilization			42.7%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Horizon Year (2 CVN) with Alternative 1
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Volume (vph)	17	428	16	27	341	0	67	40	83	2	28	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3520		1770	3539			1723			1857	1583
Flt Permitted	0.50	1.00		0.43	1.00			0.87			0.98	1.00
Satd. Flow (perm)	923	3520		810	3539			1530			1824	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	22	556	21	35	443	0	102	61	126	3	48	48
RTOR Reduction (vph)	0	4	0	0	0	0	0	33	0	0	0	30
Lane Group Flow (vph)	22	573	0	35	443	0	0	256	0	0	51	18
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.6	13.6		13.6	13.6			13.4			13.4	13.4
Effective Green, g (s)	13.6	13.6		13.6	13.6			13.4			13.4	13.4
Actuated g/C Ratio	0.38	0.38		0.38	0.38			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	346	1322		304	1329			566			675	585
v/s Ratio Prot		c0.16			0.13							
v/s Ratio Perm	0.02			0.04				c0.17			0.03	0.01
v/c Ratio	0.06	0.43		0.12	0.33			0.45			0.08	0.03
Uniform Delay, d1	7.2	8.4		7.4	8.1			8.6			7.4	7.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.1			0.6			0.0	0.0
Delay (s)	7.3	8.7		7.5	8.2			9.2			7.4	7.3
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.6			8.2			9.2			7.4	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.5		HCM 2000 Level of Service				A			
HCM 2000 Volume to Capacity ratio			0.44									
Actuated Cycle Length (s)			36.2		Sum of lost time (s)				9.2			
Intersection Capacity Utilization			47.7%		ICU Level of Service				A			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Horizon Year (2 CVN) with Alternative 1
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗			↙	
Volume (veh/h)	514	5	0	0	3	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	559	5	0	0	3	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			564		559	559
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			564		559	559
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1007		490	529
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	559	5	10			
Volume Left	0	0	3			
Volume Right	0	5	7			
cSH	1700	1700	515			
Volume to Capacity	0.33	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.1			
Lane LOS			B			
Approach Delay (s)	0.0		12.1			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			37.1%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1
Timing Plan: AM PEAK

	↖	→	↘	↖	←	↙	↘	↗	↖	↙	↘	↗
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑		↖	↑↑↑			↖			↖	
Volume (vph)	24	776	40	27	2079	50	188	42	58	102	52	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5048		1770	5067			3324			3363	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5048		1770	5067			3324			3363	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	29	924	48	30	2285	55	227	51	70	124	63	34
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	29	969	0	30	2339	0	0	336	0	0	213	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2122		157	2018			646			653	
v/s Ratio Prot	0.02	c0.19		c0.02	c0.46			c0.10			c0.06	
v/s Ratio Perm												
v/c Ratio	0.15	0.46		0.19	1.16			0.52			0.33	
Uniform Delay, d1	72.3	37.4		76.0	54.1			65.0			62.4	
Progression Factor	1.00	1.00		1.19	0.84			1.00			1.00	
Incremental Delay, d2	0.4	0.7		0.4	76.0			0.7			0.3	
Delay (s)	72.7	38.1		90.9	121.7			65.7			62.6	
Level of Service	E	D		F	F			E			E	
Approach Delay (s)		39.1			121.3			65.7			62.6	
Approach LOS		D			F			E			E	
Intersection Summary												
HCM 2000 Control Delay			92.2			HCM 2000 Level of Service				F		
HCM 2000 Volume to Capacity ratio			0.72									
Actuated Cycle Length (s)			180.0			Sum of lost time (s)				18.3		
Intersection Capacity Utilization			78.4%			ICU Level of Service				D		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

27: Florida St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1

Timing Plan: AM PEAK

	↖	→	↗	↖	←	↖	↖	↑	↗	↗	↓	↖
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↖↖		↖	↖↖↖			↖		↖	↖	
Volume (vph)	3	1039	40	23	2277		21	5	35	63	12	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5081			1690		1770	1699	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.63	1.00	
Satd. Flow (perm)	1770	5057		1770	5081			1535		1182	1699	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	3	1167	45	26	2588	16	29	7	48	90	17	24
RTOR Reduction (vph)	0	2	0	0	0	0	0	27	0	0	20	0
Lane Group Flow (vph)	3	1210	0	26	2604	0	0	57	0	90	21	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases						4				8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			255		197	283	
v/s Ratio Prot	0.00	0.24		c0.01	c0.51						0.01	
v/s Ratio Perm								0.04		c0.08		
v/c Ratio	0.08	0.35		0.22	0.70			0.22		0.46	0.07	
Uniform Delay, d1	86.2	11.6		79.6	13.3			64.9		67.7	63.3	
Progression Factor	1.61	0.25		1.42	0.40			1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.3		0.4	0.5			0.4		1.7	0.1	
Delay (s)	139.8	3.2		113.1	5.8			65.4		69.3	63.4	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.5			6.9			65.4			67.5	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		9.0			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		77.7%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

28: 13th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1

Timing Plan: AM PEAK

	↖	→	↗	↖	←	↖	↖	↑	↗	↗	↓	↖
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↖↖		↖	↖↖↖	↖		↖		↖	↖	
Volume (vph)	4	1120	72	110	2111	59	168	22	104	192	41	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	0.85	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1258	81	133	2543	71	189	25	117	256	55	23
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	97	0	3	0
Lane Group Flow (vph)	4	1335	0	133	2543	41	0	214	20	0	331	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.26		c0.08	c0.50			c0.12			c0.10	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.10	0.60		0.68	0.94	0.05		0.70	0.07		0.57	
Uniform Delay, d1	86.2	38.0		76.9	39.5	20.3		70.1	62.5		68.4	
Progression Factor	1.19	0.60		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	1.1		9.0	8.1	0.1		6.7	0.1		1.4	
Delay (s)	103.4	24.0		85.9	47.6	20.4		76.8	62.6		69.7	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		24.2			48.8			71.8			69.7	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		44.9			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		94.7%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	16	1423	29	50	2259	14	18	8	56	44	3	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1673			1724	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.79	
Satd. Flow (perm)	1770	5070		1770	5081			1562			1406	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	17	1547	32	58	2627	16	21	10	67	58	4	32
RTOR Reduction (vph)	0	2	0	0	0	0	0	53	0	0	25	0
Lane Group Flow (vph)	17	1577	0	58	2643	0	0	45	0	0	69	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	1.5	37.9		2.7	39.1			15.3			15.3	
Effective Green, g (s)	1.5	37.9		2.7	39.1			15.3			15.3	
Actuated g/C Ratio	0.02	0.53		0.04	0.55			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	37	2683		66	2774			333			300	
v/s Ratio Prot	0.01	0.31		c0.03	c0.52							
v/s Ratio Perm								0.03			c0.05	
v/c Ratio	0.46	0.59		0.88	0.95			0.14			0.23	
Uniform Delay, d1	34.6	11.5		34.3	15.4			22.8			23.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	8.8	0.3		69.1	8.6			0.2			0.4	
Delay (s)	43.4	11.8		103.4	23.9			23.0			23.7	
Level of Service	D	B		F	C			C			C	
Approach Delay (s)		12.2			25.6			23.0			23.7	
Approach LOS		B			C			C			C	
Intersection Summary												
HCM 2000 Control Delay		20.8			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		71.6			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		62.4%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰		↰	↰	↰	↰	↰	↰
Volume (vph)	105	1438	34	280	2187	246	87	83	884	269	106	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	122	1672	40	298	2327	262	97	92	982	320	126	105
RTOR Reduction (vph)	0	2	0	0	0	69	0	147	173	0	3	65
Lane Group Flow (vph)	122	1710	0	298	2327	193	97	397	357	320	134	29
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.1		17.9	47.0	47.0	8.6	35.4	35.4	10.3	37.1	37.1
Effective Green, g (s)	6.0	35.1		17.9	47.0	47.0	8.6	35.4	35.4	10.3	37.1	37.1
Actuated g/C Ratio	0.05	0.29		0.15	0.39	0.39	0.07	0.29	0.29	0.09	0.31	0.31
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	170	1474		262	1981	616	126	454	441	293	537	462
v/s Ratio Prot	0.04	0.34		c0.17	c0.46		0.05	c0.26		c0.09	0.08	
v/s Ratio Perm						0.12			0.24			0.02
v/c Ratio	0.72	1.16		1.14	1.17	0.31	0.77	0.87	0.81	1.09	0.25	0.06
Uniform Delay, d1	56.5	42.8		51.4	36.8	25.6	55.0	40.5	39.5	55.1	31.3	29.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.5	80.0		97.8	84.3	0.3	24.2	16.9	10.5	79.5	0.2	0.1
Delay (s)	69.9	122.7		149.1	121.1	25.9	79.2	57.3	50.0	134.6	31.6	29.5
Level of Service	E	F		F	F	C	E	E	D	F	C	C
Approach Delay (s)		119.2			115.3			55.8			91.1	
Approach LOS		F			F			E			F	
Intersection Summary												
HCM 2000 Control Delay		103.6			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.09										
Actuated Cycle Length (s)		120.6			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		94.9%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (2 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	326	1280	0	178	1435
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	366	1376	0	198	1594
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	366	1376	0	198	1591
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	18
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.10	c0.39		0.11	c0.57
v/s Ratio Perm						
v/c Ratio		0.14	1.18		0.96	1.04
Uniform Delay, d1		2.5	26.8		35.1	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	89.7		49.7	33.7
Delay (s)		2.5	116.5		84.8	51.7
Level of Service		A	F		F	D
Approach Delay (s)		2.5	116.5		55.4	
Approach LOS		A	F		E	
Intersection Summary						
HCM 2000 Control Delay		73.7			HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio		1.17				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		73.9%			ICU Level of Service	D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)







Horizon Year (2 CVN) with Alternative 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	504	0	0	489	600	908	2	165	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3247		1681	1631				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3247		1681	1631				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	579	0	0	532	652	987	2	179	0	0	0
RTOR Reduction (vph)	0	0	0	0	402	0	0	29	0	0	0	0
Lane Group Flow (vph)	0	579	0	0	782	0	592	547	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		18.8			18.8		22.3	22.3				
Effective Green, g (s)		18.8			18.8		22.3	22.3				
Actuated g/C Ratio		0.38			0.38		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1355			1243		763	740				
v/s Ratio Prot		0.16			c0.24							
v/s Ratio Perm							c0.35	0.34				
v/c Ratio		0.43			0.63		0.78	0.74				
Uniform Delay, d1		11.2			12.3		11.3	11.0				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			1.0		5.0	3.9				
Delay (s)		11.4			13.3		16.3	14.9				
Level of Service		B			B		B	B				
Approach Delay (s)		11.4			13.3		15.6				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay		13.8								HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		49.1								Sum of lost time (s)	8.0	
Intersection Capacity Utilization		76.4%								ICU Level of Service	D	
Analysis Period (min)		15										
c Critical Lane Group												













NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Horizon Year (2 CVN) with Alternative 1
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	4	5	67	14	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	16	7	93	34	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	141	34	34			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	141	34	34			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	848	1039	1577			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	16	100	34			
Volume Left	0	7	0			
Volume Right	16	0	0			
cSH	1039	1577	1700			
Volume to Capacity	0.02	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.5	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		1.3				
Intersection Capacity Utilization		17.6%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Horizon Year (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	4052	18	0	1803	246	0	0	915	0	0	56
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%			0%			0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4221	19	0	1859	254	0	0	1017	0	0	85
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2132			4260			4975	6383	1456	3433	6265	786
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2132			4260			4975	6383	1456	3433	6265	786
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	44	100	100	74
cM capacity (veh/h)	247			34			0	0	1830	1	0	324
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1688	1688	863	744	744	625	1017	85				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	19	0	0	254	1017	85				
cSH	1700	1700	1700	1700	1700	1700	1830	324				
Volume to Capacity	0.99	0.99	0.51	0.44	0.44	0.37	0.56	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	91	26				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.4	20.0				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.4	20.0				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization			144.0%				ICU Level of Service	H				
Analysis Period (min)			15									

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Horizon Year (2 CVN) with Alternative 1
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3815	132	0	1841	0	185	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3933	136	0	1918	0	226	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4089		4680	1419	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4089		4680	1419	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			40		1	122	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1573	1573	923	639	639	639	226
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	136	0	0	0	226
cSH	1700	1700	1700	1700	1700	1700	122
Volume to Capacity	0.93	0.93	0.54	0.38	0.38	0.38	1.85
Queue Length 95th (ft)	0	0	0	0	0	0	443
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	473.2
Lane LOS							F
Approach Delay (s)	0.0			0.0			473.2
Approach LOS							F
Intersection Summary							
Average Delay			17.2				
Intersection Capacity Utilization			96.8%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Horizon Year (2 CVN) with Alternative 1
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	↗
Volume (vph)	0	0	0	984	639	110	102	254		0	0	867
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1700
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4636		1770	3539				3526
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4636		1770	3539				3526
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1036	673	116	105	262	0	0	0	894
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	0	2
Lane Group Flow (vph)	0	0	0	518	1295	0	105	262	0	0	0	910
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1432		98	1989				1567
v/s Ratio Prot				c0.34	0.28		c0.06	0.07				c0.26
v/s Ratio Perm												
v/c Ratio				1.10	0.98dl		1.07	0.13				0.58
Uniform Delay, d1				31.1	29.8		42.5	9.3				18.7
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				72.2	8.4		111.5	0.0				0.6
Delay (s)				103.3	38.2		154.0	9.3				19.3
Level of Service				F	D		F	A				B
Approach Delay (s)		0.0			56.7			50.7				19.3
Approach LOS		A			E			D				B
Intersection Summary												
HCM 2000 Control Delay			45.0				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.81									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)				17.2		
Intersection Capacity Utilization		135.9%				ICU Level of Service				H		
Analysis Period (min)			15									
dl	Defacto Left Lane. Recode with 1 though lane as a left lane.											
c	Critical Lane Group											

NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	7	2123	110	0	0	0	0	356	437	766	1107	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Flpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.95	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3140	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3140	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2333	121	0	0	0	0	414	508	798	1153	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2341	92	0	0	0	0	632	255	798	1153	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.0	53.0	44.2	100.0	
Effective Green, g (s)		63.4	63.4					53.0	53.0	44.2	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					950	408	867	2022	
v/s Ratio Prot		c0.46						c0.20		c0.23	0.33	
v/s Ratio Perm			0.06						0.19			
v/c Ratio		1.27	0.16					0.67	0.62	0.92	0.57	
Uniform Delay, d1		55.8	37.8					53.3	52.4	63.7	23.8	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		126.6	0.1					1.8	3.0	14.8	0.4	
Delay (s)		182.4	37.9					55.0	55.4	78.5	24.2	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		175.3		0.0				55.2			46.4	
Approach LOS		F		A				E			D	
Intersection Summary												
HCM 2000 Control Delay		107.4		HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio		0.97										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		135.9%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave













Horizon Year (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑↑
Volume (vph)	203	14	1016	787	0	1408
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flrb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3260			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3260			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	260	18	1142	884	0	1514
RTOR Reduction (vph)	2	0	67	0	0	0
Lane Group Flow (vph)	276	0	1959	0	0	1514
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	296		2463			2540
v/s Ratio Prot	c0.17		c0.60			0.45
v/s Ratio Perm						
v/c Ratio	0.93		0.80			0.60
Uniform Delay, d1	64.0		12.0			8.7
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	35.0		2.8			1.0
Delay (s)	99.0		14.7			9.7
Level of Service	F		B			A
Approach Delay (s)	99.0		14.7			9.7
Approach LOS	F		B			A
Intersection Summary						
HCM 2000 Control Delay		18.9		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.84				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		86.8%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Horizon Year (2 CVN) with Alternative 1







Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	168	12	34	30	12	29	27	1707	58	79	1670	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1724		1770	3522		1770	3488	
Flt Permitted	0.65	0.65	1.00		0.81		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1153	1158	1583		1422		1770	3522		1770	3488	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	215	15	44	47	19	45	29	1835	62	86	1815	193
RTOR Reduction (vph)	0	0	36	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	114	116	8	0	89	0	29	1896	0	86	2005	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	19.7	19.7	19.7		19.7		4.7	70.9		8.1	74.3	
Effective Green, g (s)	19.7	19.7	19.7		19.7		4.7	70.9		8.1	74.3	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.04	0.62		0.07	0.65	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	200	200	274		246		73	2200		126	2283	
v/s Ratio Prot							0.02	0.54		c0.05	c0.57	
v/s Ratio Perm	0.10	c0.10	0.00		0.06							
v/c Ratio	0.57	0.58	0.03		0.36		0.40	0.86		0.68	0.88	
Uniform Delay, d1	43.0	43.1	38.9		41.3		53.0	17.3		51.4	15.9	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.7	4.0	0.0		0.9		3.5	3.7		14.2	4.2	
Delay (s)	46.7	47.1	39.0		42.3		56.5	21.0		65.6	20.1	
Level of Service	D	D	D		D		E	C		E	C	
Approach Delay (s)		45.7			42.3			21.6			22.0	
Approach LOS		D			D			C			C	
Intersection Summary												
HCM 2000 Control Delay		23.8			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		113.5			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		81.7%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Horizon Year (2 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	9	0	169	0	1480	0	38	1832	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	13	0	245	0	1574	0	41	1970	0
RTOR Reduction (vph)	0	0	0	0	198	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	60	0	0	1574	0	41	1970	0
Turn Type				Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.0			42.2		2.8	49.2	
Effective Green, g (s)					14.0			42.2		2.8	49.2	
Actuated g/C Ratio					0.19			0.58		0.04	0.67	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					309			2037		67	2375	
v/s Ratio Prot					c0.04			0.44		0.02	c0.56	
v/s Ratio Perm												
v/c Ratio					0.19			0.77		0.61	0.83	
Uniform Delay, d1					24.9			11.9		34.7	8.9	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			1.9		15.4	2.5	
Delay (s)					25.2			13.8		50.1	11.5	
Level of Service					C			B		D	B	
Approach Delay (s)		0.0			25.2			13.8			12.3	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					13.8			HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio					0.80							
Actuated Cycle Length (s)					73.3			Sum of lost time (s)		18.9		
Intersection Capacity Utilization					70.0%			ICU Level of Service		C		
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Horizon Year (2 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	263	42	116	8	64	356	27	887	3	121	1680	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1517		1852	1512	1770	3539	1353	1770	3517	
Flt Permitted	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1517		1852	1512	1770	3539	1353	1770	3517	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	346	55	153	9	70	387	30	975	3	129	1787	68
RTOR Reduction (vph)	0	0	123	0	0	204	0	0	2	0	2	0
Lane Group Flow (vph)	346	55	30	0	79	183	30	975	1	129	1853	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.8	27.8	27.8		20.5	20.5	2.9	57.5	57.5	15.4	70.0	
Effective Green, g (s)	27.8	27.8	27.8		20.5	20.5	2.9	57.5	57.5	15.4	70.0	
Actuated g/C Ratio	0.20	0.20	0.20		0.15	0.15	0.02	0.41	0.41	0.11	0.50	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	349	368	299		270	220	36	1447	553	193	1750	
v/s Ratio Prot	c0.20	0.03			0.04		0.02	0.28		c0.07	c0.53	
v/s Ratio Perm			0.02			c0.12		0.00				
v/c Ratio	0.99	0.15	0.10		0.29	0.83	0.83	0.67	0.00	0.67	1.06	
Uniform Delay, d1	56.3	46.6	46.2		53.6	58.4	68.6	33.9	24.6	60.1	35.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	45.7	0.2	0.1		0.6	22.6	85.2	2.5	0.0	8.5	39.1	
Delay (s)	102.0	46.8	46.3		54.2	81.0	153.8	36.4	24.6	68.6	74.4	
Level of Service	F	D	D		D	F	F	D	C	E	E	
Approach Delay (s)		81.1			76.4			39.9			74.1	
Approach LOS		F			E			D			E	
Intersection Summary												
HCM 2000 Control Delay		66.7								E		
HCM 2000 Volume to Capacity ratio		1.00										
Actuated Cycle Length (s)		140.6				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		86.3%				ICU Level of Service		E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

Horizon Year (2 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	312	428	4	54	165	4
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	347	476	6	76	188	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915				600
pX, platoon unblocked						
vC, conflicting volume	423	44			82	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	423	44			82	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	33	54			88	
cM capacity (veh/h)	515	1027			1516	
Direction, Lane #						
Volume Total	822	82	192			
Volume Left	347	0	188			
Volume Right	476	76	0			
cSH	1055	1700	1516			
Volume to Capacity	0.78	0.05	0.12			
Queue Length 95th (ft)	206	0	11			
Control Delay (s)	19.3	0.0	7.6			
Lane LOS	C		A			
Approach Delay (s)	19.3	0.0	7.6			
Approach LOS	C					
Intersection Summary						
Average Delay		15.8				
Intersection Capacity Utilization		40.0%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (2 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕		↕
Volume (vph)	318	4	927	57	0	1829
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1772		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1772		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	403	5	1030	63	0	2055
RTOR Reduction (vph)	1	0	0	36	0	0
Lane Group Flow (vph)	407	0	1030	27	0	2055
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	843		1520	633		1520
v/s Ratio Prot	c0.23		0.29			c0.58
v/s Ratio Perm				0.02		
v/c Ratio	0.48		0.68	0.04		1.35
Uniform Delay, d1	18.7		24.1	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		1.2	0.0		162.8
Delay (s)	19.2		25.3	17.4		192.8
Level of Service	B		C	B		F
Approach Delay (s)	19.2		24.9			192.8
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay		121.2		HCM 2000 Level of Service		F
HCM 2000 Volume to Capacity ratio		0.90				
Actuated Cycle Length (s)		105.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		100.5%		ICU Level of Service		G
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Horizon Year (2 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕	↕	↕
Volume (veh/h)	5	8	750	4	18	1680
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	10	16	872	5	20	1846
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1837	438			877	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1837	438			877	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	85	97			97	
cM capacity (veh/h)	65	566			766	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	581	295	20	923	923
Volume Left	10	0	0	20	0	0
Volume Right	16	0	5	0	0	0
cSH	144	1700	1700	766	1700	1700
Volume to Capacity	0.18	0.34	0.17	0.03	0.54	0.54
Queue Length 95th (ft)	16	0	0	2	0	0
Control Delay (s)	35.5	0.0	0.0	9.8	0.0	0.0
Lane LOS	E			A		
Approach Delay (s)	35.5	0.0		0.1		
Approach LOS	E					
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			56.4%		ICU Level of Service	B
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

Horizon Year (2 CVN) with Alternative 1

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement						
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	35	66	687	14	120	1565
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	38	72	781	16	132	1720
RTOR Reduction (vph)	0	45	0	8	0	0
Lane Group Flow (vph)	38	27	781	8	132	1720
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	11.4	25.2	26.1	26.1	8.7	43.6
Effective Green, g (s)	11.4	20.1	26.1	26.1	8.7	43.6
Actuated g/C Ratio	0.18	0.31	0.41	0.41	0.14	0.68
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	313	494	1436	642	239	2399
v/s Ratio Prot	c0.02	0.02	0.22		0.07	c0.49
v/s Ratio Perm				0.01		
v/c Ratio	0.12	0.05	0.54	0.01	0.55	0.72
Uniform Delay, d1	22.2	15.5	14.6	11.4	26.0	6.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.4	0.0	2.7	1.0
Delay (s)	22.4	15.5	15.0	11.4	28.7	7.5
Level of Service	C	B	B	B	C	A
Approach Delay (s)	17.9		14.9			9.0
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay		11.1			HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio		0.71				
Actuated Cycle Length (s)		64.3			Sum of lost time (s)	18.1
Intersection Capacity Utilization		55.2%			ICU Level of Service	B
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

Horizon Year (2 CVN) with Alternative 1

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement						
Lane Configurations		↖	↕			↕
Volume (veh/h)	0	27	676	22	0	1600
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	36	777	25	0	1739
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1659	401			802	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1659	401			802	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	94			100	
cM capacity (veh/h)	88	599			817	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	36	518	284	870	870	
Volume Left	0	0	0	0	0	
Volume Right	36	0	25	0	0	
cSH	599	1700	1700	1700	1700	
Volume to Capacity	0.06	0.30	0.17	0.51	0.51	
Queue Length 95th (ft)	5	0	0	0	0	
Control Delay (s)	11.4	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	11.4	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay		0.2				
Intersection Capacity Utilization		47.6%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Horizon Year (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↕	↕	↰	↱
Volume (vph)	35	30	668	22	27	1572
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	49	42	711	23	30	1727
RTOR Reduction (vph)	0	36	0	10	0	0
Lane Group Flow (vph)	49	6	711	13	30	1727
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	4.2	7.0	29.0	29.0	2.8	39.3
Effective Green, g (s)	4.2	7.0	29.0	29.0	2.8	39.3
Actuated g/C Ratio	0.08	0.14	0.58	0.58	0.06	0.78
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	148	221	2048	916	98	2776
v/s Ratio Prot	c0.03	0.00	0.20		0.02	c0.49
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.33	0.03	0.35	0.01	0.31	0.62
Uniform Delay, d1	21.6	18.6	5.6	4.5	22.7	2.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	0.0	0.1	0.0	1.8	0.4
Delay (s)	22.9	18.7	5.7	4.5	24.5	2.7
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.0		5.6			3.1
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			4.4		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.72			
Actuated Cycle Length (s)			50.1		Sum of lost time (s)	14.1
Intersection Capacity Utilization			54.4%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↕	↕		↕			↕		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	13	17	98	9	0	208	15	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	14	18	127	12	0	234	17	0	0
Direction, Lane #										
Volume Total (vph)	14	18	139	251						
Volume Left (vph)	0	0	127	0						
Volume Right (vph)	0	18	0	17						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.1	3.2	4.1	3.2						
Degree Utilization, x	0.02	0.02	0.16	0.22						
Capacity (veh/h)	867	1121	860	1122						
Control Delay (s)	7.1	6.3	7.9	7.1						
Approach Delay (s)	6.6		7.9	7.1						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.3							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱	↰	↱	↰			
Volume (vph)	12	215	0	0	95	160	14	577	80	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.69	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1279	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	14	244	0	0	109	184	15	634	88	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	94	0	53	0	0	0	0
Lane Group Flow (vph)	14	244	0	0	109	90	15	634	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	10.8	10.8			10.8	10.8	16.2	16.2	16.2			
Effective Green, g (s)	10.8	10.8			10.8	10.8	16.2	16.2	16.2			
Actuated g/C Ratio	0.27	0.27			0.27	0.27	0.40	0.40	0.40			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	341	498			498	423	709	1419	634			
v/s Ratio Prot		c0.13			0.06		0.01	c0.18				
v/s Ratio Perm	0.01					0.06			0.02			
v/c Ratio	0.04	0.49			0.22	0.21	0.02	0.45	0.06			
Uniform Delay, d1	11.0	12.5			11.5	11.5	7.3	8.8	7.4			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.8			0.2	0.3	0.0	0.2	0.0			
Delay (s)	11.0	13.2			11.7	11.8	7.3	9.1	7.5			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		13.1			11.7		8.8				0.0	
Approach LOS		B			B		A				A	
Intersection Summary												
HCM 2000 Control Delay		10.4			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.46										
Actuated Cycle Length (s)		40.4			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		45.4%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												





















NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱	↰
Volume (veh/h)	226	421	105	518	0	1709	57
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	904	1684	119	589	0	1899	63
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2464	981	1962		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2464	981	1962		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	0	59		0		
cM capacity (veh/h)	15	249	293		0		
Direction, Lane #							
Volume Total	2588	119	294	294	1266	696	0
Volume Left	904	119	0	0	0	0	0
Volume Right	1684	0	0	0	0	63	0
cSH	38	293	1700	1700	1700	1700	1700
Volume to Capacity	67.56	0.41	0.17	0.17	0.74	0.41	0.00
Queue Length 95th (ft)	Err	47	0	0	0	0	0
Control Delay (s)	Err	25.5	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	D					
Approach Delay (s)	Err	4.3			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			4921.9				
Intersection Capacity Utilization			103.3%		ICU Level of Service		
Analysis Period (min)			15				G

















NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (2 CVN) with Alternative 1
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	102	7	79	19	4	7	85	456	58	19	1612	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.90		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1605		1770	1685		1770	3479		1770	3474	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1605		1770	1685		1770	3479		1770	3474	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	136	9	105	38	8	14	93	501	64	21	1791	251
RTOR Reduction (vph)	0	84	0	0	14	0	0	7	0	0	9	0
Lane Group Flow (vph)	136	30	0	38	8	0	93	558	0	21	2033	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	18.4	18.4		2.7	2.7		5.8	48.4		1.6	44.2	
Effective Green, g (s)	18.4	18.4		2.7	2.7		5.8	48.4		1.6	44.2	
Actuated g/C Ratio	0.20	0.20		0.03	0.03		0.06	0.54		0.02	0.49	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	361	328		53	50		114	1870		31	1706	
v/s Ratio Prot	c0.08	0.02		c0.02	0.00		c0.05	c0.16		0.01	c0.59	
v/s Ratio Perm												
v/c Ratio	0.38	0.09		0.72	0.17		0.82	0.30		0.68	1.19	
Uniform Delay, d1	30.9	29.0		43.3	42.6		41.6	11.5		43.9	22.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.1		36.9	1.6		34.4	0.1		45.6	92.5	
Delay (s)	31.5	29.2		80.2	44.2		76.0	11.5		89.6	115.4	
Level of Service	C	C		F	D		E	B		F	F	
Approach Delay (s)	30.4			67.0			20.6			115.1		
Approach LOS	C			E			C			F		
Intersection Summary												
HCM 2000 Control Delay	86.7			HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio	0.91											
Actuated Cycle Length (s)	90.0			Sum of lost time (s)				18.9				
Intersection Capacity Utilization	80.7%			ICU Level of Service				D				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (2 CVN) with Alternative 1
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	1557	69	0	498	40	20	46	5	28	30	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.99			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5053			5028		1770	1836			1759	
Flt Permitted	0.95	1.00			1.00		0.69	1.00			0.12	
Satd. Flow (perm)	1770	5053			5028		1294	1836			217	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	75	1769	78	0	530	43	29	66	7	33	35	28
RTOR Reduction (vph)	0	2	0	0	5	0	0	2	0	0	8	0
Lane Group Flow (vph)	75	1845	0	0	568	0	29	71	0	0	88	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1911			2041		251	357			36	
v/s Ratio Prot	c0.04	c0.37			c0.11			c0.04				
v/s Ratio Perm							0.02				c0.40	
v/c Ratio	0.38	0.97			0.28		0.12	0.20			2.44	
Uniform Delay, d1	74.3	54.8			35.8		59.7	60.7			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.2	13.9			0.3		0.2	0.3			721.7	
Delay (s)	75.5	68.7			36.1		60.0	61.0			796.7	
Level of Service	E	E			D		E	E			F	
Approach Delay (s)	68.9				36.1		60.7				796.7	
Approach LOS	E				D		E				F	
Intersection Summary												
HCM 2000 Control Delay	87.6			HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio	0.97											
Actuated Cycle Length (s)	180.0			Sum of lost time (s)				22.3				
Intersection Capacity Utilization	70.0%			ICU Level of Service				C				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

Horizon Year (2 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	1591	0	580	541	44	0	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3499							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3499							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1788	0	617	576	47	0	0	0	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	1788	0	617	623	0	0	0	0	0	0	4
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3180							609
v/s Ratio Prot		c0.35		c0.18	c0.18							
v/s Ratio Perm												0.00
v/c Ratio		0.93		0.32	0.20							0.01
Uniform Delay, d1		53.7		21.2	0.9							34.9
Progression Factor		0.29		1.00	1.00							1.00
Incremental Delay, d2		2.9		0.1	0.0							0.0
Delay (s)		18.6		21.3	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		18.6			11.1		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		15.6										B
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		180.0							22.3			
Intersection Capacity Utilization		56.5%										B
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave




















Horizon Year (2 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	4	220	0	0	319	42	0	0	0	107	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	5	256	0	0	362	48	0	0	0	162	0	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	410			256			665	675	256	651	651	386
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	410			256			665	675	256	651	651	386
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	57	100	98
cM capacity (veh/h)	1149			1309			365	374	783	380	386	662
Direction, Lane #												
Volume Total	260	410	0	176								
Volume Left	5	0	0	162								
Volume Right	0	48	0	14								
cSH	1149	1309	1700	393								
Volume to Capacity	0.00	0.00	0.00	0.45								
Queue Length 95th (ft)	0	0	0	56								
Control Delay (s)	0.2	0.0	0.0	21.3								
Lane LOS	A			A								
Approach Delay (s)	0.2	0.0	0.0	21.3								
Approach LOS				A								
Intersection Summary												
Average Delay		4.5										
Intersection Capacity Utilization		32.5%								A		
Analysis Period (min)		15										













NBC Coastal Campus
22: 3rd St & Palm Ave

Horizon Year (2 CVN) with Alternative 1
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	303	13	87	333	25	15	40	70	29	34	14
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	10	388	17	98	374	28	26	70	123	63	74	30
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	10	405	98	402	219	167						
Volume Left (vph)	10	0	98	0	26	63						
Volume Right (vph)	0	17	0	28	123	30						
Hadj (s)	0.53	0.01	0.53	-0.01	-0.28	0.00						
Departure Headway (s)	7.4	6.8	7.3	6.7	6.8	7.3						
Degree Utilization, x	0.02	0.77	0.20	0.75	0.41	0.34						
Capacity (veh/h)	462	507	474	518	465	422						
Control Delay (s)	9.3	27.8	10.9	25.9	14.6	13.9						
Approach Delay (s)	27.4		23.0		14.6	13.9						
Approach LOS	D		C		B	B						
Intersection Summary												
Delay			21.8									
Level of Service			C									
Intersection Capacity Utilization			42.3%	ICU Level of Service		A						
Analysis Period (min)			15									
























NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Horizon Year (2 CVN) with Alternative 1
Timing Plan: PM PEAK

									
Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Lane Configurations									
Volume (veh/h)	76	432	466	41	54	146			
Sign Control		Free	Free		Stop				
Grade		0%	0%		0%				
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85			
Hourly flow rate (vph)	78	445	542	48	64	172			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type	None		None						
Median storage (veh)									
Upstream signal (ft)	908								
pX, platoon unblocked									
vC, conflicting volume	590				1168	295			
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	590				1168	295			
tC, single (s)	4.1				6.8	6.9			
tC, 2 stage (s)									
tF (s)	2.2				3.5	3.3			
p0 queue free %	92				63	76			
cM capacity (veh/h)	982				172	702			
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1				
Volume Total	78	445	361	228	235				
Volume Left	78	0	0	0	64				
Volume Right	0	0	0	48	172				
cSH	982	1700	1700	1700	383				
Volume to Capacity	0.08	0.26	0.21	0.13	0.61				
Queue Length 95th (ft)	6	0	0	0	99				
Control Delay (s)	9.0	0.0	0.0	0.0	28.3				
Lane LOS	A				D				
Approach Delay (s)	1.3	0.0			28.3				
Approach LOS					D				
Intersection Summary									
Average Delay			5.5						
Intersection Capacity Utilization			41.4%	ICU Level of Service		A			
Analysis Period (min)			15						










NBC Coastal Campus
24: 7th St & Palm Ave

Horizon Year (2 CVN) with Alternative 1
Timing Plan: PM PEAK

																
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR				
Lane Configurations																
Volume (vph)	29	441	30	32	468	4	56	27	23	13	45	31				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6				
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00				
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85				
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00				
Satd. Flow (prot)	1770	3505		1770	3535			1762			1842	1583				
Flt Permitted	0.46	1.00		0.44	1.00			0.79			0.89	1.00				
Satd. Flow (perm)	858	3505		823	3535			1436			1664	1583				
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76				
Adj. Flow (vph)	35	525	36	35	514	4	68	33	28	17	59	41				
RTOR Reduction (vph)	0	7	0	0	1	0	0	22	0	0	0	32				
Lane Group Flow (vph)	35	554	0	35	517	0	0	107	0	0	76	9				
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm				
Protected Phases	2			6			8			4		4				
Permitted Phases	2			6			8			4		4				
Actuated Green, G (s)	14.9	14.9		14.9	14.9			6.5			6.5	6.5				
Effective Green, g (s)	14.9	14.9		14.9	14.9			6.5			6.5	6.5				
Actuated g/C Ratio	0.49	0.49		0.49	0.49			0.21			0.21	0.21				
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6				
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0				
Lane Grp Cap (vph)	417	1706		400	1721			305			353	336				
v/s Ratio Prot	c0.16			0.15												
v/s Ratio Perm	0.04			0.04				c0.07			0.05	0.01				
v/c Ratio	0.08		0.32	0.09		0.30		0.35			0.22	0.03				
Uniform Delay, d1	4.2		4.8	4.2		4.7		10.3			9.9	9.5				
Progression Factor	1.00		1.00	1.00		1.00		1.00			1.00	1.00				
Incremental Delay, d2	0.1		0.1	0.1		0.1		0.7			0.3	0.0				
Delay (s)	4.3		4.9	4.3		4.8		11.0			10.3	9.6				
Level of Service	A		A	A		A		B			B	A				
Approach Delay (s)	4.9			4.8				11.0			10.0					
Approach LOS	A			A				B			B					
Intersection Summary																
HCM 2000 Control Delay	5.8			HCM 2000 Level of Service				A								
HCM 2000 Volume to Capacity ratio	0.33															
Actuated Cycle Length (s)	30.6			Sum of lost time (s)				9.2								
Intersection Capacity Utilization	45.6%			ICU Level of Service				A								
Analysis Period (min)	15															
c Critical Lane Group																

NBC Coastal Campus
25: Delaware St & Palm Ave

Horizon Year (2 CVN) with Alternative 1
Timing Plan: PM PEAK

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	490	9	0	0	7	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	598	11	0	0	10	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			609		598	598
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			609		598	598
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			970		465	503
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	598	11	15			
Volume Left	0	0	10			
Volume Right	0	11	4			
cSH	1700	1700	476			
Volume to Capacity	0.35	0.01	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.8			
Lane LOS			B			
Approach Delay (s)	0.0		12.8			
Approach LOS			B			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			35.8%	ICU Level of Service		A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	47	1897	143	66	967	149	112	102	71	197	90	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5032		1770	4983			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5032		1770	4983			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	50	2018	152	67	977	151	123	112	78	221	101	33
RTOR Reduction (vph)	0	5	0	0	11	0	0	18	0	0	4	0
Lane Group Flow (vph)	50	2165	0	67	1117	0	0	295	0	0	351	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2004		196	1984			649			658	
v/s Ratio Prot	0.03	c0.43		c0.04	0.22			c0.09			c0.10	
v/s Ratio Perm												
v/c Ratio	0.26	1.08		0.34	0.56			0.45			0.53	
Uniform Delay, d1	73.2	54.1		73.9	42.0			64.1			65.2	
Progression Factor	1.00	1.00		1.21	0.91			1.00			1.00	
Incremental Delay, d2	0.7	45.7		1.0	1.1			0.5			0.8	
Delay (s)	73.9	99.9		90.2	39.4			64.6			66.0	
Level of Service	E	F		F	D			E			E	
Approach Delay (s)		99.3			42.2			64.6			66.0	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		77.0			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		124.9%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	23	2219	65	56	1429	63	24	12	40	72	15	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5064		1770	5053			1703		1770	1719	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.59	1.00	
Satd. Flow (perm)	1770	5064		1770	5053			1541		1103	1719	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.83	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	23	2264	66	58	1473	65	29	14	48	85	18	19
RTOR Reduction (vph)	0	1	0	0	2	0	0	24	0	0	17	0
Lane Group Flow (vph)	23	2329	0	58	1536	0	0	67	0	85	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.3		16.0	130.3			22.5		22.5	22.5	
Effective Green, g (s)	12.0	126.3		16.0	130.3			22.5		22.5	22.5	
Actuated g/C Ratio	0.07	0.70		0.09	0.72			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3553		157	3657			192		137	214	
v/s Ratio Prot	0.01	c0.46		c0.03	c0.30						0.01	
v/s Ratio Perm								0.04		c0.08		
v/c Ratio	0.19	0.66		0.37	0.42			0.35		0.62	0.10	
Uniform Delay, d1	79.4	14.8		77.2	9.9			72.1		74.7	69.7	
Progression Factor	1.42	0.15		1.54	0.27			1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.2		1.1	0.3			1.1		8.4	0.2	
Delay (s)	113.3	2.5		119.8	3.0			73.2		83.1	69.9	
Level of Service	F	A		F	A			E		F	E	
Approach Delay (s)		3.6			7.2			73.2			79.1	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.7			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		66.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔↔↔		↔	↔↔↔	↔		↔	↔		↔↔	
Volume (vph)	30	2085	227	179	1514	93	148	46	146	176	51	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5011		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5011		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	32	2218	241	185	1561	96	161	50	159	238	69	31
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	132	0	4	0
Lane Group Flow (vph)	32	2452	0	185	1561	59	0	211	27	0	334	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2218		192	2364	736		305	269		575	
v/s Ratio Prot	0.02	c0.49		c0.10	c0.31			c0.12			c0.10	
v/s Ratio Perm					0.04			0.02				
v/c Ratio	0.20	1.11		0.96	0.66	0.08		0.69	0.10		0.58	
Uniform Delay, d1	76.1	50.1		79.8	37.2	26.8		70.2	63.0		68.7	
Progression Factor	0.99	1.04		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	53.4		54.0	1.5	0.2		12.2	0.7		4.2	
Delay (s)	76.0	105.4		133.9	38.6	27.0		82.4	63.8		73.0	
Level of Service	E	F		F	D	C		F	E		E	
Approach Delay (s)		105.0			47.6			74.4			73.0	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		79.6			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.90										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		109.3%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔↔↔		↔	↔↔↔						↔↔	
Volume (vph)	11	2230	57	195	1854	18	45	10	93	27	12	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5066		1770	5078			1680			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.88			0.80	
Satd. Flow (perm)	1770	5066		1770	5078			1503			1451	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.95	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	12	2478	63	205	1952	19	53	12	109	33	15	15
RTOR Reduction (vph)	0	2	0	0	1	0	0	78	0	0	12	0
Lane Group Flow (vph)	12	2539	0	205	1970	0	0	96	0	0	51	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.7			17.7	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.7			17.7	
Actuated g/C Ratio	0.01	0.47		0.13	0.60			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2404		233	3032			313			302	
v/s Ratio Prot	0.01	c0.50		c0.12	0.39							
v/s Ratio Perm								c0.06			0.04	
v/c Ratio	0.75	1.06		0.88	0.65			0.31			0.17	
Uniform Delay, d1	42.0	22.3		36.2	11.3			28.4			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	106.0	35.3		29.1	0.5			0.6			0.3	
Delay (s)	148.0	57.6		65.3	11.7			29.0			27.8	
Level of Service	F	E		E	B			C			C	
Approach Delay (s)		58.0			16.8			29.0			27.8	
Approach LOS		E			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		38.6			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.84										
Actuated Cycle Length (s)		84.9			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		77.6%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↔↔↔		↔	↔↔↔	↔	↔	↔	↔	↔↔	↔	↔
Volume (vph)	216	2161	30	376	1863	636	76	203	611	674	274	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	227	2275	32	404	2003	684	81	216	650	733	298	284
RTOR Reduction (vph)	0	1	0	0	0	86	0	25	309	0	2	122
Lane Group Flow (vph)	227	2306	0	404	2003	598	81	425	107	733	324	134
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.6	36.3		45.0	69.7	69.7	8.9	40.0	40.0	11.8	42.9	42.9
Effective Green, g (s)	11.6	36.3		45.0	69.7	69.7	8.9	40.0	40.0	11.8	42.9	42.9
Actuated g/C Ratio	0.07	0.23		0.29	0.45	0.45	0.06	0.26	0.26	0.08	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	256	1188		513	2286	711	101	421	388	261	483	416
v/s Ratio Prot	0.07	c0.45		c0.23	c0.39		0.05	c0.26		c0.21	c0.19	
v/s Ratio Perm						0.38			0.07			0.09
v/c Ratio	0.89	1.94		0.79	0.88	0.84	0.80	1.01	0.28	2.81	0.67	0.32
Uniform Delay, d1	71.0	59.4		50.6	38.7	37.7	72.2	57.5	45.9	71.6	49.8	44.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	28.5	426.7		7.8	4.1	8.8	35.2	46.1	0.4	824.4	3.6	0.5
Delay (s)	99.6	486.0		58.4	42.8	46.6	107.4	103.6	46.3	896.0	53.4	44.9
Level of Service	F	F		E	D	D	F	F	D	F	D	D
Approach Delay (s)		451.4			45.7			78.8			521.4	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		259.3										
HCM 2000 Volume to Capacity ratio		1.37										
Actuated Cycle Length (s)		155.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		139.6%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (2 CVN) with Alternative 1

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔↔	↔↔		↔	↔↔
Volume (vph)	0	581	980	0	504	1901
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	653	1043	0	554	2089
RTOR Reduction (vph)	0	0	0	0	0	2
Lane Group Flow (vph)	0	653	1043	0	554	2087
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.18	c0.29		0.31	c0.75
v/s Ratio Perm						
v/c Ratio		0.37	1.22		0.84	1.18
Uniform Delay, d1		12.0	30.3		22.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	107.7		9.0	85.1
Delay (s)		12.1	138.0		31.7	99.6
Level of Service		B	F		C	F
Approach Delay (s)		12.1	138.0		85.4	
Approach LOS		B	F		F	
Intersection Summary						
HCM 2000 Control Delay		87.0				
HCM 2000 Volume to Capacity ratio		1.27				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		97.2%			ICU Level of Service	F
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	1078	0	0	604	287	501	3	123	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1123	0	0	679	322	539	3	132	0	0	0
RTOR Reduction (vph)	0	0	0	0	97	0	0	22	0	0	0	0
Lane Group Flow (vph)	0	1123	0	0	904	0	345	307	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases						2						
Actuated Green, G (s)		21.1			21.1		15.9	15.9				
Effective Green, g (s)		21.1			21.1		15.9	15.9				
Actuated g/C Ratio		0.47			0.47		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1659			1579		593	570				
v/s Ratio Prot		0.32			0.27							
v/s Ratio Perm							0.21	0.19				
v/c Ratio		0.68			0.57		0.58	0.54				
Uniform Delay, d1		9.3			8.7		11.8	11.6				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		1.1			0.5		1.5	1.0				
Delay (s)		10.4			9.2		13.3	12.6				
Level of Service		B			A		B	B				
Approach Delay (s)		10.4			9.2		13.0			0.0		
Approach LOS		B			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		10.6			HCM 2000 Level of Service		B					
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		45.0			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		54.2%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Horizon Year (2 CVN) with Alternative 1
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	11	9	4	38	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	18	10	4	55	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	79	55	55			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	79	55	55			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	918	1012	1550			
Direction, Lane #						
Volume Total	18	14	55			
Volume Left	0	10	0			
Volume Right	18	0	0			
cSH	1012	1550	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.6				
Intersection Capacity Utilization		17.4%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1409	35	0	3717	557	0	0	480	0	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1698	42	0	4040	605	0	0	600	0	0	13
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4666			1760			3119	6404	627	4949	6123	1689
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4666			1760			3119	6404	627	4949	6123	1689
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	83
cM capacity (veh/h)	23			345			4	0	1357	0	0	80
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	679	679	382	1616	1616	1413	600	13				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	42	0	0	605	600	13				
cSH	1700	1700	1700	1700	1700	1700	1357	80				
Volume to Capacity	0.40	0.40	0.22	0.95	0.95	0.83	0.44	0.17				
Queue Length 95th (ft)	0	0	0	0	0	0	58	14				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	59.0				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	59.0				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				99.3%			ICU Level of Service		F			
Analysis Period (min)				15								

* User Entered Value



















NBC Coastal Campus
2: Pomona Ave & Fourth St

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR						
Lane Configurations	↑↑↑			↑↑↑		↑						
Volume (veh/h)	1270	204	0	3616	0	232						
Sign Control	Free			Free	Stop							
Grade	0%			0%	0%							
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92						
Hourly flow rate (vph)	1443	232	0	4018	0	252						
Pedestrians	20			20	20							
Lane Width (ft)	12.0			12.0	12.0							
Walking Speed (ft/s)	4.0			4.0	4.0							
Percent Blockage	2			2	2							
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume				1695	2938	637						
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol				1695	2938	637						
tC, single (s)				4.1	6.8	6.9						
tC, 2 stage (s)												
tF (s)				2.2	3.5	3.3						
p0 queue free %				100	100	38						
cM capacity (veh/h)				366	11	406						
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1					
Volume Total	577	577	520	1339	1339	1339	252					
Volume Left	0	0	0	0	0	0	0					
Volume Right	0	0	232	0	0	0	252					
cSH	1700	1700	1700	1700	1700	1700	406					
Volume to Capacity	0.34	0.34	0.31	0.79	0.79	0.79	0.62					
Queue Length 95th (ft)	0	0	0	0	0	0	101					
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.3					
Lane LOS							D					
Approach Delay (s)	0.0			0.0			27.3					
Approach LOS							D					
Intersection Summary												
Average Delay				1.2								
Intersection Capacity Utilization				84.7%			ICU Level of Service		E			
Analysis Period (min)				15								













NBC Coastal Campus
3: Orange Ave & Third St

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1486	1957	345	108	103	0	0	280	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4642		1770	3539			3505	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4642		1770	3539			3505	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1598	2104	371	146	139	0	0	322	15
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1007	3057	0	146	139	0	0	335	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3213		186	872			397	
v/s Ratio Prot				c0.66	0.66		c0.08	0.04			c0.10	
v/s Ratio Perm												
v/c Ratio				0.96	0.95		0.78	0.16			0.84	
Uniform Delay, d1				26.5	26.3		82.7	56.0			82.4	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				18.0	7.5		19.2	0.1			15.1	
Delay (s)				44.5	33.8		101.9	56.1			97.4	
Level of Service				D	C		F	E			F	
Approach Delay (s)		0.0			36.5			79.5			97.4	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay			43.5	HCM 2000 Level of Service					D			
HCM 2000 Volume to Capacity ratio			0.92									
Actuated Cycle Length (s)			189.5	Sum of lost time (s)					16.8			
Intersection Capacity Utilization			201.0%	ICU Level of Service					H			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑		↑↑	↑↑	↑↑
Volume (vph)	1	587	81	0	0	0	0	201	211	455	1369	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3252	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3252	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	638	88	0	0	0	0	234	229	495	1426	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	20	48	0	0	0
Lane Group Flow (vph)	0	639	59	0	0	0	0	301	94	495	1426	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1174	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.40	
v/s Ratio Perm		0.13	0.04						0.07			
v/c Ratio		0.36	0.11					0.26	0.18	0.70	0.69	
Uniform Delay, d1		41.5	37.7					38.6	37.4	63.3	25.0	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.2	1.0	
Delay (s)		41.6	37.8					38.7	37.6	66.5	26.0	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.4			36.5	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		37.9		HCM 2000 Level of Service					D			
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)					14.4			
Intersection Capacity Utilization		201.0%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗		↖	↗
Volume (vph)	253	8	1322	702	0	1211
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Flt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3313			3362
Flt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3313			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	294	9	1422	755	0	1275
RTOR Reduction (vph)	1	0	56	0	0	0
Lane Group Flow (vph)	302	0	2121	0	0	1275
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	18.5		43.5			43.5
Effective Green, g (s)	18.5		43.5			43.5
Actuated g/C Ratio	0.26		0.61			0.61
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	413		2026			2056
v/s Ratio Prot	c0.19		c0.64			0.38
v/s Ratio Perm						
v/c Ratio	0.73		1.05			0.62
Uniform Delay, d1	24.0		13.8			8.6
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	6.5		33.6			0.6
Delay (s)	30.5		47.4			9.2
Level of Service	C		D			A
Approach Delay (s)	30.5		47.4			9.2
Approach LOS	C		D			A
Intersection Summary						
HCM 2000 Control Delay			33.1		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			1.00			
Actuated Cycle Length (s)			71.1		Sum of lost time (s)	12.1
Intersection Capacity Utilization			86.5%		ICU Level of Service	E
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↗	↖	↗	↖	↖	↗	↖
Volume (vph)	55	3	12	9	0	7	23	1570	30	46	1376	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Flt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1692	1583		1705		1770	3529		1770	3523	
Flt Permitted	0.74	0.77	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1303	1358	1583		1508		1770	3529		1770	3523	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	64	3	14	18	0	14	27	1869	36	50	1496	47
RTOR Reduction (vph)	0	0	12	0	27	0	0	1	0	0	1	0
Lane Group Flow (vph)	33	34	2	0	5	0	27	1904	0	50	1542	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	16.2	16.2	16.2		16.2		3.0	69.9		4.1	71.0	
Effective Green, g (s)	16.2	16.2	16.2		16.2		3.0	69.9		4.1	71.0	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.67		0.04	0.68	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	210	245		234		50	2365		69	2398	
v/s Ratio Prot							0.02	c0.54		c0.03	0.44	
v/s Ratio Perm	c0.03	0.03	0.00		0.00							
v/c Ratio	0.16	0.16	0.01		0.02		0.54	0.81		0.72	0.64	
Uniform Delay, d1	38.2	38.2	37.3		37.3		50.0	12.3		49.5	9.5	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4	0.0		0.0		11.4	2.1		31.2	0.6	
Delay (s)	38.6	38.5	37.3		37.4		61.3	14.4		80.7	10.1	
Level of Service	D	D	D		D		E	B		F	B	
Approach Delay (s)		38.3			37.4			15.1			12.3	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			14.6				HCM 2000 Level of Service			B		
HCM 2000 Volume to Capacity ratio			0.69									
Actuated Cycle Length (s)			104.3				Sum of lost time (s)			14.1		
Intersection Capacity Utilization			60.2%				ICU Level of Service			B		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	27	0	1506	9	499	868	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	41	0	1655	10	509	886	0
RTOR Reduction (vph)	0	0	0	0	37	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	4	0	0	1655	5	509	886	0
Turn Type					NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.47		c0.29	0.25	
v/s Ratio Perm								0.00				
v/c Ratio					0.03			1.00	0.01	0.83	0.30	
Uniform Delay, d1					60.6			38.3	20.5	43.7	2.4	
Progression Factor					1.00			0.41	1.00	1.00	1.00	
Incremental Delay, d2					0.1			14.7	0.0	9.6	0.3	
Delay (s)					60.7			30.3	20.5	53.3	2.6	
Level of Service					E			C	C	D	A	
Approach Delay (s)		0.0			60.7			30.2			21.1	
Approach LOS		A			E			C			C	
Intersection Summary												
HCM 2000 Control Delay		26.5			HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		88.1%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	44	14	2	61	135	137	1340	7	172	431	311
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.88		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3276	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1396		1860	1510	1770	3539	1347	1770	3276	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	42	68	22	2	69	153	152	1489	8	198	495	357
RTOR Reduction (vph)	0	0	21	0	0	129	0	0	4	0	88	0
Lane Group Flow (vph)	42	68	1	0	71	24	152	1489	4	198	764	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Effective Green, g (s)	8.0	8.0	8.0		23.0	23.0	45.0	66.6	66.6	28.0	49.6	
Actuated g/C Ratio	0.06	0.06	0.06		0.16	0.16	0.31	0.46	0.46	0.19	0.34	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	97	102	77		295	239	549	1625	618	341	1120	
v/s Ratio Prot	0.02	c0.04			c0.04		0.09	c0.42		c0.11	0.23	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.43	0.67	0.02		0.24	0.10	0.28	0.92	0.01	0.58	0.68	
Uniform Delay, d1	66.3	67.2	64.8		53.4	52.2	37.7	36.6	21.3	53.2	40.9	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.93	
Incremental Delay, d2	3.1	15.2	0.1		0.4	0.2	0.3	9.7	0.0	2.5	3.3	
Delay (s)	69.4	82.4	64.9		53.8	52.4	38.0	46.3	21.3	53.3	41.4	
Level of Service	E	F	E		D	D	D	D	C	D	D	
Approach Delay (s)		75.4			52.8			45.4			43.7	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay		46.6			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		92.7%			ICU Level of Service				F			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖			↖
Volume (veh/h)	46	215	5	45	200	10
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	54	253	6	56	217	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	480	34			62	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	480	34			62	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	88	76			86	
cM capacity (veh/h)	468	1039			1540	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	307	62	228			
Volume Left	54	0	217			
Volume Right	253	56	0			
cSH	1261	1700	1540			
Volume to Capacity	0.24	0.04	0.14			
Queue Length 95th (ft)	24	0	12			
Control Delay (s)	10.3	0.0	7.4			
Lane LOS	B		A			
Approach Delay (s)	10.3	0.0	7.4			
Approach LOS	B					
Intersection Summary						
Average Delay		8.1				
Intersection Capacity Utilization		28.3%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖	↖		↖
Volume (vph)	49	3	1498	421	0	402
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1755		3539	1519		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1755		3539	1519		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	65	4	1577	443	0	628
RTOR Reduction (vph)	4	0	0	131	0	0
Lane Group Flow (vph)	65	0	1577	312	0	628
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.1		31.0	31.0		31.0
Effective Green, g (s)	3.1		31.0	31.0		31.0
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	123		2493	1070		2493
v/s Ratio Prot	c0.04		c0.45			0.18
v/s Ratio Perm				0.21		
v/c Ratio	0.53		0.63	0.29		0.25
Uniform Delay, d1	19.7		3.5	2.4		2.3
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.3		0.5	0.2		0.1
Delay (s)	24.1		4.0	2.6		2.4
Level of Service	C		A	A		A
Approach Delay (s)	24.1		3.7			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.9		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.62				
Actuated Cycle Length (s)		44.0		Sum of lost time (s)	9.9	
Intersection Capacity Utilization		53.8%		ICU Level of Service	A	
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (veh/h)	0	18	2402	7	7	451
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	31	2583	8	10	663
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2939	1295			2590	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2939	1295			2590	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	80			94	
cM capacity (veh/h)	11	153			165	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	31	1722	868	10	332	332
Volume Left	0	0	0	10	0	0
Volume Right	31	0	8	0	0	0
cSH	153	1700	1700	165	1700	1700
Volume to Capacity	0.20	1.01	0.51	0.06	0.20	0.20
Queue Length 95th (ft)	18	0	0	5	0	0
Control Delay (s)	34.4	0.0	0.0	28.2	0.0	0.0
Lane LOS	D			D		
Approach Delay (s)	34.4	0.0		0.4		
Approach LOS	D					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		76.6%		ICU Level of Service	D	
Analysis Period (min)		15				

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (vph)	20	101	2301	14	44	407
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	25	125	2474	15	64	590
RTOR Reduction (vph)	0	2	0	1	0	0
Lane Group Flow (vph)	25	123	2474	14	64	590
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	16.4	26.5	68.2	68.2	5.0	82.0
Effective Green, g (s)	16.4	21.4	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.20	0.63	0.63	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	269	314	2241	1002	82	2694
v/s Ratio Prot	0.01	c0.08	c0.70		c0.04	0.17
v/s Ratio Perm				0.01		
v/c Ratio	0.09	0.39	1.10	0.01	0.78	0.22
Uniform Delay, d1	39.3	37.5	19.8	7.3	50.8	3.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.8	54.2	0.0	37.0	0.0
Delay (s)	39.4	38.3	73.9	7.3	87.8	3.7
Level of Service	D	D	E	A	F	A
Approach Delay (s)	38.5		73.5			12.0
Approach LOS	D		E			B
Intersection Summary						
HCM 2000 Control Delay		59.7		HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio		0.96				
Actuated Cycle Length (s)		107.7		Sum of lost time (s)	18.1	
Intersection Capacity Utilization		80.7%		ICU Level of Service	D	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↖↗			↖↗
Volume (veh/h)	0	38	2275	30	0	425
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	61	2395	32	0	574
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2698	1213			2426	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2698	1213			2426	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	65			100	
cM capacity (veh/h)	17	174			192	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	61	1596	830	287	287	
Volume Left	0	0	0	0	0	
Volume Right	61	0	32	0	0	
cSH	174	1700	1700	1700	1700	
Volume to Capacity	0.35	0.94	0.49	0.17	0.17	
Queue Length 95th (ft)	37	0	0	0	0	
Control Delay (s)	36.6	0.0	0.0	0.0	0.0	
Lane LOS	E					
Approach Delay (s)	36.6	0.0		0.0		
Approach LOS	E					
Intersection Summary						
Average Delay			0.7			
Intersection Capacity Utilization			73.8%		ICU Level of Service	D
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖↗	↖	↖	↖↗
Volume (vph)	12	8	2305	38	18	398
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	19	13	2401	40	22	491
RTOR Reduction (vph)	0	2	0	10	0	0
Lane Group Flow (vph)	19	11	2401	30	22	491
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.5	4.6	58.8	58.8	3.1	69.4
Effective Green, g (s)	1.5	4.6	58.8	58.8	3.1	69.4
Actuated g/C Ratio	0.02	0.06	0.76	0.76	0.04	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	34	93	2685	1201	70	3169
v/s Ratio Prot	c0.01	0.00	c0.68		c0.01	0.14
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.56	0.12	0.89	0.03	0.31	0.15
Uniform Delay, d1	37.7	34.5	7.0	2.3	36.2	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	18.4	0.6	4.3	0.0	2.6	0.0
Delay (s)	56.1	35.1	11.3	2.3	38.7	0.5
Level of Service	E	D	B	A	D	A
Approach Delay (s)	47.6		11.2			2.2
Approach LOS	D		B			A
Intersection Summary						
HCM 2000 Control Delay			10.0		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.86			
Actuated Cycle Length (s)			77.5		Sum of lost time (s)	14.1
Intersection Capacity Utilization			76.5%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	3	0	53	2	0	51	3	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	12	0	98	4	0	81	5	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	12	0	102	81	5					
Volume Left (vph)	0	0	98	0	0					
Volume Right (vph)	0	0	0	0	5					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.2	3.2					
Degree Utilization, x	0.01	0.00	0.12	0.09	0.00					
Capacity (veh/h)	822	1121	809	828	1121					
Control Delay (s)	7.3	6.2	7.9	7.6	6.2					
Approach Delay (s)	7.3		7.9	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.7							
Level of Service			A							
Intersection Capacity Utilization			19.7%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (2 CVN) with Alternative 1 No Hooper








Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑	↑	↑	↑			
Volume (vph)	3	43	0	0	38	262	4	2078	59	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.72	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1346	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	4	57	0	0	53	364	4	2211	63	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	54	0	0	27	0	0	0
Lane Group Flow (vph)	4	57	0	0	53	310	4	2211	36	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	18.5	18.5			18.5	18.5	47.7	43.6	43.6			
Effective Green, g (s)	18.5	18.5			18.5	18.5	47.7	43.6	43.6			
Actuated g/C Ratio	0.25	0.25			0.25	0.25	0.63	0.58	0.58			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	329	456			456	387	1118	2043	914			
v/s Ratio Prot		0.03			0.03		0.00	c0.62				
v/s Ratio Perm	0.00					c0.20			0.02			
v/c Ratio	0.01	0.12			0.12	0.80	0.00	1.08	0.04			
Uniform Delay, d1	21.6	22.2			22.1	26.8	5.1	15.9	6.9			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	11.3	0.0	46.3	0.0			
Delay (s)	21.6	22.3			22.3	38.0	5.1	62.2	6.9			
Level of Service	C	C			C	D	A	E	A			
Approach Delay (s)		22.3				36.0		60.6			0.0	
Approach LOS		C				D		E			A	
Intersection Summary												
HCM 2000 Control Delay		56.0				HCM 2000 Level of Service		E				
HCM 2000 Volume to Capacity ratio		1.00										
Actuated Cycle Length (s)		75.5				Sum of lost time (s)		13.4				
Intersection Capacity Utilization		93.2%				ICU Level of Service		F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (2 CVN) with Alternative 1 No Hooper













Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	0	1846	0	362	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	0	1923	0	458	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1420	229	458		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1420	229	458		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	127	773	1099		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	961	961	305	153	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.57	0.57	0.18	0.09	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			54.4%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	470	2	45	50	8	21	30	1692	11	4	145	214
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	1.00		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1594		1770	1661		1770	3536		1770	3223	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1594		1770	1661		1770	3536		1770	3223	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	534	2	51	161	26	68	32	1781	12	6	210	310
RTOR Reduction (vph)	0	34	0	0	65	0	0	1	0	0	190	0
Lane Group Flow (vph)	534	19	0	161	29	0	32	1792	0	6	330	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	32.4	32.4		5.0	5.0		3.3	39.9		1.0	37.6	
Effective Green, g (s)	32.4	32.4		5.0	5.0		3.3	39.9		1.0	37.6	
Actuated g/C Ratio	0.33	0.33		0.05	0.05		0.03	0.41		0.01	0.39	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	590	531		91	85		60	1451		18	1246	
v/s Ratio Prot	c0.30	0.01		c0.09	0.02		c0.02	c0.51		0.00	0.10	
v/s Ratio Perm												
v/c Ratio	0.91	0.04		1.77	0.35		0.53	1.24		0.33	0.26	
Uniform Delay, d1	30.9	21.9		46.1	44.5		46.2	28.7		47.8	20.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	17.4	0.0		386.9	2.5		8.8	112.0		10.6	0.1	
Delay (s)	48.3	21.9		433.0	47.0		55.0	140.7		58.4	20.5	
Level of Service	D	C		F	D		E	F		E	C	
Approach Delay (s)		45.9			290.7			139.2			20.9	
Approach LOS		D			F			F			C	
Intersection Summary												
HCM 2000 Control Delay			114.7					HCM 2000 Level of Service			F	
HCM 2000 Volume to Capacity ratio			1.14									
Actuated Cycle Length (s)			97.2					Sum of lost time (s)			18.9	
Intersection Capacity Utilization			88.2%					ICU Level of Service			E	
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	9	213	19	0	1530	20	40	27	1900	23	48	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5024			5075		1770	1846			1732	
Flt Permitted	0.95	1.00			1.00		0.65	1.00			0.14	
Satd. Flow (perm)	1770	5024			5075		1210	1846			250	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	10	239	21	0	1681	22	48	32	2	30	62	78
RTOR Reduction (vph)	0	6	0	0	1	0	0	2	0	0	17	0
Lane Group Flow (vph)	10	254	0	0	1702	0	48	32	0	0	153	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1900			2061		235	358			41	
v/s Ratio Prot	c0.01	0.05			c0.34			0.02				
v/s Ratio Perm							c0.04				c0.61	
v/c Ratio	0.05	0.13			0.83		0.20	0.09			3.74	
Uniform Delay, d1	71.5	36.6			47.8		60.8	59.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			3.6		0.4	0.1			1290.2	
Delay (s)	71.6	36.8			51.4		61.3	59.6			1365.2	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		38.1			51.4			60.5			1365.2	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		150.5			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.13										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		68.4%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	230	0	935	1540	10	0	0	0	0	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	280	0	995	1638	11	0	0	0	0	0	20
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	280	0	995	1649	0	0	0	0	0	0	8
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.06		c0.29	c0.47							
v/s Ratio Perm												0.00
v/c Ratio		0.15		0.58	0.51							0.01
Uniform Delay, d1		36.8		31.7	1.4							34.9
Progression Factor		0.41		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.5	0.1							0.0
Delay (s)		15.3		32.2	1.5							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.3			13.1			0.0				35.0
Approach LOS		B			B			A				C
Intersection Summary												
HCM 2000 Control Delay				13.4	HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio				0.57								
Actuated Cycle Length (s)				180.0	Sum of lost time (s)			21.9				
Intersection Capacity Utilization				64.6%	ICU Level of Service			C				
Analysis Period (min)				15								
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	17	238	0	0	131	755	0	0	0	121	0	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	20	283	0	0	141	812	0	0	0	133	0	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	953			283			877	1276	283	871	871	547
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	953			283			877	1276	283	871	871	547
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			100			100	100	100	50	100	99
cM capacity (veh/h)	721			1279			260	162	756	266	281	537
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	304	953	0	140								
Volume Left	20	0	0	133								
Volume Right	0	812	0	7								
cSH	721	1279	1700	272								
Volume to Capacity	0.03	0.00	0.00	0.51								
Queue Length 95th (ft)	2	0	0	68								
Control Delay (s)	1.0	0.0	0.0	31.3								
Lane LOS	A			D								
Approach Delay (s)	1.0	0.0	0.0	31.3								
Approach LOS				D								
Intersection Summary												
Average Delay				3.3								
Intersection Capacity Utilization				67.2%								
Analysis Period (min)				15								
ICU Level of Service C												

NBC Coastal Campus
22: 3rd St & Palm Ave

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	350	5	27	862	25	12	15	129	12	11	15
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	9	407	6	29	927	27	15	19	159	15	14	19
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	413	29	954	193	48						
Volume Left (vph)	9	0	29	0	15	15						
Volume Right (vph)	0	6	0	27	159	19						
Hadj (s)	0.53	0.02	0.53	0.01	-0.45	-0.14						
Departure Headway (s)	6.7	6.2	6.5	5.9	6.3	7.1						
Degree Utilization, x	0.02	0.71	0.05	1.0	0.34	0.09						
Capacity (veh/h)	531	570	541	610	541	450						
Control Delay (s)	8.6	21.3	8.6	281.6	12.5	10.9						
Approach Delay (s)	21.0		273.6		12.5	10.9						
Approach LOS	C		F		B	B						
Intersection Summary												
Delay				170.6								
Level of Service				F								
Intersection Capacity Utilization				63.4%								
Analysis Period (min)				15								
ICU Level of Service B												

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

HCM Unsignalized Intersection Capacity Analysis
KHA
Synchro 8 Report
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Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

HCM Signalized Intersection Capacity Analysis
KHA
Synchro 8 Report
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NBC Coastal Campus
25: Delaware St & Palm Ave

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗			↙	
Volume (veh/h)	567	5	0	0	3	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	616	5	0	0	3	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			622		616	616
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			622		616	616
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			959		454	490
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	616	5	10			
Volume Left	0	0	3			
Volume Right	0	5	7			
cSH	1700	1700	478			
Volume to Capacity	0.36	0.00	0.02			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.7			
Lane LOS			B			
Approach Delay (s)	0.0		12.7			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			39.8%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↙
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑↑	↘	↙	↑↑↑			↗			↙	↘
Volume (vph)	24	784	40	27	2145		188	42	58	102	52	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5048		1770	5068			3324			3363	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5048		1770	5068			3324			3363	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	29	933	48	30	2357	55	227	51	70	124	63	34
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	29	978	0	30	2411	0	0	336	0	0	213	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2122		157	2018			646			653	
v/s Ratio Prot	0.02	c0.19		c0.02	c0.48			c0.10			c0.06	
v/s Ratio Perm												
v/c Ratio	0.15	0.46		0.19	1.19			0.52			0.33	
Uniform Delay, d1	72.3	37.5		76.0	54.1			65.0			62.4	
Progression Factor	1.00	1.00		1.17	0.87			1.00			1.00	
Incremental Delay, d2	0.4	0.7		0.4	91.3			0.7			0.3	
Delay (s)	72.7	38.2		89.4	138.7			65.7			62.6	
Level of Service	E	D		F	F			E			E	
Approach Delay (s)		39.2			138.1			65.7			62.6	
Approach LOS		D			F			E			E	
Intersection Summary												
HCM 2000 Control Delay		102.8			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		79.6%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑↑↑	↔	↔	↑↑↑	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	3	1047	40	23	2343	14	21	5	35	63	12	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5081			1690		1770	1699	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.63	1.00	
Satd. Flow (perm)	1770	5057		1770	5081			1535		1182	1699	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	3	1176	45	26	2662	16	29	7	48	90	17	24
RTOR Reduction (vph)	0	2	0	0	0	0	0	27	0	0	20	0
Lane Group Flow (vph)	3	1219	0	26	2678	0	0	57	0	90	21	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			255		197	283	
v/s Ratio Prot	0.00	0.24		c0.01	c0.53						0.01	
v/s Ratio Perm								0.04		c0.08		
v/c Ratio	0.08	0.35		0.22	0.72			0.22		0.46	0.07	
Uniform Delay, d1	86.2	11.6		79.6	13.7			64.9		67.7	63.3	
Progression Factor	1.62	0.25		1.40	0.40			1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.3		0.4	0.5			0.4		1.7	0.1	
Delay (s)	140.5	3.2		112.1	6.0			65.4		69.3	63.4	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.5			7.0			65.4			67.5	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		9.1			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		79.0%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑↑↑	↔	↔	↑↑↑	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	4	1127	72	110	2176	59	168	22	104	192	41	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1266	81	133	2622	71	189	25	117	256	55	23
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	97	0	3	0
Lane Group Flow (vph)	4	1343	0	133	2622	41	0	214	20	0	331	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.27		c0.08	c0.52			c0.12			c0.10	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.10	0.60		0.68	0.97	0.05		0.70	0.07		0.57	
Uniform Delay, d1	86.2	38.1		76.9	40.8	20.3		70.1	62.5		68.4	
Progression Factor	1.18	0.60		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	1.2		9.0	11.6	0.1		6.7	0.1		1.4	
Delay (s)	102.6	24.0		85.9	52.4	20.4		76.8	62.6		69.7	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		24.2			53.1			71.8			69.7	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		47.5			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.84										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		96.0%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												



































NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	16	1430	29	50	2324	14	18	8	56	44	3	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1673			1724	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.79	
Satd. Flow (perm)	1770	5070		1770	5081			1562			1406	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	17	1554	32	58	2702	16	21	10	67	58	4	32
RTOR Reduction (vph)	0	2	0	0	0	0	0	53	0	0	25	0
Lane Group Flow (vph)	17	1584	0	58	2718	0	0	45	0	0	69	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	1.5	37.9		2.7	39.1			15.3			15.3	
Effective Green, g (s)	1.5	37.9		2.7	39.1			15.3			15.3	
Actuated g/C Ratio	0.02	0.53		0.04	0.55			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	37	2683		66	2774			333			300	
v/s Ratio Prot	0.01	0.31		c0.03	c0.53							
v/s Ratio Perm								0.03			c0.05	
v/c Ratio	0.46	0.59		0.88	0.98			0.14			0.23	
Uniform Delay, d1	34.6	11.5		34.3	15.9			22.8			23.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	8.8	0.4		69.1	12.5			0.2			0.4	
Delay (s)	43.4	11.9		103.4	28.4			23.0			23.7	
Level of Service	D	B		F	C			C			C	
Approach Delay (s)		12.2			30.0			23.0			23.7	
Approach LOS		B			C			C			C	
Intersection Summary												
HCM 2000 Control Delay	23.5			HCM 2000 Level of Service				C				
HCM 2000 Volume to Capacity ratio	0.79											
Actuated Cycle Length (s)	71.6			Sum of lost time (s)				15.7				
Intersection Capacity Utilization	63.6%			ICU Level of Service				B				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

															
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR			
Lane Configurations		  			  						  				  
Volume (vph)	105	1445	34	280	2253	246	87	83	884	269	106	88			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6			
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95			
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85			
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1748	1504			
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1748	1504			
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84			
Adj. Flow (vph)	122	1680	40	298	2397	262	97	92	982	320	126	105			
RTOR Reduction (vph)	0	2	0	0	0	69	0	147	173	0	3	65			
Lane Group Flow (vph)	122	1718	0	298	2397	193	97	397	357	320	134	29			
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm			
Protected Phases	1	6		5	2		7	4		3	8				
Permitted Phases						2			4			8			
Actuated Green, G (s)	6.0	35.1		17.9	47.0	47.0	8.6	35.4	35.4	10.3	37.1	37.1			
Effective Green, g (s)	6.0	35.1		17.9	47.0	47.0	8.6	35.4	35.4	10.3	37.1	37.1			
Actuated g/C Ratio	0.05	0.29		0.15	0.39	0.39	0.07	0.29	0.29	0.09	0.31	0.31			
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6			
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	170	1475		262	1981	616	126	454	441	293	537	462			
v/s Ratio Prot	0.04	0.34		c0.17	c0.47		0.05	c0.26		c0.09	0.08				
v/s Ratio Perm						0.12			0.24			0.02			
v/c Ratio	0.72	1.16		1.14	1.21	0.31	0.77	0.87	0.81	1.09	0.25	0.06			
Uniform Delay, d1	56.5	42.8		51.4	36.8	25.6	55.0	40.5	39.5	55.1	31.3	29.5			
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	13.5	81.9		97.8	99.5	0.3	24.2	16.9	10.5	79.5	0.2	0.1			
Delay (s)	69.9	124.7		149.1	136.3	25.9	79.2	57.3	50.0	134.6	31.6	29.5			
Level of Service	E	F		F	F	C	E	E	D	F	C	C			
Approach Delay (s)		121.0			127.8			55.8			91.1				
Approach LOS		F			F			E			F				
Intersection Summary															
HCM 2000 Control Delay	109.9			HCM 2000 Level of Service				F							
HCM 2000 Volume to Capacity ratio	1.10														
Actuated Cycle Length (s)	120.6			Sum of lost time (s)				21.9							
Intersection Capacity Utilization	96.1%			ICU Level of Service				F							
Analysis Period (min)	15														
c Critical Lane Group															

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	326	1280	0	178	1500
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	366	1376	0	198	1667
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	366	1376	0	198	1664
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.10	c0.39		0.11	c0.60
v/s Ratio Perm						
v/c Ratio		0.14	1.18		0.96	1.09
Uniform Delay, d1		2.5	26.8		35.1	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	89.7		49.7	50.3
Delay (s)		2.5	116.5		84.8	68.3
Level of Service		A	F		F	E
Approach Delay (s)		2.5	116.5		70.0	
Approach LOS		A	F		E	
Intersection Summary						
HCM 2000 Control Delay			80.9		HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio			1.20			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			76.2%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	504	0	0	489	600	908	2	165	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3247		1681	1631				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3247		1681	1631				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	579	0	0	532	652	987	2	179	0	0	0
RTOR Reduction (vph)	0	0	0	0	402	0	0	29	0	0	0	0
Lane Group Flow (vph)	0	579	0	0	782	0	592	547	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		18.8			18.8		22.3	22.3				
Effective Green, g (s)		18.8			18.8		22.3	22.3				
Actuated g/C Ratio		0.38			0.38		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1355			1243		763	740				
v/s Ratio Prot		0.16			c0.24							
v/s Ratio Perm							c0.35	0.34				
v/c Ratio		0.43			0.63		0.78	0.74				
Uniform Delay, d1		11.2			12.3		11.3	11.0				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			1.0		5.0	3.9				
Delay (s)		11.4			13.3		16.3	14.9				
Level of Service		B			B		B	B				
Approach Delay (s)		11.4			13.3		15.6				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					13.8					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.71							
Actuated Cycle Length (s)					49.1					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					76.4%					ICU Level of Service	D	
Analysis Period (min)					15							
c Critical Lane Group												





















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔			↔	↔	
Volume (veh/h)	0	4	5	722	87	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	16	7	1003	212	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1229	212	212			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1229	212	212			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	195	828	1358			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	16	1010	212			
Volume Left	0	7	0			
Volume Right	16	0	0			
cSH	828	1358	1700			
Volume to Capacity	0.02	0.01	0.12			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	9.4	0.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.4	0.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			52.0%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Volume (veh/h)	0	3988	18	0	1787	246	0	0	915	0	0	56
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4154	19	0	1842	254	0	0	1017	0	0	85
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2116			4193			4902	6299	1434	3394	6182	781
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2116			4193			4902	6299	1434	3394	6182	781
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	44	100	100	74
cM capacity (veh/h)	251			36			0	0	1817	1	0	326
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1662	1662	850	737	737	622	1017	85				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	19	0	0	254	1017	85				
cSH	1700	1700	1700	1700	1700	1700	1817	326				
Volume to Capacity	0.98	0.98	0.50	0.43	0.43	0.37	0.56	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	92	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.5	19.9				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.5	19.9				
Approach LOS							A	C				
Intersection Summary												
Average Delay	1.5											
Intersection Capacity Utilization	142.7%			ICU Level of Service					H			
Analysis Period (min)	15											

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3751	132	0	1825	0	185	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3867	136	0	1901	0	226	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4023		4609	1397	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4023		4609	1397	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			42		1	126	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1547	1547	909	634	634	634	226
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	136	0	0	0	226
cSH	1700	1700	1700	1700	1700	1700	126
Volume to Capacity	0.91	0.91	0.53	0.37	0.37	0.37	1.79
Queue Length 95th (ft)	0	0	0	0	0	0	433
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	443.9
Lane LOS							F
Approach Delay (s)	0.0			0.0			443.9
Approach LOS							F
Intersection Summary							
Average Delay			16.3				
Intersection Capacity Utilization			95.5%		ICU Level of Service		F
Analysis Period (min)			15				



















NBC Coastal Campus
3: Orange Ave & Third St

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	↗
Volume (vph)	0	0	0	968	639	110	102	254		0	0	867
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4636		1770	3539				3526
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4636		1770	3539				3526
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1019	673	116	105	262	0	0	0	894
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	0	2
Lane Group Flow (vph)	0	0	0	509	1287	0	105	262	0	0	0	910
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1432		98	1989				1567
v/s Ratio Prot				c0.33	0.28		c0.06	0.07				c0.26
v/s Ratio Perm												
v/c Ratio				1.08	0.96dl		1.07	0.13				0.58
Uniform Delay, d1				31.1	29.8		42.5	9.3				18.7
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				65.7	7.9		111.5	0.0				0.6
Delay (s)				96.8	37.6		154.0	9.3				19.3
Level of Service				F	D		F	A				B
Approach Delay (s)		0.0			54.3			50.7				19.3
Approach LOS		A			D			D				B
Intersection Summary												
HCM 2000 Control Delay			43.5			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			0.81									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			17.2			
Intersection Capacity Utilization		135.6%				ICU Level of Service			H			
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												










NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	2123	110	0	0	0	0	356	373	766	1091	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3179	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3179	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2333	121	0	0	0	0	414	434	798	1136	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2341	92	0	0	0	0	582	231	798	1136	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.0	53.0	44.2	100.0	
Effective Green, g (s)		63.4	63.4					53.0	53.0	44.2	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					962	408	867	2022	
v/s Ratio Prot		c0.46						c0.18		c0.23	0.32	
v/s Ratio Perm			0.06						0.17			
v/c Ratio		1.27	0.16					0.61	0.57	0.92	0.56	
Uniform Delay, d1		55.8	37.8					52.1	51.3	63.7	23.7	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		126.6	0.1					1.1	1.8	14.8	0.4	
Delay (s)		182.4	37.9					53.2	53.1	78.5	24.0	
Level of Service		F	D					D	D	E	C	
Approach Delay (s)		175.3		0.0				53.1			46.5	
Approach LOS		F		A				D			D	
Intersection Summary												
HCM 2000 Control Delay		108.1		HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio		0.95										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		135.6%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave













Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	203	14	951	787	0	1392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3250			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3250			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	260	18	1069	884	0	1497
RTOR Reduction (vph)	2	0	71	0	0	0
Lane Group Flow (vph)	276	0	1882	0	0	1497
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	296		2455			2540
v/s Ratio Prot	c0.17		c0.58			0.45
v/s Ratio Perm						
v/c Ratio	0.93		0.77			0.59
Uniform Delay, d1	64.0		11.4			8.6
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	35.0		2.4			1.0
Delay (s)	99.0		13.7			9.6
Level of Service	F		B			A
Approach Delay (s)	99.0		13.7			9.6
Approach LOS	F		B			A
Intersection Summary						
HCM 2000 Control Delay		18.4		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.82				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		85.0%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Horizon Year (2 CVN) with Alternative 1 No Hooper







Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	168	12	34	30	12	29	27	1642	58	79	1654	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	0.99		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1724		1770	3521		1770	3488	
Flt Permitted	0.65	0.65	1.00		0.81		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1153	1158	1583		1422		1770	3521		1770	3488	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	215	15	44	47	19	45	29	1766	62	86	1798	193
RTOR Reduction (vph)	0	0	36	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	114	116	8	0	89	0	29	1827	0	86	1988	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	19.7	19.7	19.7		19.7		4.7	70.9		8.1	74.3	
Effective Green, g (s)	19.7	19.7	19.7		19.7		4.7	70.9		8.1	74.3	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.04	0.62		0.07	0.65	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	200	200	274		246		73	2199		126	2283	
v/s Ratio Prot							0.02	0.52		c0.05	c0.57	
v/s Ratio Perm	0.10	c0.10	0.00		0.06							
v/c Ratio	0.57	0.58	0.03		0.36		0.40	0.83		0.68	0.87	
Uniform Delay, d1	43.0	43.1	38.9		41.3		53.0	16.6		51.4	15.7	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.7	4.0	0.0		0.9		3.5	2.8		14.2	3.9	
Delay (s)	46.7	47.1	39.0		42.3		56.5	19.4		65.6	19.7	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		45.7			42.3			20.0			21.6	
Approach LOS		D			D			C			C	
Intersection Summary												
HCM 2000 Control Delay		23.0			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		113.5			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		81.3%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Horizon Year (2 CVN) with Alternative 1 No Hooper












Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	9	0	169	0	1415	0	38	1816	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	13	0	245	0	1505	0	41	1953	0
RTOR Reduction (vph)	0	0	0	0	198	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	60	0	0	1505	0	41	1953	0
Turn Type				Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.0			42.2		2.8	49.2	
Effective Green, g (s)					14.0			42.2		2.8	49.2	
Actuated g/C Ratio					0.19			0.58		0.04	0.67	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					309			2037		67	2375	
v/s Ratio Prot					c0.04			0.43		0.02	c0.55	
v/s Ratio Perm												
v/c Ratio					0.19			0.74		0.61	0.82	
Uniform Delay, d1					24.9			11.5		34.7	8.8	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			1.4		15.4	2.4	
Delay (s)					25.2			12.9		50.1	11.3	
Level of Service					C			B		D	B	
Approach Delay (s)		0.0			25.2			12.9			12.1	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					13.3			HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio					0.79							
Actuated Cycle Length (s)					73.3			Sum of lost time (s)		18.9		
Intersection Capacity Utilization					69.6%			ICU Level of Service		C		
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Horizon Year (2 CVN) with Alternative 1 No Hooper






Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	263	42	116	8	64	356	27	809	3	121	1664	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1517		1852	1512	1770	3539	1353	1770	3516	
Flt Permitted	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1517		1852	1512	1770	3539	1353	1770	3516	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	346	55	153	9	70	387	30	889	3	129	1770	68
RTOR Reduction (vph)	0	0	123	0	0	208	0	0	2	0	2	0
Lane Group Flow (vph)	346	55	30	0	79	179	30	889	1	129	1836	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.8	27.8	27.8		20.3	20.3	2.9	57.6	57.6	15.4	70.1	
Effective Green, g (s)	27.8	27.8	27.8		20.3	20.3	2.9	57.6	57.6	15.4	70.1	
Actuated g/C Ratio	0.20	0.20	0.20		0.14	0.14	0.02	0.41	0.41	0.11	0.50	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	350	368	300		267	218	36	1450	554	194	1754	
v/s Ratio Prot	c0.20	0.03			0.04		0.02	0.25		c0.07	c0.52	
v/s Ratio Perm			0.02			c0.12			0.00			
v/c Ratio	0.99	0.15	0.10		0.30	0.82	0.83	0.61	0.00	0.66	1.05	
Uniform Delay, d1	56.2	46.6	46.1		53.7	58.3	68.6	32.7	24.5	60.1	35.2	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	44.6	0.2	0.1		0.6	21.4	85.2	1.9	0.0	8.3	35.0	
Delay (s)	100.8	46.8	46.3		54.3	79.7	153.8	34.6	24.5	68.4	70.2	
Level of Service	F	D	D		D	E	F	C	C	E	E	
Approach Delay (s)		80.3			75.4			38.5			70.1	
Approach LOS		F			E			D			E	
Intersection Summary												
HCM 2000 Control Delay		64.7			HCM 2000 Level of Service					E		
HCM 2000 Volume to Capacity ratio		1.00										
Actuated Cycle Length (s)		140.5			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		85.8%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	312	428	4	54	165	4
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	347	476	6	76	188	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	423	44			82	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	423	44			82	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	33	54			88	
cM capacity (veh/h)	515	1027			1516	
Direction, Lane #						
Volume Total	822	82	192			
Volume Left	347	0	188			
Volume Right	476	76	0			
cSH	1055	1700	1516			
Volume to Capacity	0.78	0.05	0.12			
Queue Length 95th (ft)	206	0	11			
Control Delay (s)	19.3	0.0	7.6			
Lane LOS	C		A			
Approach Delay (s)	19.3	0.0	7.6			
Approach LOS	C					
Intersection Summary						
Average Delay		15.8				
Intersection Capacity Utilization		40.0%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕		↕
Volume (vph)	318	4	849	57	0	1813
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1772		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1772		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	403	5	943	63	0	2037
RTOR Reduction (vph)	1	0	0	36	0	0
Lane Group Flow (vph)	407	0	943	27	0	2037
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	843		1520	633		1520
v/s Ratio Prot	c0.23		0.27			c0.58
v/s Ratio Perm				0.02		
v/c Ratio	0.48		0.62	0.04		1.34
Uniform Delay, d1	18.7		23.3	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.8	0.0		157.6
Delay (s)	19.2		24.1	17.4		187.5
Level of Service	B		C	B		F
Approach Delay (s)	19.2		23.7			187.5
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay		119.9		HCM 2000 Level of Service		F
HCM 2000 Volume to Capacity ratio		0.89				
Actuated Cycle Length (s)		105.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		100.0%		ICU Level of Service		G
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕	↕	↕
Volume (veh/h)	5	8	686	4	18	1664
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	10	16	798	5	20	1829
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1754	401			802	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1754	401			802	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	87	97			98	
cM capacity (veh/h)	75	599			817	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	532	271	20	914	914
Volume Left	10	0	0	20	0	0
Volume Right	16	0	5	0	0	0
cSH	162	1700	1700	817	1700	1700
Volume to Capacity	0.16	0.31	0.16	0.02	0.54	0.54
Queue Length 95th (ft)	14	0	0	2	0	0
Control Delay (s)	31.5	0.0	0.0	9.5	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	31.5	0.0		0.1		
Approach LOS	D					
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			56.0%		ICU Level of Service	B
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	35	66	623	14	120	1549
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	38	72	708	16	132	1702
RTOR Reduction (vph)	0	49	0	8	0	0
Lane Group Flow (vph)	38	23	708	8	132	1702
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	11.4	25.2	25.9	25.9	8.7	43.4
Effective Green, g (s)	11.4	20.1	25.9	25.9	8.7	43.4
Actuated g/C Ratio	0.18	0.31	0.40	0.40	0.14	0.68
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	314	496	1429	639	240	2396
v/s Ratio Prot	c0.02	0.01	0.20		0.07	c0.48
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.05	0.50	0.01	0.55	0.71
Uniform Delay, d1	22.1	15.3	14.2	11.4	25.9	6.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.3	0.0	2.7	1.0
Delay (s)	22.3	15.4	14.5	11.4	28.6	7.5
Level of Service	C	B	B	B	C	A
Approach Delay (s)	17.8		14.4			9.0
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay		10.8		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.70				
Actuated Cycle Length (s)		64.1		Sum of lost time (s)	18.1	
Intersection Capacity Utilization		54.7%		ICU Level of Service	A	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↕			↕
Volume (veh/h)	0	27	612	22	0	1584
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	36	703	25	0	1722
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1577	364			729	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1577	364			729	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	94			100	
cM capacity (veh/h)	100	632			871	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	36	469	260	861	861	
Volume Left	0	0	0	0	0	
Volume Right	36	0	25	0	0	
cSH	632	1700	1700	1700	1700	
Volume to Capacity	0.06	0.28	0.15	0.51	0.51	
Queue Length 95th (ft)	5	0	0	0	0	
Control Delay (s)	11.0	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	11.0	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay		0.2				
Intersection Capacity Utilization		47.1%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	35	30	604	22	27	1556
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	49	42	643	23	30	1710
RTOR Reduction (vph)	0	36	0	10	0	0
Lane Group Flow (vph)	49	6	643	13	30	1710
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	4.2	7.0	28.6	28.6	2.8	38.9
Effective Green, g (s)	4.2	7.0	28.6	28.6	2.8	38.9
Actuated g/C Ratio	0.08	0.14	0.58	0.58	0.06	0.78
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	149	222	2036	910	99	2769
v/s Ratio Prot	c0.03	0.00	0.18		0.02	c0.48
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.33	0.03	0.32	0.01	0.30	0.62
Uniform Delay, d1	21.4	18.4	5.5	4.5	22.5	2.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	0.0	0.1	0.0	1.7	0.4
Delay (s)	22.7	18.5	5.6	4.5	24.2	2.7
Level of Service	C	B	A	A	C	A
Approach Delay (s)	20.8		5.5			3.1
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			4.4		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.71			
Actuated Cycle Length (s)			49.7		Sum of lost time (s)	14.1
Intersection Capacity Utilization			53.9%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	13	17	98	9	0	208	15	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	14	18	127	12	0	234	17	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	14	18	139	251						
Volume Left (vph)	0	0	127	0						
Volume Right (vph)	0	18	0	17						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.1	3.2	4.1	3.2						
Degree Utilization, x	0.02	0.02	0.16	0.22						
Capacity (veh/h)	867	1121	860	1122						
Control Delay (s)	7.1	6.3	7.9	7.1						
Approach Delay (s)	6.6		7.9	7.1						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.3							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱	↰	↱	↰			
Volume (vph)	12	215	0	0	95	160	14	513	80	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.69	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1279	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	14	244	0	0	109	184	15	564	88	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	120	0	53	0	0	0	0
Lane Group Flow (vph)	14	244	0	0	109	64	15	564	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	10.7	10.7			10.7	10.7	16.2	16.2	16.2			
Effective Green, g (s)	10.7	10.7			10.7	10.7	16.2	16.2	16.2			
Actuated g/C Ratio	0.27	0.27			0.27	0.27	0.40	0.40	0.40			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	339	494			494	420	711	1422	636			
v/s Ratio Prot		c0.13			0.06		0.01	c0.16				
v/s Ratio Perm	0.01					0.04			0.02			
v/c Ratio	0.04	0.49			0.22	0.15	0.02	0.40	0.06			
Uniform Delay, d1	11.0	12.5			11.5	11.3	7.3	8.6	7.4			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	0.8			0.2	0.2	0.0	0.2	0.0			
Delay (s)	11.0	13.3			11.8	11.5	7.3	8.8	7.4			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		13.2			11.6			8.5			0.0	
Approach LOS		B			B			A			A	
Intersection Summary												
HCM 2000 Control Delay		10.3									B	
HCM 2000 Volume to Capacity ratio		0.43										
Actuated Cycle Length (s)		40.3				Sum of lost time (s)		13.4				
Intersection Capacity Utilization		43.7%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (2 CVN) with Alternative 1 No Hooper









Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱	↰
Volume (veh/h)	0	0	0	680	0	1750	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	0	0	773	0	1944	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2331	972	1944		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2331	972	1944		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	31	252	297		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	386	386	1296	648	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.23	0.23	0.76	0.38	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			51.7%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (2 CVN) with Alternative 1 No Hooper









Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	262	7	79	19	4	7	85	352	58	19	1198	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.86		1.00	0.90		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1605		1770	1685		1770	3464		1770	3444	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1605		1770	1685		1770	3464		1770	3444	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	349	9	105	38	8	14	93	387	64	21	1331	290
RTOR Reduction (vph)	0	78	0	0	14	0	0	11	0	0	15	0
Lane Group Flow (vph)	349	36	0	38	8	0	93	440	0	21	1606	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	24.9	24.9		2.7	2.7		5.7	47.2		1.7	43.2	
Effective Green, g (s)	24.9	24.9		2.7	2.7		5.7	47.2		1.7	43.2	
Actuated g/C Ratio	0.26	0.26		0.03	0.03		0.06	0.49		0.02	0.45	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	461	418		50	47		105	1713		31	1559	
v/s Ratio Prot	c0.20	0.02		c0.02	0.00		c0.05	c0.13		0.01	c0.47	
v/s Ratio Perm												
v/c Ratio	0.76	0.09		0.76	0.18		0.89	0.26		0.68	1.03	
Uniform Delay, d1	32.5	26.7		46.0	45.3		44.5	14.0		46.6	26.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.0	0.1		48.9	1.8		52.9	0.1		45.6	30.8	
Delay (s)	39.4	26.7		95.0	47.1		97.4	14.0		92.2	56.9	
Level of Service	D	C		F	D		F	B		F	E	
Approach Delay (s)		36.3			77.4			28.3			57.4	
Approach LOS		D			E			C			E	
Intersection Summary												
HCM 2000 Control Delay		48.4										
HCM 2000 Volume to Capacity ratio		0.90										
Actuated Cycle Length (s)		95.4						18.9				
Intersection Capacity Utilization		79.3%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	1149	63	0	396	40	18	46	5	28	30	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.99			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5045			5015		1770	1836			1759	
Flt Permitted	0.95	1.00			1.00		0.69	1.00			0.12	
Satd. Flow (perm)	1770	5045			5015		1294	1836			217	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	75	1306	72	0	421	43	26	66	7	33	35	28
RTOR Reduction (vph)	0	3	0	0	7	0	0	2	0	0	8	0
Lane Group Flow (vph)	75	1375	0	0	457	0	26	71	0	0	88	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1908			2036		251	357			36	
v/s Ratio Prot	c0.04	c0.27			c0.09			c0.04				
v/s Ratio Perm							0.02				c0.40	
v/c Ratio	0.38	0.72			0.22		0.10	0.20			2.44	
Uniform Delay, d1	74.3	47.8			34.9		59.6	60.7			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.2	2.4			0.3		0.2	0.3			721.7	
Delay (s)	75.5	50.2			35.2		59.8	61.0			796.7	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		51.5			35.2			60.7			796.7	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		82.2										
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		180.0						22.3				
Intersection Capacity Utilization		68.0%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	1183	0	698	439	44	0	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3491							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3491							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1329	0	743	467	47	0	0	0	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	1329	0	743	514	0	0	0	0	0	0	4
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3172							609
v/s Ratio Prot		c0.26		c0.22	c0.15							
v/s Ratio Perm												0.00
v/c Ratio		0.69		0.39	0.16							0.01
Uniform Delay, d1		47.1		22.2	0.9							34.9
Progression Factor		0.18		1.00	1.00							1.00
Incremental Delay, d2		1.3		0.1	0.0							0.0
Delay (s)		10.0		22.4	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		10.0			13.6		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay			11.9			HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio			0.54									
Actuated Cycle Length (s)			180.0			Sum of lost time (s)		22.3				
Intersection Capacity Utilization			51.9%			ICU Level of Service		A				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave



















Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	6	218	0	0	313	202	0	0	0	748	0	15
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	7	253	0	0	356	230	0	0	0	1133	0	23
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	585			253			761	853	253	738	738	470
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	585			253			761	853	253	738	738	470
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	0	100	96
cM capacity (veh/h)	989			1312			308	294	785	332	343	593
Direction, Lane #												
Volume Total	260	585	0	1156								
Volume Left	7	0	0	1133								
Volume Right	0	230	0	23								
cSH	989	1312	1700	335								
Volume to Capacity	0.01	0.00	0.00	3.45								
Queue Length 95th (ft)	1	0	0	Err								
Control Delay (s)	0.3	0.0	0.0	Err								
Lane LOS	A			A	F							
Approach Delay (s)	0.3	0.0	0.0	Err								
Approach LOS				A	F							
Intersection Summary												
Average Delay			5774.7									
Intersection Capacity Utilization			77.8%			ICU Level of Service		D				
Analysis Period (min)			15									













NBC Coastal Campus
22: 3rd St & Palm Ave

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	942	13	87	487	25	15	40	70	29	34	14
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	10	1208	17	98	547	28	26	70	123	63	74	30
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	10	1224	98	575	219	167						
Volume Left (vph)	10	0	98	0	26	63						
Volume Right (vph)	0	17	0	28	123	30						
Hadj (s)	0.53	0.02	0.53	0.00	-0.28	0.00						
Departure Headway (s)	7.7	7.2	7.6	7.1	7.6	8.1						
Degree Utilization, x	0.02	1.0	0.21	1.0	0.46	0.38						
Capacity (veh/h)	455	510	465	511	452	426						
Control Delay (s)	9.7	675.4	11.4	106.6	17.0	15.9						
Approach Delay (s)	669.9		92.7		17.0	15.9						
Approach LOS	F		F		C	C						
Intersection Summary												
Delay			390.5									
Level of Service			F									
Intersection Capacity Utilization			75.1%		ICU Level of Service		D					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	236	911	586	41	54	181
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	243	939	681	48	64	213
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	729				2131	365
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	729				2131	365
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	72				0	66
cM capacity (veh/h)	871				31	632
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	243	939	454	275	276	
Volume Left	243	0	0	0	64	
Volume Right	0	0	0	48	213	
cSH	871	1700	1700	1700	115	
Volume to Capacity	0.28	0.55	0.27	0.16	2.41	
Queue Length 95th (ft)	29	0	0	0	612	
Control Delay (s)	10.7	0.0	0.0	0.0	722.4	
Lane LOS	B				F	
Approach Delay (s)	2.2		0.0		722.4	
Approach LOS					F	
Intersection Summary						
Average Delay			92.5			
Intersection Capacity Utilization			68.8%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	913	36	32	586	4	58	25	23	13	39	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3519		1770	3536			1760			1840	1583
Flt Permitted	0.41	1.00		0.20	1.00			0.79			0.90	1.00
Satd. Flow (perm)	756	3519		372	3536			1431			1685	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	35	1087	43	35	644	4	71	30	28	17	51	41
RTOR Reduction (vph)	0	4	0	0	0	0	0	22	0	0	0	32
Lane Group Flow (vph)	35	1126	0	35	648	0	0	107	0	0	68	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	21.8	21.8		21.8	21.8			9.3			9.3	9.3
Effective Green, g (s)	21.8	21.8		21.8	21.8			9.3			9.3	9.3
Actuated g/C Ratio	0.54	0.54		0.54	0.54			0.23			0.23	0.23
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	408	1903		201	1912			330			388	365
v/s Ratio Prot		c0.32			0.18							
v/s Ratio Perm	0.05			0.09			c0.08			0.04		0.01
v/c Ratio	0.09	0.59		0.17	0.34		0.33			0.18		0.03
Uniform Delay, d1	4.5	6.2		4.7	5.2		12.9			12.4		12.0
Progression Factor	1.00	1.00		1.00	1.00		1.00			1.00		1.00
Incremental Delay, d2	0.1	0.5		0.4	0.1		0.6			0.2		0.0
Delay (s)	4.5	6.7		5.1	5.3		13.5			12.6		12.0
Level of Service	A	A		A	A		B			B		B
Approach Delay (s)		6.7			5.3		13.5			12.4		
Approach LOS		A			A		B			B		
Intersection Summary												
HCM 2000 Control Delay		6.9			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.51										
Actuated Cycle Length (s)		40.3			Sum of lost time (s)		9.2					
Intersection Capacity Utilization		46.9%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	962	9	0	0	7	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1173	11	0	0	10	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			1184		1173	1173
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1184		1173	1173
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		95	98
cM capacity (veh/h)			590		212	234
Direction, Lane #						
Volume Total	1173	11	15			
Volume Left	0	0	10			
Volume Right	0	11	4			
cSH	1700	1700	218			
Volume to Capacity	0.69	0.01	0.07			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.0	0.0	22.7			
Lane LOS			C			
Approach Delay (s)	0.0		22.7			
Approach LOS			C			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			60.6%		ICU Level of Service	B
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	47	1962	143	66	984	149	112	102	71	197	90	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5034		1770	4985			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5034		1770	4985			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	50	2087	152	67	994	151	123	112	78	221	101	33
RTOR Reduction (vph)	0	5	0	0	11	0	0	18	0	0	4	0
Lane Group Flow (vph)	50	2234	0	67	1134	0	0	295	0	0	351	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2005		196	1985			649			658	
v/s Ratio Prot	0.03	c0.44		c0.04	0.23			c0.09			c0.10	
v/s Ratio Perm												
v/c Ratio	0.26	1.11		0.34	0.57			0.45			0.53	
Uniform Delay, d1	73.2	54.1		73.9	42.2			64.1			65.2	
Progression Factor	1.00	1.00		1.20	0.92			1.00			1.00	
Incremental Delay, d2	0.7	59.1		1.0	1.1			0.5			0.8	
Delay (s)	73.9	113.2		89.8	39.9			64.6			66.0	
Level of Service	E	F		F	D			E			E	
Approach Delay (s)		112.4			42.7			64.6			66.0	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		84.6			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		124.9%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	23	2284	65	56	1446	63	24	12	40	72	15	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.93			1.00	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.95	
Satd. Flow (prot)	1770	5064		1770	5053			1703			1770	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.59	
Satd. Flow (perm)	1770	5064		1770	5053			1541			1103	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.83	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	23	2331	66	58	1491	65	29	14	48	85	18	19
RTOR Reduction (vph)	0	1	0	0	2	0	0	24	0	0	17	0
Lane Group Flow (vph)	23	2396	0	58	1554	0	0	67	0	85	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.3		16.0	130.3			22.5		22.5	22.5	
Effective Green, g (s)	12.0	126.3		16.0	130.3			22.5		22.5	22.5	
Actuated g/C Ratio	0.07	0.70		0.09	0.72			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3553		157	3657			192		137	214	
v/s Ratio Prot	0.01	c0.47		c0.03	c0.31						0.01	
v/s Ratio Perm								0.04		c0.08		
v/c Ratio	0.19	0.67		0.37	0.42			0.35		0.62	0.10	
Uniform Delay, d1	79.4	15.2		77.2	9.9			72.1		74.7	69.7	
Progression Factor	1.43	0.19		1.53	0.27			1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		1.1	0.3			1.1		8.4	0.2	
Delay (s)	113.5	2.9		119.2	2.9			73.2		83.1	69.9	
Level of Service	F	A		F	A			E		F	E	
Approach Delay (s)		4.0			7.1			73.2			79.1	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		66.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑↑↑	↔	↔	↑↑↑	↔	↔	↔	↔	↔	↑↑	↔
Volume (vph)	30	2149	227	179	1530	93	148	46	146	176	51	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5013		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5013		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	32	2286	241	185	1577	96	161	50	159	238	69	31
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	132	0	4	0
Lane Group Flow (vph)	32	2520	0	185	1577	59	0	211	27	0	334	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2219		192	2364	736		305	269		575	
v/s Ratio Prot	0.02	c0.50		c0.10	c0.31			c0.12			c0.10	
v/s Ratio Perm					0.04			0.02				
v/c Ratio	0.20	1.14		0.96	0.67	0.08		0.69	0.10		0.58	
Uniform Delay, d1	76.1	50.1		79.8	37.3	26.8		70.2	63.0		68.7	
Progression Factor	0.98	1.06		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	65.9		54.0	1.5	0.2		12.2	0.7		4.2	
Delay (s)	75.0	118.8		133.9	38.9	27.0		82.4	63.8		73.0	
Level of Service	E	F		F	D	C		F	E		E	
Approach Delay (s)		118.2			47.7			74.4			73.0	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		86.5			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		0.92										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		110.5%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑↑↑	↔	↔	↑↑↑	↔	↔	↔	↔	↔	↑↑	↔
Volume (vph)	11	2294	57	195	1870	18	45	10	93	27	12	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5067		1770	5078			1680			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.88			0.80	
Satd. Flow (perm)	1770	5067		1770	5078			1503			1451	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.95	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	12	2549	63	205	1968	19	53	12	109	33	15	15
RTOR Reduction (vph)	0	2	0	0	1	0	0	78	0	0	12	0
Lane Group Flow (vph)	12	2610	0	205	1986	0	0	96	0	0	51	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.7			17.7	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.7			17.7	
Actuated g/C Ratio	0.01	0.47		0.13	0.60			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2405		233	3032			313			302	
v/s Ratio Prot	0.01	c0.52		c0.12	0.39							
v/s Ratio Perm								c0.06			0.04	
v/c Ratio	0.75	1.09		0.88	0.66			0.31			0.17	
Uniform Delay, d1	42.0	22.3		36.2	11.3			28.4			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	106.0	46.2		29.1	0.5			0.6			0.3	
Delay (s)	148.0	68.5		65.3	11.8			29.0			27.8	
Level of Service	F	E		E	B			C			C	
Approach Delay (s)		68.9			16.8			29.0			27.8	
Approach LOS		E			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		44.4			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		84.9			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		78.9%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↔↔↔		↔	↔↔↔	↔	↔	↔	↔	↔↔	↔	↔
Volume (vph)	216	2226	30	376	1879	636	76	203	611	674	274	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	227	2343	32	404	2020	684	81	216	650	733	298	284
RTOR Reduction (vph)	0	1	0	0	0	86	0	25	309	0	2	122
Lane Group Flow (vph)	227	2374	0	404	2020	598	81	425	107	733	324	134
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.6	36.3		45.0	69.7	69.7	8.9	40.0	40.0	11.8	42.9	42.9
Effective Green, g (s)	11.6	36.3		45.0	69.7	69.7	8.9	40.0	40.0	11.8	42.9	42.9
Actuated g/C Ratio	0.07	0.23		0.29	0.45	0.45	0.06	0.26	0.26	0.08	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	256	1188		513	2286	711	101	421	388	261	483	416
v/s Ratio Prot	0.07	c0.47		c0.23	c0.40		0.05	c0.26		c0.21	c0.19	
v/s Ratio Perm					0.38			0.07				0.09
v/c Ratio	0.89	2.00		0.79	0.88	0.84	0.80	1.01	0.28	2.81	0.67	0.32
Uniform Delay, d1	71.0	59.4		50.6	38.9	37.8	72.2	57.5	45.9	71.6	49.8	44.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	28.5	452.3		7.8	4.5	8.9	35.2	46.1	0.4	824.4	3.6	0.5
Delay (s)	99.6	511.7		58.4	43.4	46.6	107.4	103.6	46.3	896.0	53.4	45.0
Level of Service	F	F		E	D	D	F	F	D	F	D	D
Approach Delay (s)		475.7			46.1			78.8			521.4	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		268.6			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.38										
Actuated Cycle Length (s)		155.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		141.2%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔↔	↔↔		↔	↔↔
Volume (vph)	0	581	980	0	504	1917
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	653	1043	0	554	2107
RTOR Reduction (vph)	0	0	0	0	0	2
Lane Group Flow (vph)	0	653	1043	0	554	2105
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.18	c0.29		0.31	c0.76
v/s Ratio Perm						
v/c Ratio		0.37	1.22		0.84	1.19
Uniform Delay, d1		12.0	30.3		22.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	107.7		9.0	89.5
Delay (s)		12.1	138.0		31.7	104.0
Level of Service		B	F		C	F
Approach Delay (s)		12.1	138.0		88.9	
Approach LOS		B	F		F	
Intersection Summary						
HCM 2000 Control Delay		89.2			HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio		1.28				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		97.8%			ICU Level of Service	F
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑↑				
Volume (vph)	0	1078	0	0	604	287	501	3	123	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1123	0	0	679	322	539	3	132	0	0	0
RTOR Reduction (vph)	0	0	0	0	97	0	0	22	0	0	0	0
Lane Group Flow (vph)	0	1123	0	0	904	0	345	307	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases							2					
Actuated Green, G (s)		21.1			21.1		15.9	15.9				
Effective Green, g (s)		21.1			21.1		15.9	15.9				
Actuated g/C Ratio		0.47			0.47		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1659			1579		593	570				
v/s Ratio Prot		0.32			0.27							
v/s Ratio Perm							0.21	0.19				
v/c Ratio		0.68			0.57		0.58	0.54				
Uniform Delay, d1		9.3			8.7		11.8	11.6				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		1.1			0.5		1.5	1.0				
Delay (s)		10.4			9.2		13.3	12.6				
Level of Service		B			A		B	B				
Approach Delay (s)		10.4			9.2		13.0			0.0		
Approach LOS		B			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		10.6			HCM 2000 Level of Service		B					
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		45.0			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		54.2%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	11	9	166	685	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	18	10	180	993	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1193	993	993			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1193	993	993			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	94	99			
cM capacity (veh/h)	204	298	697			
Direction, Lane #						
Volume Total	18	190	993			
Volume Left	0	10	0			
Volume Right	18	0	0			
cSH	298	697	1700			
Volume to Capacity	0.06	0.01	0.58			
Queue Length 95th (ft)	5	1	0			
Control Delay (s)	17.8	0.7	0.0			
Lane LOS	C	A				
Approach Delay (s)	17.8	0.7	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		46.1%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1421	35	0	3831	557	0	0	480	0	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1712	42	0	4164	605	0	0	600	0	0	13
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4790			1774			3175	6543	632	5078	6261	1731
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4790			1774			3175	6543	632	5078	6261	1731
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	82
cM capacity (veh/h)	20			341			3	0	1359	0	0	75
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	685	685	385	1666	1666	1438	600	13				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	42	0	0	605	600	13				
cSH	1700	1700	1700	1700	1700	1700	1359	75				
Volume to Capacity	0.40	0.40	0.23	0.98	0.98	0.85	0.44	0.18				
Queue Length 95th (ft)	0	0	0	0	0	0	58	15				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	63.4				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	63.4				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				101.5%			ICU Level of Service		G			
Analysis Period (min)				15								

* User Entered Value



















NBC Coastal Campus
2: Pomona Ave & Fourth St

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR						
Lane Configurations	↑↑↑			↑↑↑		↑						
Volume (veh/h)	1282	204	0	3730	0	232						
Sign Control	Free			Free	Stop							
Grade	0%			0%	0%							
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92						
Hourly flow rate (vph)	1457	232	0	4144	0	252						
Pedestrians	20			20	20							
Lane Width (ft)	12.0			12.0	12.0							
Walking Speed (ft/s)	4.0			4.0	4.0							
Percent Blockage	2			2	2							
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume				1709	2994	642						
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol				1709	2994	642						
tC, single (s)				4.1	6.8	6.9						
tC, 2 stage (s)												
tF (s)				2.2	3.5	3.3						
p0 queue free %				100	100	37						
cM capacity (veh/h)				362	10	403						
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1					
Volume Total	583	583	523	1381	1381	1381	252					
Volume Left	0	0	0	0	0	0	0					
Volume Right	0	0	232	0	0	0	252					
cSH	1700	1700	1700	1700	1700	1700	403					
Volume to Capacity	0.34	0.34	0.31	0.81	0.81	0.81	0.63					
Queue Length 95th (ft)	0	0	0	0	0	0	103					
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.7					
Lane LOS							D					
Approach Delay (s)	0.0			0.0			27.7					
Approach LOS							D					
Intersection Summary												
Average Delay				1.1								
Intersection Capacity Utilization				86.9%			ICU Level of Service		E			
Analysis Period (min)				15								




















NBC Coastal Campus
3: Orange Ave & Third St

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1590	1967	345	107	103	0	0	280	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4641		1770	3539			3505	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4641		1770	3539			3505	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1710	2115	371	145	139	0	0	322	15
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1043	3145	0	145	139	0	0	335	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3213		186	872			397	
v/s Ratio Prot				c0.69	0.68		c0.08	0.04			c0.10	
v/s Ratio Perm												
v/c Ratio				0.99	0.98		0.78	0.16			0.84	
Uniform Delay, d1				28.5	27.8		82.6	56.0			82.4	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				25.3	11.3		18.4	0.1			15.1	
Delay (s)				53.9	39.1		101.0	56.1			97.4	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			42.8			79.0			97.4	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay			48.7	HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio			0.95									
Actuated Cycle Length (s)			189.5	Sum of lost time (s)				16.8				
Intersection Capacity Utilization			201.0%	ICU Level of Service				H				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	588	81	0	0	0	0	200	222	455	1473	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3244	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3244	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	639	88	0	0	0	0	233	241	495	1534	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	23	47	0	0	0
Lane Group Flow (vph)	0	640	59	0	0	0	0	304	100	495	1534	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1172	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.43	
v/s Ratio Perm		0.13	0.04						0.07			
v/c Ratio		0.36	0.11					0.26	0.19	0.70	0.74	
Uniform Delay, d1		41.5	37.7					38.6	37.6	63.3	26.4	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.2	1.5	
Delay (s)		41.6	37.8					38.7	37.8	66.5	27.9	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.4			37.3	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.3		HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		201.0%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Horizon Year (2 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↕	↕
Volume (vph)	253	8	1334	702	0	1315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Flt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3314			3362
Flt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3314			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	294	9	1434	755	0	1384
RTOR Reduction (vph)	1	0	56	0	0	0
Lane Group Flow (vph)	302	0	2133	0	0	1384
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	19.9		45.0			45.0
Effective Green, g (s)	19.9		45.0			45.0
Actuated g/C Ratio	0.27		0.61			0.61
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	427		2015			2044
v/s Ratio Prot	c0.19		c0.64			0.41
v/s Ratio Perm						
v/c Ratio	0.71		1.06			0.68
Uniform Delay, d1	24.4		14.5			9.7
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	5.3		37.7			0.9
Delay (s)	29.7		52.2			10.6
Level of Service	C		D			B
Approach Delay (s)	29.7		52.2			10.6
Approach LOS	C		D			B
Intersection Summary						
HCM 2000 Control Delay			35.6		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			1.00			
Actuated Cycle Length (s)			74.0		Sum of lost time (s)	12.1
Intersection Capacity Utilization			86.8%		ICU Level of Service	E
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Horizon Year (2 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↕	↕	↕	↕	↕	↕
Volume (vph)	55	3	12	9	0	7	23	1582	30	46	1480	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Flt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1692	1583		1705		1770	3529		1770	3524	
Flt Permitted	0.74	0.77	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1303	1358	1583		1508		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	64	3	14	18	0	14	27	1883	36	50	1609	47
RTOR Reduction (vph)	0	0	12	0	27	0	0	1	0	0	1	0
Lane Group Flow (vph)	33	34	2	0	5	0	27	1918	0	50	1655	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	16.2	16.2	16.2		16.2		3.0	69.9		4.1	71.0	
Effective Green, g (s)	16.2	16.2	16.2		16.2		3.0	69.9		4.1	71.0	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.67		0.04	0.68	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	210	245		234		50	2365		69	2398	
v/s Ratio Prot							0.02	c0.54		c0.03	0.47	
v/s Ratio Perm	c0.03	0.03	0.00		0.00							
v/c Ratio	0.16	0.16	0.01		0.02		0.54	0.81		0.72	0.69	
Uniform Delay, d1	38.2	38.2	37.3		37.3		50.0	12.4		49.5	10.0	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4	0.0		0.0		11.4	2.2		31.2	0.9	
Delay (s)	38.6	38.5	37.3		37.4		61.3	14.6		80.7	10.9	
Level of Service	D	D	D		D		E	B		F	B	
Approach Delay (s)		38.3			37.4			15.3			12.9	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			14.9							B		
HCM 2000 Volume to Capacity ratio			0.69									
Actuated Cycle Length (s)			104.3				Sum of lost time (s)			14.1		
Intersection Capacity Utilization			62.7%				ICU Level of Service			B		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	27	0	1518	9	499	972	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	41	0	1668	10	509	992	0
RTOR Reduction (vph)	0	0	0	0	37	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	4	0	0	1668	5	509	992	0
Turn Type					NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.47		c0.29	0.28	
v/s Ratio Perm								0.00				
v/c Ratio					0.03			1.00	0.01	0.83	0.33	
Uniform Delay, d1					60.6			38.5	20.5	43.7	2.5	
Progression Factor					1.00			0.42	1.00	1.00	1.00	
Incremental Delay, d2					0.1			15.6	0.0	9.6	0.3	
Delay (s)					60.7			31.8	20.5	53.3	2.8	
Level of Service					E			C	C	D	A	
Approach Delay (s)		0.0			60.7			31.7			19.9	
Approach LOS		A			E			C			B	
Intersection Summary												
HCM 2000 Control Delay		26.6			HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		88.4%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												











NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	49	15	2	66	140	144	1345	7	228	462	328
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1860	1510	1770	3539	1347	1770	3278	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1860	1510	1770	3539	1347	1770	3278	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	46	75	23	2	75	159	160	1494	8	262	531	377
RTOR Reduction (vph)	0	0	21	0	0	134	0	0	4	0	88	0
Lane Group Flow (vph)	46	75	2	0	77	25	160	1494	4	262	820	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1076	
v/s Ratio Prot	0.03	c0.04			c0.04		0.09	c0.42		c0.15	0.25	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.38	0.59	0.02		0.26	0.11	0.29	0.95	0.01	0.77	0.76	
Uniform Delay, d1	64.5	65.5	62.9		53.5	52.2	37.9	38.6	22.3	55.4	43.6	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.93	
Incremental Delay, d2	2.0	6.7	0.1		0.5	0.2	0.3	13.3	0.0	9.7	5.0	
Delay (s)	66.5	72.2	63.0		54.0	52.4	38.2	51.9	22.4	62.7	45.7	
Level of Service	E	E	E		D	D	D	D	C	E	D	
Approach Delay (s)		68.9			52.9			50.4			49.5	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay		51.1			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		93.9%			ICU Level of Service				F			
Analysis Period (min)		15										
c Critical Lane Group												











NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	44	220	5	64	260	10
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	52	259	6	80	283	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked	0.99					
vC, conflicting volume	622	46			86	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	617	46			86	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	86	75			81	
cM capacity (veh/h)	366	1023			1510	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	311	86	293			
Volume Left	52	0	283			
Volume Right	259	80	0			
cSH	1228	1700	1510			
Volume to Capacity	0.25	0.05	0.19			
Queue Length 95th (ft)	25	0	17			
Control Delay (s)	10.8	0.0	7.7			
Lane LOS	B		A			
Approach Delay (s)	10.8	0.0	7.7			
Approach LOS	B					
Intersection Summary						
Average Delay		8.1				
Intersection Capacity Utilization		31.6%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	47	3	1510	440	0	433
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1754		3539	1519		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1754		3539	1519		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	63	4	1589	463	0	677
RTOR Reduction (vph)	4	0	0	136	0	0
Lane Group Flow (vph)	63	0	1589	327	0	677
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		30.9	30.9		30.9
Effective Green, g (s)	3.0		30.9	30.9		30.9
Actuated g/C Ratio	0.07		0.71	0.71		0.71
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	120		2496	1071		2496
v/s Ratio Prot	c0.04		c0.45			0.19
v/s Ratio Perm				0.21		
v/c Ratio	0.53		0.64	0.30		0.27
Uniform Delay, d1	19.7		3.4	2.4		2.3
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.1		0.5	0.2		0.1
Delay (s)	23.9		4.0	2.6		2.4
Level of Service	C		A	A		A
Approach Delay (s)	23.9		3.7			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.8		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.63				
Actuated Cycle Length (s)		43.8		Sum of lost time (s)		9.9
Intersection Capacity Utilization		54.2%		ICU Level of Service		A
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (veh/h)	0	18	2432	7	7	481
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	31	2615	8	10	707
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2993	1311			2623	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2993	1311			2623	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	79			94	
cM capacity (veh/h)	10	149			160	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	31	1743	879	10	354	354
Volume Left	0	0	0	10	0	0
Volume Right	31	0	8	0	0	0
cSH	149	1700	1700	160	1700	1700
Volume to Capacity	0.21	1.03	0.52	0.06	0.21	0.21
Queue Length 95th (ft)	19	0	0	5	0	0
Control Delay (s)	35.4	0.0	0.0	29.0	0.0	0.0
Lane LOS	E			D		
Approach Delay (s)	35.4	0.0		0.4		
Approach LOS	E					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		77.4%		ICU Level of Service	D	
Analysis Period (min)		15				

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (vph)	20	101	2331	14	44	437
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	25	125	2506	15	64	633
RTOR Reduction (vph)	0	2	0	1	0	0
Lane Group Flow (vph)	25	123	2506	14	64	633
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	16.4	26.5	68.2	68.2	5.0	82.0
Effective Green, g (s)	16.4	21.4	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.20	0.63	0.63	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	269	314	2241	1002	82	2694
v/s Ratio Prot	0.01	c0.08	c0.71		c0.04	0.18
v/s Ratio Perm				0.01		
v/c Ratio	0.09	0.39	1.12	0.01	0.78	0.23
Uniform Delay, d1	39.3	37.5	19.8	7.3	50.8	3.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.8	60.0	0.0	37.0	0.0
Delay (s)	39.4	38.3	79.7	7.3	87.8	3.8
Level of Service	D	D	E	A	F	A
Approach Delay (s)	38.5		79.3			11.5
Approach LOS	D		E			B
Intersection Summary						
HCM 2000 Control Delay		63.4		HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio		0.97				
Actuated Cycle Length (s)		107.7		Sum of lost time (s)	18.1	
Intersection Capacity Utilization		81.5%		ICU Level of Service	D	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↖↗			↖↗
Volume (veh/h)	0	38	2305	30	0	455
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	61	2426	32	0	615
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2750	1229			2458	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2750	1229			2458	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	64			100	
cM capacity (veh/h)	16	170			187	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	61	1618	840	307	307	
Volume Left	0	0	0	0	0	
Volume Right	61	0	32	0	0	
cSH	170	1700	1700	1700	1700	
Volume to Capacity	0.36	0.95	0.49	0.18	0.18	
Queue Length 95th (ft)	38	0	0	0	0	
Control Delay (s)	37.8	0.0	0.0	0.0	0.0	
Lane LOS	E					
Approach Delay (s)	37.8	0.0		0.0		
Approach LOS	E					
Intersection Summary						
Average Delay		0.7				
Intersection Capacity Utilization		74.7%		ICU Level of Service	D	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖↗	↖	↖	↖↗
Volume (vph)	12	8	2335	38	18	428
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	19	13	2432	40	22	528
RTOR Reduction (vph)	0	2	0	10	0	0
Lane Group Flow (vph)	19	11	2432	30	22	528
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.5	4.6	58.8	58.8	3.1	69.4
Effective Green, g (s)	1.5	4.6	58.8	58.8	3.1	69.4
Actuated g/C Ratio	0.02	0.06	0.76	0.76	0.04	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	34	93	2685	1201	70	3169
v/s Ratio Prot	c0.01	0.00	c0.69		c0.01	0.15
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.56	0.12	0.91	0.03	0.31	0.17
Uniform Delay, d1	37.7	34.5	7.2	2.3	36.2	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	18.4	0.6	4.9	0.0	2.6	0.0
Delay (s)	56.1	35.1	12.1	2.3	38.7	0.5
Level of Service	E	D	B	A	D	A
Approach Delay (s)	47.6		11.9			2.1
Approach LOS	D		B			A
Intersection Summary						
HCM 2000 Control Delay		10.5		HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio		0.87				
Actuated Cycle Length (s)		77.5		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		77.4%		ICU Level of Service	D	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (2 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control	Stop			Yield			Stop		Stop	
Volume (vph)	0	3	0	53	2	0	51	3	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	12	0	98	4	0	81	5	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	12	0	102	81	5					
Volume Left (vph)	0	0	98	0	0					
Volume Right (vph)	0	0	0	0	5					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.2	3.2					
Degree Utilization, x	0.01	0.00	0.12	0.09	0.00					
Capacity (veh/h)	822	1121	809	828	1121					
Control Delay (s)	7.3	6.2	7.9	7.6	6.2					
Approach Delay (s)	7.3		7.9	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.7							
Level of Service			A							
Intersection Capacity Utilization			19.7%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (2 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑	↑	↑	↑			
Volume (vph)	3	43	0	0	38	262	4	2108	59	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.72	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1346	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	4	57	0	0	53	364	4	2243	63	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	54	0	0	27	0	0	0
Lane Group Flow (vph)	4	57	0	0	53	310	4	2243	36	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	18.5	18.5			18.5	18.5	47.7	43.6	43.6			
Effective Green, g (s)	18.5	18.5			18.5	18.5	47.7	43.6	43.6			
Actuated g/C Ratio	0.25	0.25			0.25	0.25	0.63	0.58	0.58			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	329	456			456	387	1118	2043	914			
v/s Ratio Prot		0.03			0.03		0.00	c0.63				
v/s Ratio Perm	0.00					c0.20			0.02			
v/c Ratio	0.01	0.12			0.12	0.80	0.00	1.10	0.04			
Uniform Delay, d1	21.6	22.2			22.1	26.8	5.1	15.9	6.9			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	11.3	0.0	52.4	0.0			
Delay (s)	21.6	22.3			22.3	38.0	5.1	68.3	6.9			
Level of Service	C	C			C	D	A	E	A			
Approach Delay (s)		22.3				36.0		66.5			0.0	
Approach LOS		C				D		E			A	
Intersection Summary												
HCM 2000 Control Delay		61.0				HCM 2000 Level of Service		E				
HCM 2000 Volume to Capacity ratio		1.01										
Actuated Cycle Length (s)		75.5				Sum of lost time (s)		13.4				
Intersection Capacity Utilization		94.1%				ICU Level of Service		F				
Analysis Period (min)		15										
c Critical Lane Group												





















NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔
Volume (veh/h)	21	40	355	1855	0	201	191
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	84	160	370	1932	0	254	242
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2081	248	496		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2081	248	496		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	79	65		0		
cM capacity (veh/h)	30	752	1064		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	244	370	966	966	170	327	0
Volume Left	84	370	0	0	0	0	0
Volume Right	160	0	0	0	0	242	0
cSH	81	1064	1700	1700	1700	1700	1700
Volume to Capacity	3.02	0.35	0.57	0.57	0.10	0.19	0.00
Queue Length 95th (ft)	Err	39	0	0	0	0	0
Control Delay (s)	Err	10.2	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B					
Approach Delay (s)	Err	1.6			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			803.2				
Intersection Capacity Utilization			68.2%		ICU Level of Service		C
Analysis Period (min)			15				

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	458	2	45	50	8	21	30	2067	11	4	187	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	1.00		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1594		1770	1661		1770	3536		1770	3425	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1594		1770	1661		1770	3536		1770	3425	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	520	2	51	161	26	68	32	2176	12	6	271	74
RTOR Reduction (vph)	0	34	0	0	64	0	0	1	0	0	23	0
Lane Group Flow (vph)	520	19	0	161	30	0	32	2187	0	6	322	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	31.4	31.4		5.0	5.0		3.3	40.0		1.0	37.7	
Effective Green, g (s)	31.4	31.4		5.0	5.0		3.3	40.0		1.0	37.7	
Actuated g/C Ratio	0.33	0.33		0.05	0.05		0.03	0.42		0.01	0.39	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	577	519		91	86		60	1468		18	1340	
v/s Ratio Prot	c0.29	0.01		c0.09	0.02		c0.02	c0.62		0.00	0.09	
v/s Ratio Perm												
v/c Ratio	0.90	0.04		1.77	0.34		0.53	1.49		0.33	0.24	
Uniform Delay, d1	31.0	22.1		45.6	44.1		45.7	28.1		47.3	19.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	17.2	0.0		386.9	2.4		8.8	224.2		10.6	0.1	
Delay (s)	48.2	22.2		432.5	46.5		54.6	252.3		57.9	19.8	
Level of Service	D	C		F	D		D	F		E	B	
Approach Delay (s)		45.8			290.2			249.5			20.4	
Approach LOS		D			F			F			C	
Intersection Summary												
HCM 2000 Control Delay			194.6			HCM 2000 Level of Service				F		
HCM 2000 Volume to Capacity ratio			1.27									
Actuated Cycle Length (s)			96.3			Sum of lost time (s)			18.9			
Intersection Capacity Utilization			97.9%			ICU Level of Service				F		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰	
Volume (vph)	9	254	20	0	1899	20	46	27	1900	23	48	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5031			5077		1770	1846			1732	
Flt Permitted	0.95	1.00			1.00		0.65	1.00			0.14	
Satd. Flow (perm)	1770	5031			5077		1210	1846			250	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	10	285	22	0	2087	22	55	32	2	30	62	78
RTOR Reduction (vph)	0	5	0	0	1	0	0	2	0	0	17	0
Lane Group Flow (vph)	10	302	0	0	2108	0	55	32	0	0	153	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2061		235	358			41	
v/s Ratio Prot	c0.01	0.06			c0.42			0.02				
v/s Ratio Perm							c0.05				c0.61	
v/c Ratio	0.05	0.16			1.02		0.23	0.09			3.74	
Uniform Delay, d1	71.5	37.0			53.5		61.2	59.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.2			24.3		0.5	0.1			1290.2	
Delay (s)	71.6	37.2			77.7		61.7	59.6			1365.2	
Level of Service	E	D			E		E	E			F	
Approach Delay (s)		38.3			77.7			60.9			1365.2	
Approach LOS		D			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		154.0			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.23										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		75.6%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰	↰							↰
Volume (vph)	0	271	0	457	1909	10	0	0	0	0	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	330	0	486	2031	11	0	0	0	0	0	20
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	330	0	486	2042	0	0	0	0	0	0	8
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.06		0.14	c0.58							
v/s Ratio Perm												0.00
v/c Ratio		0.17		0.28	0.64							0.01
Uniform Delay, d1		37.2		26.2	1.8							34.9
Progression Factor		0.38		1.00	1.00							1.00
Incremental Delay, d2		0.2		0.1	0.4							0.0
Delay (s)		14.3		26.3	2.2							35.0
Level of Service		B		C	A							C
Approach Delay (s)		14.3			6.8		0.0					35.0
Approach LOS		B			A		A					C
Intersection Summary												
HCM 2000 Control Delay		7.9			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		74.8%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

Horizon Year (2 CVN) with Alternative 3

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	10	243	0	0	132	107	0	0	0	49	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	12	289	0	0	142	115	0	0	0	54	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	257			289			518	570	289	513	513	199
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	257			289			518	570	289	513	513	199
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1308			1273			462	427	750	469	461	842
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	301	257	0	59								
Volume Left	12	0	0	54								
Volume Right	0	115	0	5								
cSH	1308	1273	1700	489								
Volume to Capacity	0.01	0.00	0.00	0.12								
Queue Length 95th (ft)	1	0	0	10								
Control Delay (s)	0.4	0.0	0.0	13.4								
Lane LOS	A			A	B							
Approach Delay (s)	0.4	0.0	0.0	13.4								
Approach LOS				A	B							
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				30.9%			ICU Level of Service					A
Analysis Period (min)				15								

NBC Coastal Campus

22: 3rd St & Palm Ave

Horizon Year (2 CVN) with Alternative 3











Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations	↕	↕		↕	↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	283	5	27	215	25	12	15	129	12	11	15
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	9	329	6	29	231	27	15	19	159	15	14	19
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	335	29	258	193	48						
Volume Left (vph)	9	0	29	0	15	15						
Volume Right (vph)	0	6	0	27	159	19						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.1	5.5	6.1	5.5	5.2	5.8						
Degree Utilization, x	0.02	0.52	0.05	0.40	0.28	0.08						
Capacity (veh/h)	573	629	559	622	625	536						
Control Delay (s)	8.0	13.1	8.2	11.0	10.1	9.2						
Approach Delay (s)	13.0		10.7		10.1	9.2						
Approach LOS	B		B		B	A						
Intersection Summary												
Delay				11.4								
Level of Service				B								
Intersection Capacity Utilization				38.4%			ICU Level of Service					A
Analysis Period (min)				15								

NBC Coastal Campus
23: Palm Ave & Rainbow Dr



















Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	232	435	340	156	18	71
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	294	551	415	190	25	100
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	605				1648	302
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	605				1648	302
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	70				60	86
cM capacity (veh/h)	969				63	694
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	294	551	276	328	125	
Volume Left	294	0	0	0	25	
Volume Right	0	0	0	190	100	
cSH	969	1700	1700	1700	228	
Volume to Capacity	0.30	0.32	0.16	0.19	0.55	
Queue Length 95th (ft)	32	0	0	0	74	
Control Delay (s)	10.3	0.0	0.0	0.0	38.4	
Lane LOS	B				E	
Approach Delay (s)	3.6		0.0		38.4	
Approach LOS					E	
Intersection Summary						
Average Delay			5.0			
Intersection Capacity Utilization			42.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	428	16	27	341	0	67	39	83	2	28	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3520		1770	3539			1722			1857	1583
Flt Permitted	0.50	1.00		0.43	1.00			0.87			0.98	1.00
Satd. Flow (perm)	923	3520		810	3539			1528			1824	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	22	556	21	35	443	0	102	59	126	3	48	48
RTOR Reduction (vph)	0	4	0	0	0	0	0	33	0	0	0	30
Lane Group Flow (vph)	22	573	0	35	443	0	0	254	0	0	51	18
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.5	13.5		13.5	13.5			13.4			13.4	13.4
Effective Green, g (s)	13.5	13.5		13.5	13.5			13.4			13.4	13.4
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	345	1316		302	1323			567			677	587
v/s Ratio Prot		c0.16			0.13							
v/s Ratio Perm	0.02			0.04				c0.17			0.03	0.01
v/c Ratio	0.06	0.44		0.12	0.33			0.45			0.08	0.03
Uniform Delay, d1	7.2	8.5		7.4	8.1			8.6			7.3	7.2
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.2			0.6			0.0	0.0
Delay (s)	7.3	8.7		7.6	8.2			9.1			7.4	7.2
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.6			8.2			9.1			7.3	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.5			HCM 2000 Level of Service			A			
HCM 2000 Volume to Capacity ratio			0.44									
Actuated Cycle Length (s)			36.1			Sum of lost time (s)			9.2			
Intersection Capacity Utilization			47.6%			ICU Level of Service			A			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↘			↖	
Volume (veh/h)	514	5	0	0	3	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	559	5	0	0	3	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			564		559	559
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			564		559	559
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1007		490	529
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	559	5	10			
Volume Left	0	0	3			
Volume Right	0	5	7			
cSH	1700	1700	515			
Volume to Capacity	0.33	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.1			
Lane LOS			B			
Approach Delay (s)	0.0		12.1			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			37.1%	ICU Level of Service		A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

[illegible]

NBC Coastal Campus

27: Florida St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3

Timing Plan: AM PEAK

	↖	→	↗	↖	←	↖	↖	↑	↗	↗	↓	↖
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↖↖		↖	↖↖↖			↖		↖	↖	
Volume (vph)	3	1034	40	23	2234	14	21	5	35	63	12	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5081			1690		1770	1699	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.63	1.00	
Satd. Flow (perm)	1770	5057		1770	5081			1535		1182	1699	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	3	1162	45	26	2539	16	29	7	48	90	17	24
RTOR Reduction (vph)	0	2	0	0	0	0	0	27	0	0	20	0
Lane Group Flow (vph)	3	1205	0	26	2555	0	0	57	0	90	21	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			255		197	283	
v/s Ratio Prot	0.00	0.24		c0.01	c0.50						0.01	
v/s Ratio Perm								0.04		c0.08		
v/c Ratio	0.08	0.35		0.22	0.69			0.22		0.46	0.07	
Uniform Delay, d1	86.2	11.6		79.6	13.0			64.9		67.7	63.3	
Progression Factor	1.55	0.26		1.40	0.40			1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.3		0.4	0.5			0.4		1.7	0.1	
Delay (s)	134.6	3.2		112.2	5.7			65.4		69.3	63.4	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.5			6.7			65.4			67.5	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		9.0			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		76.9%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

28: 13th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3

Timing Plan: AM PEAK

	↖	→	↗	↖	←	↖	↖	↑	↗	↗	↓	↖
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↖↖		↖	↖↖↖	↖		↖		↖	↖	
Volume (vph)	4	1114	72	110	2067	59	167	22	104	192	41	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1252	81	133	2490	71	188	25	117	256	55	23
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	97	0	3	0
Lane Group Flow (vph)	4	1329	0	133	2490	41	0	213	20	0	331	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.26		c0.08	c0.49			c0.12			c0.10	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.10	0.60		0.68	0.92	0.05		0.69	0.07		0.57	
Uniform Delay, d1	86.2	38.0		76.9	38.7	20.3		70.0	62.5		68.4	
Progression Factor	1.19	0.60		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	1.1		9.0	6.6	0.1		6.6	0.1		1.4	
Delay (s)	103.8	24.0		85.9	45.3	20.4		76.7	62.6		69.7	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		24.2			46.6			71.7			69.7	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		43.6			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		93.9%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	16	1417	29	50	2215	14	18	8	56	44	3	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1673			1724	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.79	
Satd. Flow (perm)	1770	5070		1770	5081			1562			1406	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	17	1540	32	58	2576	16	21	10	67	58	4	32
RTOR Reduction (vph)	0	2	0	0	0	0	0	53	0	0	25	0
Lane Group Flow (vph)	17	1570	0	58	2592	0	0	45	0	0	69	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	1.5	37.9		2.7	39.1			15.3			15.3	
Effective Green, g (s)	1.5	37.9		2.7	39.1			15.3			15.3	
Actuated g/C Ratio	0.02	0.53		0.04	0.55			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	37	2683		66	2774			333			300	
v/s Ratio Prot	0.01	0.31		c0.03	c0.51							
v/s Ratio Perm								0.03			c0.05	
v/c Ratio	0.46	0.59		0.88	0.93			0.14			0.23	
Uniform Delay, d1	34.6	11.5		34.3	15.1			22.8			23.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	8.8	0.3		69.1	6.7			0.2			0.4	
Delay (s)	43.4	11.8		103.4	21.7			23.0			23.7	
Level of Service	D	B		F	C			C			C	
Approach Delay (s)		12.2			23.5			23.0			23.7	
Approach LOS		B			C			C			C	
Intersection Summary												
HCM 2000 Control Delay		19.4			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		71.6			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		61.5%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	105	1434	34	280	2144	246	86	83	884	269	106	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	122	1667	40	298	2281	262	96	92	982	320	126	105
RTOR Reduction (vph)	0	2	0	0	0	69	0	147	173	0	3	65
Lane Group Flow (vph)	122	1705	0	298	2281	193	96	397	357	320	134	29
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.1		17.9	47.0	47.0	8.5	35.3	35.3	10.3	37.1	37.1
Effective Green, g (s)	6.0	35.1		17.9	47.0	47.0	8.5	35.3	35.3	10.3	37.1	37.1
Actuated g/C Ratio	0.05	0.29		0.15	0.39	0.39	0.07	0.29	0.29	0.09	0.31	0.31
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	170	1475		262	1983	617	124	453	440	293	538	463
v/s Ratio Prot	0.04	0.34		c0.17	c0.45		0.05	c0.26		c0.09	0.08	
v/s Ratio Perm						0.12			0.24			0.02
v/c Ratio	0.72	1.16		1.14	1.15	0.31	0.77	0.88	0.81	1.09	0.25	0.06
Uniform Delay, d1	56.4	42.7		51.3	36.8	25.5	55.1	40.5	39.5	55.1	31.3	29.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.5	78.2		97.8	74.0	0.3	25.4	17.1	10.8	79.5	0.2	0.1
Delay (s)	69.9	120.9		149.1	110.7	25.8	80.5	57.6	50.3	134.6	31.5	29.5
Level of Service	E	F		F	F	C	F	E	D	F	C	C
Approach Delay (s)		117.5			106.9			56.2			91.0	
Approach LOS		F			F			E			F	
Intersection Summary												
HCM 2000 Control Delay		99.3			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.08										
Actuated Cycle Length (s)		120.5			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		94.0%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (2 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↘	↗
Volume (vph)	0	326	1281	0	178	1392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	366	1377	0	198	1547
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	366	1377	0	198	1544
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	18
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.10	c0.39		0.11	c0.55
v/s Ratio Perm						
v/c Ratio		0.14	1.18		0.96	1.01
Uniform Delay, d1		2.5	26.8		35.1	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	90.1		49.7	25.0
Delay (s)		2.5	116.9		84.8	43.0
Level of Service		A	F		F	D
Approach Delay (s)		2.5	116.9		47.7	
Approach LOS		A	F		D	
Intersection Summary						
HCM 2000 Control Delay		70.3			HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio		1.15				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		72.4%			ICU Level of Service	C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)







Horizon Year (2 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↗		↘	↗				
Volume (vph)	0	504	0	0	489	600	908	2	165	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3247		1681	1631				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3247		1681	1631				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	579	0	0	532	652	987	2	179	0	0	0
RTOR Reduction (vph)	0	0	0	0	402	0	0	29	0	0	0	0
Lane Group Flow (vph)	0	579	0	0	782	0	592	547	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		18.8			18.8		22.3	22.3				
Effective Green, g (s)		18.8			18.8		22.3	22.3				
Actuated g/C Ratio		0.38			0.38		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1355			1243		763	740				
v/s Ratio Prot		0.16			c0.24							
v/s Ratio Perm							c0.35	0.34				
v/c Ratio		0.43			0.63		0.78	0.74				
Uniform Delay, d1		11.2			12.3		11.3	11.0				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			1.0		5.0	3.9				
Delay (s)		11.4			13.3		16.3	14.9				
Level of Service		B			B		B	B				
Approach Delay (s)		11.4			13.3		15.6				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay		13.8								HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		49.1								Sum of lost time (s)	8.0	
Intersection Capacity Utilization		76.4%								ICU Level of Service	D	
Analysis Period (min)		15										
c Critical Lane Group												













NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	4	5	67	14	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	16	7	93	34	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	141	34	34			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	141	34	34			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	848	1039	1577			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	16	100	34			
Volume Left	0	7	0			
Volume Right	16	0	0			
cSH	1039	1577	1700			
Volume to Capacity	0.02	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.5	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		1.3				
Intersection Capacity Utilization		17.6%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	4097	18	0	1815	246	0	0	915	0	0	56
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%	0%		0%	0%		0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4268	19	0	1871	254	0	0	1017	0	0	85
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2145			4306			5026	6442	1472	3461	6324	791
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2145			4306			5026	6442	1472	3461	6324	791
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	244			32			0	0	1840	1	0	322
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1707	1707	872	748	748	628	1017	85				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	19	0	0	254	1017	85				
cSH	1700	1700	1700	1700	1700	1700	1840	322				
Volume to Capacity	1.00	1.00	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	90	26				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3	20.2				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.3	20.2				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				144.8%			ICU Level of Service	H				
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3860	132	0	1853	0	191	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3979	136	0	1930	0	233	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4135		4731	1435	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4135		4731	1435	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			38		1	119	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1592	1592	932	643	643	643	233
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	136	0	0	0	233
cSH	1700	1700	1700	1700	1700	1700	119
Volume to Capacity	0.94	0.94	0.55	0.38	0.38	0.38	1.96
Queue Length 95th (ft)	0	0	0	0	0	0	472
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	520.8
Lane LOS							F
Approach Delay (s)	0.0			0.0			520.8
Approach LOS							F
Intersection Summary							
Average Delay			19.3				
Intersection Capacity Utilization			98.0%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	↗
Volume (vph)	0	0	0	993	642	110	103	254			867	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3526	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3526	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1045	676	116	106	262	0	0	894	18
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	522	1303	0	106	262	0	0	910	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1432		98	1989			1567	
v/s Ratio Prot				c0.34	0.28		c0.06	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.11	0.99dl		1.08	0.13			0.58	
Uniform Delay, d1				31.1	29.9		42.5	9.3			18.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				75.2	8.9		114.7	0.0			0.6	
Delay (s)				106.3	38.8		157.2	9.3			19.3	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			58.0			51.9			19.3	
Approach LOS		A			E			D			B	
Intersection Summary												
HCM 2000 Control Delay			46.0				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.82									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)		17.2				
Intersection Capacity Utilization		136.1%				ICU Level of Service		H				
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	7	2133	111	0	0	0	0	357	472	766	1116	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3125	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3125	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2344	122	0	0	0	0	415	549	798	1162	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2352	93	0	0	0	0	656	273	798	1162	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm				NA	Perm	Prot	NA		
Protected Phases	4	4					2		1	6		
Permitted Phases			4					2				
Actuated Green, G (s)		63.4	63.4				53.0	53.0	44.2	100.0		
Effective Green, g (s)		63.4	63.4				53.0	53.0	44.2	100.0		
Actuated g/C Ratio		0.36	0.36				0.30	0.30	0.25	0.57		
Clearance Time (s)		5.6	5.6				4.6	4.6	4.2	6.0		
Vehicle Extension (s)		3.0	3.0				3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)		1841	573				946	408	867	2022		
v/s Ratio Prot		c0.46					c0.21		c0.23	0.33		
v/s Ratio Perm			0.06					0.20				
v/c Ratio		1.28	0.16				0.69	0.67	0.92	0.57		
Uniform Delay, d1		55.8	37.8				53.8	53.3	63.7	23.9		
Progression Factor		1.00	1.00				1.00	1.00	1.00	1.00		
Incremental Delay, d2		129.3	0.1				2.2	4.1	14.8	0.4		
Delay (s)		185.1	37.9				56.1	57.4	78.5	24.3		
Level of Service		F	D				E	E	E	C		
Approach Delay (s)		177.8		0.0			56.5			46.4		
Approach LOS		F		A			E			D		
Intersection Summary												
HCM 2000 Control Delay		108.4		HCM 2000 Level of Service			F					
HCM 2000 Volume to Capacity ratio		0.99										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)			14.4					
Intersection Capacity Utilization		136.1%		ICU Level of Service			H					
Analysis Period (min)		15										
c Critical Lane Group												













NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑		↑↑			↑↑
Volume (vph)	203	14	1049	793	0	1418
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3264			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3264			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	260	18	1179	891	0	1525
RTOR Reduction (vph)	2	0	65	0	0	0
Lane Group Flow (vph)	276	0	2005	0	0	1525
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA		NA	
Protected Phases	8		2		6	
Permitted Phases						
Actuated Green, G (s)	30.0		120.9		120.9	
Effective Green, g (s)	30.0		120.9		120.9	
Actuated g/C Ratio	0.19		0.76		0.76	
Clearance Time (s)	4.1		5.0		5.0	
Vehicle Extension (s)	3.0		3.0		3.0	
Lane Grp Cap (vph)	296		2466		2540	
v/s Ratio Prot	c0.17		c0.61		0.45	
v/s Ratio Perm						
v/c Ratio	0.93		0.81		0.60	
Uniform Delay, d1	64.0		12.4		8.7	
Progression Factor	1.00		1.00		1.00	
Incremental Delay, d2	35.0		3.1		1.1	
Delay (s)	99.0		15.4		9.8	
Level of Service	F		B		A	
Approach Delay (s)	99.0		15.4		9.8	
Approach LOS	F		B		A	
Intersection Summary						
HCM 2000 Control Delay		19.2		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.85				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		87.8%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						







NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	168	12	34	30	12	29	27	1746	58	79	1680	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1724		1770	3522		1770	3488	
Flt Permitted	0.65	0.65	1.00		0.81		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1153	1158	1583		1422		1770	3522		1770	3488	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	215	15	44	47	19	45	29	1877	62	86	1826	193
RTOR Reduction (vph)	0	0	36	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	114	116	8	0	89	0	29	1938	0	86	2016	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4		4							
Actuated Green, G (s)	19.7	19.7	19.7		19.7		4.7	70.9		8.1	74.3	
Effective Green, g (s)	19.7	19.7	19.7		19.7		4.7	70.9		8.1	74.3	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.04	0.62		0.07	0.65	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	200	200	274		246		73	2200		126	2283	
v/s Ratio Prot							0.02	0.55		c0.05	c0.58	
v/s Ratio Perm	0.10	c0.10	0.00		0.06							
v/c Ratio	0.57	0.58	0.03		0.36		0.40	0.88		0.68	0.88	
Uniform Delay, d1	43.0	43.1	38.9		41.3		53.0	17.8		51.4	16.0	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.7	4.0	0.0		0.9		3.5	4.5		14.2	4.4	
Delay (s)	46.7	47.1	39.0		42.3		56.5	22.3		65.6	20.5	
Level of Service	D	D	D		D		E	C		E	C	
Approach Delay (s)		45.7			42.3			22.8			22.3	
Approach LOS		D			D			C			C	
Intersection Summary												
HCM 2000 Control Delay		24.5			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		113.5			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		82.0%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd












Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	9	0	169	0	1519	0	38	1842	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	13	0	245	0	1616	0	41	1981	0
RTOR Reduction (vph)	0	0	0	0	198	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	60	0	0	1616	0	41	1981	0
Turn Type				Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.0			42.2		2.8	49.2	
Effective Green, g (s)					14.0			42.2		2.8	49.2	
Actuated g/C Ratio					0.19			0.58		0.04	0.67	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					309			2037		67	2375	
v/s Ratio Prot					c0.04			0.46		0.02	c0.56	
v/s Ratio Perm												
v/c Ratio					0.19			0.79		0.61	0.83	
Uniform Delay, d1					24.9			12.1		34.7	9.0	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			2.2		15.4	2.7	
Delay (s)					25.2			14.4		50.1	11.7	
Level of Service					C			B		D	B	
Approach Delay (s)		0.0			25.2			14.4			12.5	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay				14.1				HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio				0.80								
Actuated Cycle Length (s)				73.3				Sum of lost time (s)		18.9		
Intersection Capacity Utilization				70.3%				ICU Level of Service		C		
Analysis Period (min)				15								
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Horizon Year (2 CVN) with Alternative 3






Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	289	48	123	8	70	402	29	852	3	135	1672	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1515		1853	1510	1770	3539	1346	1770	3515	
Flt Permitted	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1515		1853	1510	1770	3539	1346	1770	3515	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	380	63	162	9	76	437	32	936	3	144	1779	72
RTOR Reduction (vph)	0	0	131	0	0	195	0	0	2	0	2	0
Lane Group Flow (vph)	380	63	31	0	85	242	32	936	1	144	1849	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.7	27.7	27.7		25.3	25.3	4.0	56.8	56.8	16.9	69.7	
Effective Green, g (s)	27.7	27.7	27.7		25.3	25.3	4.0	56.8	56.8	16.9	69.7	
Actuated g/C Ratio	0.19	0.19	0.19		0.17	0.17	0.03	0.39	0.39	0.12	0.48	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	335	353	287		320	261	48	1375	523	204	1676	
v/s Ratio Prot	c0.21	0.03			0.05		0.02	0.26		c0.08	c0.53	
v/s Ratio Perm			0.02			c0.16			0.00			
v/c Ratio	1.13	0.18	0.11		0.27	0.93	0.67	0.68	0.00	0.71	1.10	
Uniform Delay, d1	59.2	49.7	49.0		52.3	59.5	70.4	37.1	27.3	62.2	38.2	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	90.7	0.2	0.2		0.4	36.2	29.8	2.7	0.0	10.6	56.0	
Delay (s)	149.9	49.9	49.1		52.8	95.7	100.2	39.9	27.3	72.8	94.2	
Level of Service	F	D	D		D	F	F	D	C	E	F	
Approach Delay (s)		112.5			88.7			41.8			92.6	
Approach LOS		F			F			D			F	
Intersection Summary												
HCM 2000 Control Delay		83.0			HCM 2000 Level of Service					F		
HCM 2000 Volume to Capacity ratio		1.07										
Actuated Cycle Length (s)		146.1			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		87.6%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Horizon Year (2 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	331	478	4	55	180	4
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	368	531	6	77	205	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked	1.00					
vC, conflicting volume	458	44			83	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	456	44			83	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	24	48			86	
cM capacity (veh/h)	485	1026			1514	
Direction, Lane #						
Volume Total	899	83	209			
Volume Left	368	0	205			
Volume Right	531	77	0			
cSH	946	1700	1514			
Volume to Capacity	0.95	0.05	0.14			
Queue Length 95th (ft)	392	0	12			
Control Delay (s)	39.5	0.0	7.6			
Lane LOS	E		A			
Approach Delay (s)	39.5	0.0	7.6			
Approach LOS	E					
Intersection Summary						
Average Delay		31.2				
Intersection Capacity Utilization		41.9%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕		↕
Volume (vph)	337	5	893	58	0	1821
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1771		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1771		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	427	6	992	64	0	2046
RTOR Reduction (vph)	1	0	0	37	0	0
Lane Group Flow (vph)	432	0	992	27	0	2046
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	843		1520	633		1520
v/s Ratio Prot	c0.24		0.28			c0.58
v/s Ratio Perm				0.02		
v/c Ratio	0.51		0.65	0.04		1.35
Uniform Delay, d1	19.1		23.7	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.5		1.0	0.0		160.2
Delay (s)	19.6		24.8	17.4		190.2
Level of Service	B		C	B		F
Approach Delay (s)	19.6		24.3			190.2
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay		119.7		HCM 2000 Level of Service		F
HCM 2000 Volume to Capacity ratio		0.91				
Actuated Cycle Length (s)		105.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		100.3%		ICU Level of Service		G
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕	↕	↕
Volume (veh/h)	5	8	720	4	18	1697
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	10	16	837	5	20	1865
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1812	421			842	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1812	421			842	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	85	97			97	
cM capacity (veh/h)	68	581			790	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	558	284	20	932	932
Volume Left	10	0	0	20	0	0
Volume Right	16	0	5	0	0	0
cSH	149	1700	1700	790	1700	1700
Volume to Capacity	0.17	0.33	0.17	0.03	0.55	0.55
Queue Length 95th (ft)	15	0	0	2	0	0
Control Delay (s)	34.2	0.0	0.0	9.7	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	34.2	0.0		0.1		
Approach LOS	D					
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			56.9%		ICU Level of Service	B
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

Horizon Year (2 CVN) with Alternative 3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↙	↘	↗	↖	↙	↘
Lane Configurations	↙	↘	↗	↖	↙	↘
Volume (vph)	35	66	657	14	120	1582
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	38	72	747	16	132	1738
RTOR Reduction (vph)	0	50	0	8	0	0
Lane Group Flow (vph)	38	22	747	8	132	1738
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	11.4	25.2	26.2	26.2	8.7	43.7
Effective Green, g (s)	11.4	20.1	26.2	26.2	8.7	43.7
Actuated g/C Ratio	0.18	0.31	0.41	0.41	0.14	0.68
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	313	494	1439	644	239	2401
v/s Ratio Prot	c0.02	0.01	0.21		0.07	c0.49
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.05	0.52	0.01	0.55	0.72
Uniform Delay, d1	22.3	15.5	14.4	11.4	26.0	6.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.3	0.0	2.7	1.1
Delay (s)	22.5	15.5	14.7	11.4	28.8	7.6
Level of Service	C	B	B	B	C	A
Approach Delay (s)	17.9		14.6			9.1
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay		11.0			HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio		0.71				
Actuated Cycle Length (s)		64.4			Sum of lost time (s)	18.1
Intersection Capacity Utilization		55.6%			ICU Level of Service	B
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave







Horizon Year (2 CVN) with Alternative 3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↙	↘	↗	↖	↙	↘
Lane Configurations		↗	↗			↗
Volume (veh/h)	0	27	646	22	0	1617
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	36	743	25	0	1758
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1634	384			768	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1634	384			768	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	94			100	
cM capacity (veh/h)	92	614			842	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	36	495	273	879	879	
Volume Left	0	0	0	0	0	
Volume Right	36	0	25	0	0	
cSH	614	1700	1700	1700	1700	
Volume to Capacity	0.06	0.29	0.16	0.52	0.52	
Queue Length 95th (ft)	5	0	0	0	0	
Control Delay (s)	11.2	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	11.2	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay		0.2				
Intersection Capacity Utilization		48.0%			ICU Level of Service	A
Analysis Period (min)		15				





NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	35	30	638	22	27	1589
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	49	42	679	23	30	1746
RTOR Reduction (vph)	0	36	0	10	0	0
Lane Group Flow (vph)	49	6	679	13	30	1746
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	4.2	7.0	29.2	29.2	2.8	39.5
Effective Green, g (s)	4.2	7.0	29.2	29.2	2.8	39.5
Actuated g/C Ratio	0.08	0.14	0.58	0.58	0.06	0.79
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	147	220	2054	918	98	2779
v/s Ratio Prot	c0.03	0.00	0.19		0.02	c0.49
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.33	0.03	0.33	0.01	0.31	0.63
Uniform Delay, d1	21.7	18.7	5.5	4.5	22.8	2.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	0.0	0.1	0.0	1.8	0.4
Delay (s)	23.1	18.8	5.6	4.5	24.6	2.7
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.1		5.5			3.1
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			4.4		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.72			
Actuated Cycle Length (s)			50.3		Sum of lost time (s)	14.1
Intersection Capacity Utilization			54.8%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	13	17	98	9	0	208	15	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	14	18	127	12	0	234	17	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	14	18	139	251						
Volume Left (vph)	0	0	127	0						
Volume Right (vph)	0	18	0	17						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.1	3.2	4.1	3.2						
Degree Utilization, x	0.02	0.02	0.16	0.22						
Capacity (veh/h)	867	1121	860	1122						
Control Delay (s)	7.1	6.3	7.9	7.1						
Approach Delay (s)	6.6		7.9	7.1						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.3							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (2 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱	↰	↱	↰			
Volume (vph)	12	215	0	0	95	160	14	547	80	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.69	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1279	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	14	244	0	0	109	184	15	601	88	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	105	0	53	0	0	0	0
Lane Group Flow (vph)	14	244	0	0	109	79	15	601	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	10.7	10.7			10.7	10.7	16.2	16.2	16.2			
Effective Green, g (s)	10.7	10.7			10.7	10.7	16.2	16.2	16.2			
Actuated g/C Ratio	0.27	0.27			0.27	0.27	0.40	0.40	0.40			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	339	494			494	420	711	1422	636			
v/s Ratio Prot		c0.13			0.06		0.01	c0.17				
v/s Ratio Perm	0.01					0.05			0.02			
v/c Ratio	0.04	0.49			0.22	0.19	0.02	0.42	0.06			
Uniform Delay, d1	11.0	12.5			11.5	11.4	7.3	8.7	7.4			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	0.8			0.2	0.2	0.0	0.2	0.0			
Delay (s)	11.0	13.3			11.8	11.7	7.3	8.9	7.4			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		13.2			11.7		8.7			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.3			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.45										
Actuated Cycle Length (s)		40.3			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		44.6%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd









Horizon Year (2 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱	↰
Volume (veh/h)	189	351	88	525	0	1736	47
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	756	1404	100	597	0	1929	52
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2453	991	1981		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2453	991	1981		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	0	65		0		
cM capacity (veh/h)	17	245	288		0		
Direction, Lane #							
Volume Total	2160	100	298	298	1286	695	0
Volume Left	756	100	0	0	0	0	0
Volume Right	1404	0	0	0	0	52	0
cSH	42	288	1700	1700	1700	1700	1700
Volume to Capacity	51.14	0.35	0.18	0.18	0.76	0.41	0.00
Queue Length 95th (ft)	Err	38	0	0	0	0	0
Control Delay (s)	Err	24.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C					
Approach Delay (s)	Err	3.4			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			4465.0				
Intersection Capacity Utilization			96.4%		ICU Level of Service		
Analysis Period (min)			15				F









NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	101	7	79	19	4	7	85	445	58	19	1570	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.86		1.00	0.90		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1605		1770	1685		1770	3478		1770	3472	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1605		1770	1685		1770	3478		1770	3472	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	135	9	105	38	8	14	93	489	64	21	1744	251
RTOR Reduction (vph)	0	84	0	0	14	0	0	7	0	0	9	0
Lane Group Flow (vph)	135	30	0	38	8	0	93	546	0	21	1986	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	18.4	18.4		2.7	2.7		5.8	48.4		1.6	44.2	
Effective Green, g (s)	18.4	18.4		2.7	2.7		5.8	48.4		1.6	44.2	
Actuated g/C Ratio	0.20	0.20		0.03	0.03		0.06	0.54		0.02	0.49	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	361	328		53	50		114	1870		31	1705	
v/s Ratio Prot	c0.08	0.02		c0.02	0.00		c0.05	c0.16		0.01	c0.57	
v/s Ratio Perm												
v/c Ratio	0.37	0.09		0.72	0.17		0.82	0.29		0.68	1.17	
Uniform Delay, d1	30.8	29.0		43.3	42.6		41.6	11.4		43.9	22.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.1		36.9	1.6		34.4	0.1		45.6	81.1	
Delay (s)	31.5	29.2		80.2	44.2		76.0	11.5		89.6	104.0	
Level of Service	C	C		F	D		E	B		F	F	
Approach Delay (s)		30.4			67.0			20.8			103.8	
Approach LOS		C			E			C			F	
Intersection Summary												
HCM 2000 Control Delay		78.9										
HCM 2000 Volume to Capacity ratio		0.89										
Actuated Cycle Length (s)		90.0										
Intersection Capacity Utilization		79.5%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	1514	69	0	487	40	19	46	5	28	30	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.99			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5052			5027		1770	1836			1759	
Flt Permitted	0.95	1.00			1.00		0.69	1.00			0.12	
Satd. Flow (perm)	1770	5052			5027		1294	1836			217	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	75	1720	78	0	518	43	27	66	7	33	35	28
RTOR Reduction (vph)	0	2	0	0	5	0	0	2	0	0	8	0
Lane Group Flow (vph)	75	1796	0	0	556	0	27	71	0	0	88	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1911			2041		251	357			36	
v/s Ratio Prot	c0.04	c0.36			c0.11			c0.04				
v/s Ratio Perm							0.02				c0.40	
v/c Ratio	0.38	0.94			0.27		0.11	0.20			2.44	
Uniform Delay, d1	74.3	54.0			35.7		59.7	60.7			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.2	10.6			0.3		0.2	0.3			721.7	
Delay (s)	75.5	64.5			36.0		59.8	61.0			796.7	
Level of Service	E	E			D		E	E			F	
Approach Delay (s)		65.0			36.0			60.7			796.7	
Approach LOS		E			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		85.3										
HCM 2000 Volume to Capacity ratio		0.96										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		69.7%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

Horizon Year (2 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	1548	0	580	530	44	0	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3498							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3498							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1739	0	617	564	47	0	0	0	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	1739	0	617	611	0	0	0	0	0	0	4
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3179							609
v/s Ratio Prot		c0.34		c0.18	c0.17							
v/s Ratio Perm												0.00
v/c Ratio		0.90		0.32	0.19							0.01
Uniform Delay, d1		52.9		21.2	0.9							34.9
Progression Factor		0.27		1.00	1.00							1.00
Incremental Delay, d2		2.5		0.1	0.0							0.0
Delay (s)		17.0		21.3	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		17.0			11.2		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		14.7				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		55.6%				ICU Level of Service		B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave




















Horizon Year (2 CVN) with Alternative 3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	4	219	0	0	318	42	0	0	0	107	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	5	255	0	0	361	48	0	0	0	162	0	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	409			255			663	673	255	649	649	385
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	409			255			663	673	255	649	649	385
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	58	100	98
cM capacity (veh/h)	1150			1310			366	375	784	382	387	662
Direction, Lane #												
Volume Total	259	409	0	176								
Volume Left	5	0	0	162								
Volume Right	0	48	0	14								
cSH	1150	1310	1700	395								
Volume to Capacity	0.00	0.00	0.00	0.45								
Queue Length 95th (ft)	0	0	0	56								
Control Delay (s)	0.2	0.0	0.0	21.3								
Lane LOS	A			A			C					
Approach Delay (s)	0.2	0.0	0.0	21.3								
Approach LOS				A			C					
Intersection Summary												
Average Delay		4.5										
Intersection Capacity Utilization		32.4%				ICU Level of Service		A				
Analysis Period (min)		15										













NBC Coastal Campus
22: 3rd St & Palm Ave

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	302	13	87	332	25	15	40	70	29	34	14
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	10	387	17	98	373	28	26	70	123	63	74	30
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	10	404	98	401	219	167						
Volume Left (vph)	10	0	98	0	26	63						
Volume Right (vph)	0	17	0	28	123	30						
Hadj (s)	0.53	0.01	0.53	-0.02	-0.28	0.00						
Departure Headway (s)	7.4	6.8	7.3	6.7	6.8	7.2						
Degree Utilization, x	0.02	0.77	0.20	0.75	0.41	0.34						
Capacity (veh/h)	462	507	474	518	466	422						
Control Delay (s)	9.3	27.6	10.8	25.7	14.5	13.9						
Approach Delay (s)	27.1		22.8		14.5	13.9						
Approach LOS	D		C		B	B						
Intersection Summary												
Delay			21.6									
Level of Service			C									
Intersection Capacity Utilization			42.3%	ICU Level of Service		A						
Analysis Period (min)			15									




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

									
Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Lane Configurations									
Volume (veh/h)	75	432	466	41	54	146			
Sign Control		Free	Free		Stop				
Grade		0%	0%		0%				
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85			
Hourly flow rate (vph)	77	445	542	48	64	172			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type	None		None						
Median storage (veh)									
Upstream signal (ft)	908								
pX, platoon unblocked									
vC, conflicting volume	590				1166	295			
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	590				1166	295			
tC, single (s)	4.1				6.8	6.9			
tC, 2 stage (s)									
tF (s)	2.2				3.5	3.3			
p0 queue free %	92				63	76			
cM capacity (veh/h)	982				172	702			
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1				
Volume Total	77	445	361	228	235				
Volume Left	77	0	0	0	64				
Volume Right	0	0	0	48	172				
cSH	982	1700	1700	1700	384				
Volume to Capacity	0.08	0.26	0.21	0.13	0.61				
Queue Length 95th (ft)	6	0	0	0	98				
Control Delay (s)	9.0	0.0	0.0	0.0	28.2				
Lane LOS	A				D				
Approach Delay (s)	1.3	0.0			28.2				
Approach LOS					D				
Intersection Summary									
Average Delay			5.4						
Intersection Capacity Utilization			41.4%	ICU Level of Service		A			
Analysis Period (min)			15						










NBC Coastal Campus
24: 7th St & Palm Ave

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	441	30	32	468	4	56	26	23	13	45	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3535			1761			1842	1583
Flt Permitted	0.46	1.00		0.44	1.00			0.79			0.89	1.00
Satd. Flow (perm)	858	3505		823	3535			1433			1665	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	35	525	36	35	514	4	68	32	28	17	59	41
RTOR Reduction (vph)	0	7	0	0	1	0	0	22	0	0	0	32
Lane Group Flow (vph)	35	554	0	35	517	0	0	106	0	0	76	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases	2			6			8			4		
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	14.9	14.9		14.9	14.9			6.5			6.5	6.5
Effective Green, g (s)	14.9	14.9		14.9	14.9			6.5			6.5	6.5
Actuated g/C Ratio	0.49	0.49		0.49	0.49			0.21			0.21	0.21
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	417	1706		400	1721			304			353	336
v/s Ratio Prot	c0.16			0.15								
v/s Ratio Perm	0.04			0.04				c0.07			0.05	0.01
v/c Ratio	0.08		0.32	0.09		0.30		0.35			0.22	0.03
Uniform Delay, d1	4.2		4.8	4.2		4.7		10.2			9.9	9.5
Progression Factor	1.00		1.00	1.00		1.00		1.00			1.00	1.00
Incremental Delay, d2	0.1		0.1	0.1		0.1		0.7			0.3	0.0
Delay (s)	4.3		4.9	4.3		4.8		10.9			10.3	9.6
Level of Service	A		A	A		A		B			B	A
Approach Delay (s)	4.9			4.8				10.9			10.0	
Approach LOS	A			A				B			B	
Intersection Summary												
HCM 2000 Control Delay	5.8			HCM 2000 Level of Service				A				
HCM 2000 Volume to Capacity ratio	0.33											
Actuated Cycle Length (s)	30.6			Sum of lost time (s)				9.2				
Intersection Capacity Utilization	45.5%			ICU Level of Service				A				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	490	9	0	0	7	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	598	11	0	0	10	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)	767					
pX, platoon unblocked						
vC, conflicting volume			609		598	598
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			609		598	598
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			970		465	503
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	598	11	15			
Volume Left	0	0	10			
Volume Right	0	11	4			
cSH	1700	1700	476			
Volume to Capacity	0.35	0.01	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.8			
Lane LOS	B					
Approach Delay (s)	0.0	12.8				
Approach LOS	B					
Intersection Summary						
Average Delay	0.3					
Intersection Capacity Utilization	35.8%			ICU Level of Service		A
Analysis Period (min)	15					

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	47	1855	143	66	957	149	111	102	71	197	90	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5031		1770	4982			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5031		1770	4982			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	50	1973	152	67	967	151	122	112	78	221	101	33
RTOR Reduction (vph)	0	5	0	0	11	0	0	19	0	0	4	0
Lane Group Flow (vph)	50	2120	0	67	1107	0	0	293	0	0	351	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2004		196	1984			649			658	
v/s Ratio Prot	0.03	c0.42		c0.04	0.22			c0.09			c0.10	
v/s Ratio Perm												
v/c Ratio	0.26	1.06		0.34	0.56			0.45			0.53	
Uniform Delay, d1	73.2	54.1		73.9	41.9			64.0			65.2	
Progression Factor	1.00	1.00		1.21	0.90			1.00			1.00	
Incremental Delay, d2	0.7	37.5		1.0	1.1			0.5			0.8	
Delay (s)	73.9	91.6		90.1	39.0			64.5			66.0	
Level of Service	E	F		F	D			E			E	
Approach Delay (s)		91.2			41.8			64.5			66.0	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		72.4			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		124.9%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	23	2177	65	56	1419	63	24	12	40	72	15	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5063		1770	5053			1703		1770	1719	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.59	1.00	
Satd. Flow (perm)	1770	5063		1770	5053			1541		1103	1719	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.83	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	23	2221	66	58	1463	65	29	14	48	85	18	19
RTOR Reduction (vph)	0	1	0	0	2	0	0	24	0	0	17	0
Lane Group Flow (vph)	23	2286	0	58	1526	0	0	67	0	85	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.3		16.0	130.3			22.5		22.5	22.5	
Effective Green, g (s)	12.0	126.3		16.0	130.3			22.5		22.5	22.5	
Actuated g/C Ratio	0.07	0.70		0.09	0.72			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3552		157	3657			192		137	214	
v/s Ratio Prot	0.01	c0.45		c0.03	c0.30						0.01	
v/s Ratio Perm								0.04		c0.08		
v/c Ratio	0.19	0.64		0.37	0.42			0.35		0.62	0.10	
Uniform Delay, d1	79.4	14.6		77.2	9.8			72.1		74.7	69.7	
Progression Factor	1.41	0.14		1.53	0.27			1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.3		1.1	0.3			1.1		8.4	0.2	
Delay (s)	112.6	2.3		119.1	3.0			73.2		83.1	69.9	
Level of Service	F	A		F	A			E		F	E	
Approach Delay (s)		3.4			7.2			73.2			79.1	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.7			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		66.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰		↰↰	
Volume (vph)	30	2042	227	179	1503	93	147	46	146	176	51	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5009		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5009		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	32	2172	241	185	1549	96	160	50	159	238	69	31
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	132	0	4	0
Lane Group Flow (vph)	32	2406	0	185	1549	59	0	210	27	0	334	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2			4				
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2217		192	2364	736		305	269		575	
v/s Ratio Prot	0.02	c0.48		c0.10	c0.30			c0.12			c0.10	
v/s Ratio Perm					0.04			0.02				
v/c Ratio	0.20	1.09		0.96	0.66	0.08		0.69	0.10		0.58	
Uniform Delay, d1	76.1	50.1		79.8	37.0	26.8		70.2	63.0		68.7	
Progression Factor	1.00	1.03		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	45.3		54.0	1.4	0.2		12.0	0.7		4.2	
Delay (s)	76.8	96.9		133.9	38.5	27.0		82.2	63.8		73.0	
Level of Service	E	F		F	D	C		F	E		E	
Approach Delay (s)		96.7			47.5			74.2			73.0	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		75.3			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.89										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		108.4%			ICU Level of Service				G			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰						↰↰	
Volume (vph)	11	2187	57	195	1843	18	45	10		93	27	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5066		1770	5078			1680			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.88			0.80	
Satd. Flow (perm)	1770	5066		1770	5078			1503			1451	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.95	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	12	2430	63	205	1940	19	53	12	109	33	15	15
RTOR Reduction (vph)	0	2	0	0	1	0	0	78	0	0	12	0
Lane Group Flow (vph)	12	2491	0	205	1958	0	0	96	0	0	51	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.7			17.7	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.7			17.7	
Actuated g/C Ratio	0.01	0.47		0.13	0.60			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2404		233	3032			313			302	
v/s Ratio Prot	0.01	c0.49		c0.12	0.39							
v/s Ratio Perm								c0.06			0.04	
v/c Ratio	0.75	1.04		0.88	0.65			0.31			0.17	
Uniform Delay, d1	42.0	22.3		36.2	11.2			28.4			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	106.0	28.5		29.1	0.5			0.6			0.3	
Delay (s)	148.0	50.8		65.3	11.7			29.0			27.8	
Level of Service	F	D		E	B			C			C	
Approach Delay (s)		51.3			16.8			29.0			27.8	
Approach LOS		D			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		35.0			HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		84.9			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		76.8%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↔↔↔		↔	↔↔↔	↔	↔	↔	↔	↔↔	↔	↔
Volume (vph)	216	2118	30	376	1853	636	75	203	611	674	274	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	227	2229	32	404	1992	684	80	216	650	733	298	284
RTOR Reduction (vph)	0	1	0	0	0	87	0	25	309	0	2	122
Lane Group Flow (vph)	227	2260	0	404	1992	597	80	425	107	733	324	134
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.6	36.3		45.0	69.7	69.7	8.9	40.0	40.0	11.8	42.9	42.9
Effective Green, g (s)	11.6	36.3		45.0	69.7	69.7	8.9	40.0	40.0	11.8	42.9	42.9
Actuated g/C Ratio	0.07	0.23		0.29	0.45	0.45	0.06	0.26	0.26	0.08	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	256	1188		513	2286	711	101	421	388	261	483	416
v/s Ratio Prot	0.07	c0.45		c0.23	c0.39		0.05	c0.26		c0.21	c0.19	
v/s Ratio Perm						0.38			0.07			0.09
v/c Ratio	0.89	1.90		0.79	0.87	0.84	0.79	1.01	0.28	2.81	0.67	0.32
Uniform Delay, d1	71.0	59.4		50.6	38.6	37.7	72.1	57.5	45.9	71.6	49.8	44.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	28.5	409.3		7.8	4.0	8.6	33.3	46.1	0.4	824.4	3.6	0.5
Delay (s)	99.6	468.7		58.4	42.5	46.3	105.5	103.6	46.3	896.0	53.4	44.9
Level of Service	F	F		E	D	D	F	F	D	F	D	D
Approach Delay (s)		435.0			45.5			78.6			521.4	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		253.2			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.36										
Actuated Cycle Length (s)		155.0			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		138.6%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↖	↖↖
Volume (vph)	0	581	980	0	504	1891
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	653	1043	0	554	2078
RTOR Reduction (vph)	0	0	0	0	0	2
Lane Group Flow (vph)	0	653	1043	0	554	2076
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.18	c0.29		0.31	c0.75
v/s Ratio Perm						
v/c Ratio		0.37	1.22		0.84	1.17
Uniform Delay, d1		12.0	30.3		22.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	107.7		9.0	82.5
Delay (s)		12.1	138.0		31.7	97.0
Level of Service		B	F		C	F
Approach Delay (s)		12.1	138.0		83.3	
Approach LOS		B	F		F	
Intersection Summary						
HCM 2000 Control Delay		85.7		HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio		1.26				
Actuated Cycle Length (s)		80.0		Sum of lost time (s)	14.2	
Intersection Capacity Utilization		96.9%		ICU Level of Service	F	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	1078	0	0	604	287	501	3	123	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1123	0	0	679	322	539	3	132	0	0	0
RTOR Reduction (vph)	0	0	0	0	97	0	0	22	0	0	0	0
Lane Group Flow (vph)	0	1123	0	0	904	0	345	307	0	0	0	0
Turn Type	NA				NA		Perm	NA				
Protected Phases	4				8			2				
Permitted Phases							2					
Actuated Green, G (s)		21.1			21.1		15.9	15.9				
Effective Green, g (s)		21.1			21.1		15.9	15.9				
Actuated g/C Ratio		0.47			0.47		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1659			1579		593	570				
v/s Ratio Prot		0.32			0.27							
v/s Ratio Perm							0.21	0.19				
v/c Ratio		0.68			0.57		0.58	0.54				
Uniform Delay, d1		9.3			8.7		11.8	11.6				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		1.1			0.5		1.5	1.0				
Delay (s)		10.4			9.2		13.3	12.6				
Level of Service		B			A		B	B				
Approach Delay (s)		10.4			9.2		13.0				0.0	
Approach LOS		B			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		10.6			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		45.0			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		54.2%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Horizon Year (2 CVN) with Alternative 3
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	11	9	4	38	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	18	10	4	55	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	79	55	55			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	79	55	55			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	918	1012	1550			
Direction, Lane #						
Volume Total	18	14	55			
Volume Left	0	10	0			
Volume Right	18	0	0			
cSH	1012	1550	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.6				
Intersection Capacity Utilization		17.4%		ICU Level of Service		
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St










Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1415	35	0	3776	557	0	0	480	0	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1705	42	0	4104	605	0	0	600	0	0	13
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4730			1767			3147	6476	629	5015	6194	1711
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4730			1767			3147	6476	629	5015	6194	1711
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	83
cM capacity (veh/h)	21			343			4	0	1358	0	0	77
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	682	682	383	1642	1642	1426	600	13				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	42	0	0	605	600	13				
cSH	1700	1700	1700	1700	1700	1700	1358	77				
Volume to Capacity	0.40	0.40	0.23	0.97	0.97	0.84	0.44	0.17				
Queue Length 95th (ft)	0	0	0	0	0	0	58	15				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	61.3				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	61.3				
Approach LOS							A	F				
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			100.5%			ICU Level of Service		G				
Analysis Period (min)			15									

* User Entered Value



















NBC Coastal Campus
2: Pomona Ave & Fourth St

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1276	204	0	3675	0	232	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1450	232	0	4083	0	252	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1702		2967	639	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1702		2967	639	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	38	
cM capacity (veh/h)			364		11	405	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	580	580	522	1361	1361	1361	252
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	232	0	0	0	252
cSH	1700	1700	1700	1700	1700	1700	405
Volume to Capacity	0.34	0.34	0.31	0.80	0.80	0.80	0.62
Queue Length 95th (ft)	0	0	0	0	0	0	102
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.5
Lane LOS							D
Approach Delay (s)	0.0			0.0			27.5
Approach LOS							D
Intersection Summary							
Average Delay			1.2				
Intersection Capacity Utilization			85.9%		ICU Level of Service		E
Analysis Period (min)			15				













NBC Coastal Campus
3: Orange Ave & Third St

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1535	1967	345	107	103	0	0	280	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4641		1770	3539			3505	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4641		1770	3539			3505	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1651	2115	371	145	139	0	0	322	15
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1024	3105	0	145	139	0	0	335	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3213		186	872			397	
v/s Ratio Prot				c0.67	0.67		c0.08	0.04			c0.10	
v/s Ratio Perm												
v/c Ratio				0.97	0.97		0.78	0.16			0.84	
Uniform Delay, d1				27.4	27.1		82.6	56.0			82.4	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				21.2	9.3		18.4	0.1			15.1	
Delay (s)				48.6	36.4		101.0	56.1			97.4	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			39.4			79.0			97.4	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay			45.9	HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio			0.93									
Actuated Cycle Length (s)			189.5	Sum of lost time (s)				16.8				
Intersection Capacity Utilization			201.0%	ICU Level of Service				H				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑		↑↑	↑↑	↑↑
Volume (vph)	1	588	81	0	0	0	0	200	216	455	1418	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3246	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3246	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	639	88	0	0	0	0	233	235	495	1477	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	22	47	0	0	0
Lane Group Flow (vph)	0	640	59	0	0	0	0	303	96	495	1477	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1172	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.42	
v/s Ratio Perm		0.13	0.04						0.07			
v/c Ratio		0.36	0.11					0.26	0.18	0.70	0.72	
Uniform Delay, d1		41.5	37.7					38.6	37.5	63.3	25.6	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.2	1.2	
Delay (s)		41.6	37.8					38.7	37.7	66.5	26.8	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.4			36.8	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.1		HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		201.0%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↕	↕
Volume (vph)	253	8	1328	702	0	1261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Flt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3314			3362
Flt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3314			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	294	9	1428	755	0	1327
RTOR Reduction (vph)	1	0	56	0	0	0
Lane Group Flow (vph)	302	0	2127	0	0	1327
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	19.9		44.5			44.5
Effective Green, g (s)	19.9		44.5			44.5
Actuated g/C Ratio	0.27		0.61			0.61
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	430		2006			2035
v/s Ratio Prot	c0.19		c0.64			0.39
v/s Ratio Perm						
v/c Ratio	0.70		1.06			0.65
Uniform Delay, d1	24.1		14.5			9.5
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	5.1		38.2			0.8
Delay (s)	29.2		52.7			10.2
Level of Service	C		D			B
Approach Delay (s)	29.2		52.7			10.2
Approach LOS	C		D			B
Intersection Summary						
HCM 2000 Control Delay			36.1		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			1.00			
Actuated Cycle Length (s)			73.5		Sum of lost time (s)	12.1
Intersection Capacity Utilization			86.7%		ICU Level of Service	E
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↕	↕	↕	↕	↕	↕
Volume (vph)	55	3	12	9	0	7	23	1576	30	46	1426	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Flt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1692	1583		1705		1770	3529		1770	3524	
Flt Permitted	0.74	0.77	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1303	1358	1583		1508		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	64	3	14	18	0	14	27	1876	36	50	1550	47
RTOR Reduction (vph)	0	0	12	0	27	0	0	1	0	0	1	0
Lane Group Flow (vph)	33	34	2	0	5	0	27	1911	0	50	1596	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases							5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	16.2	16.2	16.2		16.2		3.0	69.9		4.1	71.0	
Effective Green, g (s)	16.2	16.2	16.2		16.2		3.0	69.9		4.1	71.0	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.67		0.04	0.68	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	210	245		234		50	2365		69	2398	
v/s Ratio Prot							0.02	c0.54		c0.03	0.45	
v/s Ratio Perm	c0.03	0.03	0.00		0.00							
v/c Ratio	0.16	0.16	0.01		0.02		0.54	0.81		0.72	0.67	
Uniform Delay, d1	38.2	38.2	37.3		37.3		50.0	12.4		49.5	9.7	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4	0.0		0.0		11.4	2.1		31.2	0.7	
Delay (s)	38.6	38.5	37.3		37.4		61.3	14.5		80.7	10.4	
Level of Service	D	D	D		D		E	B		F	B	
Approach Delay (s)		38.3			37.4			15.2			12.6	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			14.7							B		
HCM 2000 Volume to Capacity ratio			0.69									
Actuated Cycle Length (s)			104.3				Sum of lost time (s)			14.1		
Intersection Capacity Utilization			61.2%				ICU Level of Service			B		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	27	0	1512	9	499	918	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	41	0	1662	10	509	937	0
RTOR Reduction (vph)	0	0	0	0	37	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	4	0	0	1662	5	509	937	0
Turn Type					NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.47		c0.29	0.26	
v/s Ratio Perm								0.00				
v/c Ratio					0.03			1.00	0.01	0.83	0.31	
Uniform Delay, d1					60.6			38.5	20.5	43.7	2.4	
Progression Factor					1.00			0.42	1.00	1.00	1.00	
Incremental Delay, d2					0.1			14.8	0.0	9.6	0.3	
Delay (s)					60.7			30.9	20.5	53.3	2.7	
Level of Service					E			C	C	D	A	
Approach Delay (s)		0.0			60.7			30.8			20.5	
Approach LOS		A			E			C			C	
Intersection Summary												
HCM 2000 Control Delay		26.5			HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		88.3%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd











Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	49	15	2	66	140	144	1338	7	228	408	328
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1860	1510	1770	3539	1347	1770	3259	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1860	1510	1770	3539	1347	1770	3259	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	46	75	23	2	75	159	160	1487	8	262	469	377
RTOR Reduction (vph)	0	0	21	0	0	134	0	0	4	0	101	0
Lane Group Flow (vph)	46	75	2	0	77	25	160	1487	4	262	745	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1069	
v/s Ratio Prot	0.03	c0.04			c0.04		0.09	c0.42		c0.15	0.23	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.38	0.59	0.02		0.26	0.11	0.29	0.94	0.01	0.77	0.70	
Uniform Delay, d1	64.5	65.5	62.9		53.5	52.2	37.9	38.5	22.3	55.4	42.4	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.93	
Incremental Delay, d2	2.0	6.7	0.1		0.5	0.2	0.3	12.7	0.0	9.8	3.7	
Delay (s)	66.5	72.2	63.0		54.0	52.4	38.2	51.2	22.4	62.8	43.2	
Level of Service	E	E	E		D	D	D	D	C	E	D	
Approach Delay (s)		68.9			52.9			49.8			47.8	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			50.2		HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio			0.75									
Actuated Cycle Length (s)			145.0		Sum of lost time (s)				19.4			
Intersection Capacity Utilization			92.6%		ICU Level of Service				F			
Analysis Period (min)			15									
c Critical Lane Group												











NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	44	220	5	64	260	10
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	52	259	6	80	283	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked	0.99					
vC, conflicting volume	622	46			86	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	617	46			86	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	86	75			81	
cM capacity (veh/h)	366	1023			1510	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	311	86	293			
Volume Left	52	0	283			
Volume Right	259	80	0			
cSH	1228	1700	1510			
Volume to Capacity	0.25	0.05	0.19			
Queue Length 95th (ft)	25	0	17			
Control Delay (s)	10.8	0.0	7.7			
Lane LOS	B		A			
Approach Delay (s)	10.8	0.0	7.7			
Approach LOS	B					
Intersection Summary						
Average Delay		8.1				
Intersection Capacity Utilization		31.6%	ICU Level of Service	A		
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	47	3	1503	440	0	379
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1754		3539	1519		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1754		3539	1519		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	63	4	1582	463	0	592
RTOR Reduction (vph)	4	0	0	136	0	0
Lane Group Flow (vph)	63	0	1582	327	0	592
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		30.9	30.9		30.9
Effective Green, g (s)	3.0		30.9	30.9		30.9
Actuated g/C Ratio	0.07		0.71	0.71		0.71
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	120		2496	1071		2496
v/s Ratio Prot	c0.04		c0.45			0.17
v/s Ratio Perm				0.21		
v/c Ratio	0.53		0.63	0.30		0.24
Uniform Delay, d1	19.7		3.4	2.4		2.3
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.1		0.5	0.2		0.0
Delay (s)	23.9		4.0	2.6		2.3
Level of Service	C		A	A		A
Approach Delay (s)	23.9		3.7			2.3
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.9	HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.62			
Actuated Cycle Length (s)			43.8	Sum of lost time (s)		9.9
Intersection Capacity Utilization			54.0%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (veh/h)	0	18	2426	7	7	427
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	31	2609	8	10	628
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2947	1308			2616	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2947	1308			2616	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	79			94	
cM capacity (veh/h)	11	150			161	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	31	1739	877	10	314	314
Volume Left	0	0	0	10	0	0
Volume Right	31	0	8	0	0	0
cSH	150	1700	1700	161	1700	1700
Volume to Capacity	0.21	1.02	0.52	0.06	0.18	0.18
Queue Length 95th (ft)	19	0	0	5	0	0
Control Delay (s)	35.2	0.0	0.0	28.8	0.0	0.0
Lane LOS	E			D		
Approach Delay (s)	35.2	0.0		0.5		
Approach LOS	E					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		77.3%		ICU Level of Service		D
Analysis Period (min)		15				

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖↗	↖	↖	↖↗
Volume (vph)	20	101	2325	14	44	383
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	25	125	2500	15	64	555
RTOR Reduction (vph)	0	2	0	1	0	0
Lane Group Flow (vph)	25	123	2500	14	64	555
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	16.4	26.5	68.2	68.2	5.0	82.0
Effective Green, g (s)	16.4	21.4	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.20	0.63	0.63	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	269	314	2241	1002	82	2694
v/s Ratio Prot	0.01	c0.08	c0.71		c0.04	0.16
v/s Ratio Perm				0.01		
v/c Ratio	0.09	0.39	1.12	0.01	0.78	0.21
Uniform Delay, d1	39.3	37.5	19.8	7.3	50.8	3.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.8	58.9	0.0	37.0	0.0
Delay (s)	39.4	38.3	78.6	7.3	87.8	3.7
Level of Service	D	D	E	A	F	A
Approach Delay (s)	38.5		78.2			12.4
Approach LOS	D		E			B
Intersection Summary						
HCM 2000 Control Delay		64.0		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		0.96				
Actuated Cycle Length (s)		107.7		Sum of lost time (s)		18.1
Intersection Capacity Utilization		81.4%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	38	2299	30	0	401
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	61	2420	32	0	542
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2707	1226			2452	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2707	1226			2452	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	64			100	
cM capacity (veh/h)	17	170			188	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	61	1613	838	271	271	
Volume Left	0	0	0	0	0	
Volume Right	61	0	32	0	0	
cSH	170	1700	1700	1700	1700	
Volume to Capacity	0.36	0.95	0.49	0.16	0.16	
Queue Length 95th (ft)	38	0	0	0	0	
Control Delay (s)	37.5	0.0	0.0	0.0	0.0	
Lane LOS	E					
Approach Delay (s)	37.5	0.0		0.0		
Approach LOS	E					
Intersection Summary						
Average Delay			0.8			
Intersection Capacity Utilization			74.5%		ICU Level of Service	D
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	12	8	2329	38	18	374
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	19	13	2426	40	22	462
RTOR Reduction (vph)	0	2	0	10	0	0
Lane Group Flow (vph)	19	11	2426	30	22	462
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.5	4.6	58.8	58.8	3.1	69.4
Effective Green, g (s)	1.5	4.6	58.8	58.8	3.1	69.4
Actuated g/C Ratio	0.02	0.06	0.76	0.76	0.04	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	34	93	2685	1201	70	3169
v/s Ratio Prot	c0.01	0.00	c0.69		c0.01	0.13
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.56	0.12	0.90	0.03	0.31	0.15
Uniform Delay, d1	37.7	34.5	7.2	2.3	36.2	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	18.4	0.6	4.8	0.0	2.6	0.0
Delay (s)	56.1	35.1	11.9	2.3	38.7	0.5
Level of Service	E	D	B	A	D	A
Approach Delay (s)	47.6		11.8			2.2
Approach LOS	D		B			A
Intersection Summary						
HCM 2000 Control Delay			10.6		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.87			
Actuated Cycle Length (s)			77.5		Sum of lost time (s)	14.1
Intersection Capacity Utilization			77.2%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	3	0	53	2	0	51	3	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	12	0	98	4	0	81	5	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	12	0	102	81	5					
Volume Left (vph)	0	0	98	0	0					
Volume Right (vph)	0	0	0	0	5					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.2	3.2					
Degree Utilization, x	0.01	0.00	0.12	0.09	0.00					
Capacity (veh/h)	822	1121	809	828	1121					
Control Delay (s)	7.3	6.2	7.9	7.6	6.2					
Approach Delay (s)	7.3		7.9	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.7							
Level of Service			A							
Intersection Capacity Utilization			19.7%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑	↑	↑	↑			
Volume (vph)	3	43	0	0	38	262	4	2102	59	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.72	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1346	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	4	57	0	0	53	364	4	2236	63	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	54	0	0	27	0	0	0
Lane Group Flow (vph)	4	57	0	0	53	310	4	2236	36	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	18.5	18.5			18.5	18.5	47.7	43.6	43.6			
Effective Green, g (s)	18.5	18.5			18.5	18.5	47.7	43.6	43.6			
Actuated g/C Ratio	0.25	0.25			0.25	0.25	0.63	0.58	0.58			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	329	456			456	387	1118	2043	914			
v/s Ratio Prot		0.03			0.03		0.00	c0.63				
v/s Ratio Perm	0.00					c0.20			0.02			
v/c Ratio	0.01	0.12			0.12	0.80	0.00	1.09	0.04			
Uniform Delay, d1	21.6	22.2			22.1	26.8	5.1	15.9	6.9			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	11.3	0.0	51.0	0.0			
Delay (s)	21.6	22.3			22.3	38.0	5.1	67.0	6.9			
Level of Service	C	C			C	D	A	E	A			
Approach Delay (s)		22.3				36.0		65.2			0.0	
Approach LOS		C				D		E			A	
Intersection Summary												
HCM 2000 Control Delay			59.9					HCM 2000 Level of Service		E		
HCM 2000 Volume to Capacity ratio			1.01									
Actuated Cycle Length (s)			75.5			Sum of lost time (s)			13.4			
Intersection Capacity Utilization			93.9%			ICU Level of Service			F			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (2 CVN) with Alternative 3 No Hooper





















Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔
Volume (veh/h)	0	0	0	1870	0	338	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	0	1948	0	428	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1402	214	428		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1402	214	428		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	131	791	1128		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	974	974	285	143	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.57	0.57	0.17	0.08	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			55.0%		ICU Level of Service		B
Analysis Period (min)			15				

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	468	2	45	50	8	21	30	1718	11	4	148	187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	1.00		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1594		1770	1661		1770	3536		1770	3243	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1594		1770	1661		1770	3536		1770	3243	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	532	2	51	161	26	68	32	1808	12	6	214	271
RTOR Reduction (vph)	0	34	0	0	64	0	0	1	0	0	166	0
Lane Group Flow (vph)	532	19	0	161	30	0	32	1819	0	6	319	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	32.3	32.3		5.0	5.0		3.3	39.9		1.0	37.6	
Effective Green, g (s)	32.3	32.3		5.0	5.0		3.3	39.9		1.0	37.6	
Actuated g/C Ratio	0.33	0.33		0.05	0.05		0.03	0.41		0.01	0.39	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	588	530		91	85		60	1453		18	1255	
v/s Ratio Prot	c0.30	0.01		c0.09	0.02		c0.02	c0.51		0.00	0.10	
v/s Ratio Perm												
v/c Ratio	0.90	0.04		1.77	0.35		0.53	1.25		0.33	0.25	
Uniform Delay, d1	30.9	21.9		46.0	44.5		46.1	28.6		47.7	20.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	17.4	0.0		386.9	2.5		8.8	119.3		10.6	0.1	
Delay (s)	48.3	21.9		432.9	46.9		55.0	147.9		58.3	20.3	
Level of Service	D	C		F	D		D	F		E	C	
Approach Delay (s)		45.9			290.6			146.3			20.8	
Approach LOS		D			F			F			C	
Intersection Summary												
HCM 2000 Control Delay			120.1			HCM 2000 Level of Service				F		
HCM 2000 Volume to Capacity ratio			1.14									
Actuated Cycle Length (s)			97.1			Sum of lost time (s)			18.9			
Intersection Capacity Utilization			88.9%			ICU Level of Service				E		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	9	216	19	0	1555	20	41	27	2	23	48	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5025			5076		1770	1846			1732	
Flt Permitted	0.95	1.00			1.00		0.65	1.00			0.14	
Satd. Flow (perm)	1770	5025			5076		1210	1846			250	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	
Adj. Flow (vph)	10	243	21	0	1709	22	49	32	2	30	62	78
RTOR Reduction (vph)	0	6	0	0	1	0	0	2	0	0	17	0
Lane Group Flow (vph)	10	258	0	0	1730	0	49	32	0	0	153	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1901			2061		235	358			41	
v/s Ratio Prot	c0.01	0.05			c0.34			0.02				
v/s Ratio Perm							c0.04				c0.61	
v/c Ratio	0.05	0.14			0.84		0.21	0.09			3.74	
Uniform Delay, d1	71.5	36.7			48.2		60.9	59.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			3.9		0.4	0.1			1290.2	
Delay (s)	71.6	36.8			52.1		61.3	59.6			1365.2	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		38.1			52.1			60.6			1365.2	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		149.6			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.14										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		68.9%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	233	0	856	1565	10	0	0	0	0	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	284	0	911	1665	11	0	0	0	0	0	20
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	284	0	911	1676	0	0	0	0	0	0	8
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.06		c0.27	c0.47							
v/s Ratio Perm												0.00
v/c Ratio		0.15		0.53	0.52							0.01
Uniform Delay, d1		36.8		30.6	1.4							34.9
Progression Factor		0.41		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.3	0.2							0.0
Delay (s)		15.1		30.9	1.6							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.1			11.9			0.0				35.0
Approach LOS		B			B			A				C
Intersection Summary												
HCM 2000 Control Delay				12.4				HCM 2000 Level of Service			B	
HCM 2000 Volume to Capacity ratio				0.55								
Actuated Cycle Length (s)				180.0				Sum of lost time (s)			21.9	
Intersection Capacity Utilization				65.2%				ICU Level of Service			C	
Analysis Period (min)				15								
c Critical Lane Group												

NBC Coastal Campus
21: DwY/Silver Strand Blvd & Palm Ave

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	15	238	0	0	131	648	0	0	0	109	0	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	18	283	0	0	141	697	0	0	0	120	0	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	838			283			815	1157	283	808	808	489
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	838			283			815	1157	283	808	808	489
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			100			100	100	100	59	100	99
cM capacity (veh/h)	797			1279			288	192	756	294	308	579
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	301	838	0	126								
Volume Left	18	0	0	120								
Volume Right	0	697	0	7								
cSH	797	1279	1700	302								
Volume to Capacity	0.02	0.00	0.00	0.42								
Queue Length 95th (ft)	2	0	0	50								
Control Delay (s)	0.8	0.0	0.0	25.2								
Lane LOS	A			D								
Approach Delay (s)	0.8	0.0	0.0	25.2								
Approach LOS				D								
Intersection Summary												
Average Delay		2.7										
Intersection Capacity Utilization		59.9%			ICU Level of Service				B			
Analysis Period (min)		15										

NBC Coastal Campus
22: 3rd St & Palm Ave

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	338	5	27	755	25	12	15	129	12	11	15
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	9	393	6	29	812	27	15	19	159	15	14	19
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	399	29	839	193	48						
Volume Left (vph)	9	0	29	0	15	15						
Volume Right (vph)	0	6	0	27	159	19						
Hadj (s)	0.53	0.02	0.53	0.01	-0.45	-0.14						
Departure Headway (s)	6.7	6.1	6.4	5.9	6.3	7.1						
Degree Utilization, x	0.02	0.68	0.05	1.0	0.34	0.09						
Capacity (veh/h)	531	569	543	622	544	454						
Control Delay (s)	8.6	20.0	8.6	197.0	12.4	10.8						
Approach Delay (s)	19.8		190.7		12.4	10.8						
Approach LOS	C		F		B	B						
Intersection Summary												
Delay			116.4									
Level of Service			F									
Intersection Capacity Utilization		57.8%		ICU Level of Service					B			
Analysis Period (min)		15										























NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↑	↕	↕	↔	↔
Volume (veh/h)	242	480	744	156	18	207
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	306	608	907	190	25	292
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked	0.83				0.83	0.83
vC, conflicting volume	1098				2223	549
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	717				2067	58
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	58				0	65
cM capacity (veh/h)	733				23	830
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	306	608	605	493	317	
Volume Left	306	0	0	0	25	
Volume Right	0	0	0	190	292	
cSH	733	1700	1700	1700	216	
Volume to Capacity	0.42	0.36	0.36	0.29	1.46	
Queue Length 95th (ft)	52	0	0	0	472	
Control Delay (s)	13.4	0.0	0.0	0.0	274.3	
Lane LOS	B				F	
Approach Delay (s)	4.5		0.0		274.3	
Approach LOS					F	
Intersection Summary						
Average Delay			39.1			
Intersection Capacity Utilization			62.7%		ICU Level of Service	B
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 				
Volume (vph)	17	473	17	27	740	0	72	34	83	2	27	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1720			1857	1583
Flt Permitted	0.23	1.00		0.39	1.00			0.86			0.98	1.00
Satd. Flow (perm)	434	3521		733	3539			1506			1825	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	22	614	22	35	961	0	109	52	126	3	47	48
RTOR Reduction (vph)	0	3	0	0	0	0	0	35	0	0	0	33
Lane Group Flow (vph)	22	633	0	35	961	0	0	252	0	0	50	15
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	22.1	22.1		22.1	22.1			14.9			14.9	14.9
Effective Green, g (s)	22.1	22.1		22.1	22.1			14.9			14.9	14.9
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.32			0.32	0.32
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	207	1684		350	1692			485			588	510
v/s Ratio Prot		0.18			c0.27							
v/s Ratio Perm	0.05			0.05				c0.17			0.03	0.01
v/c Ratio	0.11	0.38		0.10	0.57			0.52			0.09	0.03
Uniform Delay, d1	6.6	7.7		6.6	8.6			12.7			10.9	10.7
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.2	0.1		0.1	0.4			0.9			0.1	0.0
Delay (s)	6.8	7.8		6.7	9.1			13.7			11.0	10.7
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)		7.8			9.0			13.7			10.9	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay			9.3		HCM 2000 Level of Service				A			
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		46.2			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		51.1%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗			↖	
Volume (veh/h)	559	5	0	0	3	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	608	5	0	0	3	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			613		608	608
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			613		608	608
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			966		459	496
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	608	5	10			
Volume Left	0	0	3			
Volume Right	0	5	7			
cSH	1700	1700	483			
Volume to Capacity	0.36	0.00	0.02			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.6			
Lane LOS			B			
Approach Delay (s)	0.0		12.6			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			39.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑	↘	↖	↑↑↑			↗			↖	↘
Volume (vph)	24	777	40	27	2090		187	42	58	102	52	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5048		1770	5067			3324			3363	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5048		1770	5067			3324			3363	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	29	925	48	30	2297	55	225	51	70	124	63	34
RTOR Reduction (vph)	0	3	0	0	1	0	0	13	0	0	8	0
Lane Group Flow (vph)	29	970	0	30	2351	0	0	333	0	0	213	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2122		157	2018			646			653	
v/s Ratio Prot	0.02	c0.19		c0.02	c0.46			c0.10			c0.06	
v/s Ratio Perm												
v/c Ratio	0.15	0.46		0.19	1.16			0.52			0.33	
Uniform Delay, d1	72.3	37.4		76.0	54.1			64.9			62.4	
Progression Factor	1.00	1.00		1.18	0.85			1.00			1.00	
Incremental Delay, d2	0.4	0.7		0.4	78.5			0.7			0.3	
Delay (s)	72.7	38.1		90.4	124.5			65.6			62.6	
Level of Service	E	D		F	F			E			E	
Approach Delay (s)		39.1			124.1			65.6			62.6	
Approach LOS		D			F			E			E	
Intersection Summary												
HCM 2000 Control Delay		94.0			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		78.6%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑↑↑	↔	↔	↑↑↑	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	3	1040	40	23	2288	14	21	5	35	63	12	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5081			1690		1770	1699	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.63	1.00	
Satd. Flow (perm)	1770	5057		1770	5081			1535		1182	1699	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	3	1169	45	26	2600	16	29	7	48	90	17	24
RTOR Reduction (vph)	0	2	0	0	0	0	0	27	0	0	20	0
Lane Group Flow (vph)	3	1212	0	26	2616	0	0	57	0	90	21	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			255		197	283	
v/s Ratio Prot	0.00	0.24		c0.01	c0.51						0.01	
v/s Ratio Perm								0.04		c0.08		
v/c Ratio	0.08	0.35		0.22	0.70			0.22		0.46	0.07	
Uniform Delay, d1	86.2	11.6		79.6	13.4			64.9		67.7	63.3	
Progression Factor	1.61	0.25		1.42	0.40			1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.3		0.4	0.5			0.4		1.7	0.1	
Delay (s)	139.9	3.2		113.4	5.8			65.4		69.3	63.4	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.5			6.9			65.4			67.5	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		9.0			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		77.9%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑↑↑	↔	↔	↑↑↑	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	4	1120	72	110	2122	59	167	22	104	192	41	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1258	81	133	2557	71	188	25	117	256	55	23
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	97	0	3	0
Lane Group Flow (vph)	4	1335	0	133	2557	41	0	213	20	0	331	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.26		c0.08	c0.50			c0.12			c0.10	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.10	0.60		0.68	0.95	0.05		0.69	0.07		0.57	
Uniform Delay, d1	86.2	38.0		76.9	39.7	20.3		70.0	62.5		68.4	
Progression Factor	1.19	0.60		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	1.1		9.0	8.6	0.1		6.6	0.1		1.4	
Delay (s)	103.4	24.0		85.9	48.3	20.4		76.7	62.6		69.7	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		24.2			49.4			71.7			69.7	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		45.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		94.9%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰	
Volume (vph)	16	1423	29	50	2270	14	18	8	56	44	3	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1673			1724	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.79	
Satd. Flow (perm)	1770	5070		1770	5081			1562			1406	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	17	1547	32	58	2640	16	21	10	67	58	4	32
RTOR Reduction (vph)	0	2	0	0	0	0	0	53	0	0	25	0
Lane Group Flow (vph)	17	1577	0	58	2656	0	0	45	0	0	69	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	1.5	37.9		2.7	39.1			15.3			15.3	
Effective Green, g (s)	1.5	37.9		2.7	39.1			15.3			15.3	
Actuated g/C Ratio	0.02	0.53		0.04	0.55			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	37	2683		66	2774			333			300	
v/s Ratio Prot	0.01	0.31		c0.03	c0.52							
v/s Ratio Perm								0.03			c0.05	
v/c Ratio	0.46	0.59		0.88	0.96			0.14			0.23	
Uniform Delay, d1	34.6	11.5		34.3	15.5			22.8			23.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	8.8	0.3		69.1	9.1			0.2			0.4	
Delay (s)	43.4	11.8		103.4	24.5			23.0			23.7	
Level of Service	D	B		F	C			C			C	
Approach Delay (s)		12.2			26.2			23.0			23.7	
Approach LOS		B			C			C			C	
Intersection Summary												
HCM 2000 Control Delay		21.1			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		71.6			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		62.6%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	105	1440	34	280	2198	246	86	83	884	269	106	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	122	1674	40	298	2338	262	96	92	982	320	126	105
RTOR Reduction (vph)	0	2	0	0	0	69	0	147	173	0	3	65
Lane Group Flow (vph)	122	1712	0	298	2338	193	96	397	357	320	134	29
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.1		17.9	47.0	47.0	8.5	35.3	35.3	10.3	37.1	37.1
Effective Green, g (s)	6.0	35.1		17.9	47.0	47.0	8.5	35.3	35.3	10.3	37.1	37.1
Actuated g/C Ratio	0.05	0.29		0.15	0.39	0.39	0.07	0.29	0.29	0.09	0.31	0.31
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	170	1475		262	1983	617	124	453	440	293	538	463
v/s Ratio Prot	0.04	0.34		c0.17	c0.46		0.05	c0.26		c0.09	0.08	
v/s Ratio Perm						0.12			0.24			0.02
v/c Ratio	0.72	1.16		1.14	1.18	0.31	0.77	0.88	0.81	1.09	0.25	0.06
Uniform Delay, d1	56.4	42.7		51.3	36.8	25.5	55.1	40.5	39.5	55.1	31.3	29.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.5	80.2		97.8	86.1	0.3	25.4	17.1	10.8	79.5	0.2	0.1
Delay (s)	69.9	122.9		149.1	122.9	25.8	80.5	57.6	50.3	134.6	31.5	29.5
Level of Service	E	F		F	F	C	F	E	D	F	C	C
Approach Delay (s)		119.4			116.8			56.2			91.0	
Approach LOS		F			F			E			F	
Intersection Summary												
HCM 2000 Control Delay		104.4			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.09										
Actuated Cycle Length (s)		120.5			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		95.1%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	326	1281	0	178	1446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	366	1377	0	198	1607
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	366	1377	0	198	1604
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.10	c0.39		0.11	c0.58
v/s Ratio Perm						
v/c Ratio		0.14	1.18		0.96	1.05
Uniform Delay, d1		2.5	26.8		35.1	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	90.1		49.7	36.4
Delay (s)		2.5	116.9		84.8	54.4
Level of Service		A	F		F	D
Approach Delay (s)		2.5	116.9		57.8	
Approach LOS		A	F		E	
Intersection Summary						
HCM 2000 Control Delay			75.0		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			1.17			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			74.3%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	504	0	0	489	600	908	2	165	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3247		1681	1631				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3247		1681	1631				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	579	0	0	532	652	987	2	179	0	0	0
RTOR Reduction (vph)	0	0	0	0	402	0	0	29	0	0	0	0
Lane Group Flow (vph)	0	579	0	0	782	0	592	547	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		18.8			18.8		22.3	22.3				
Effective Green, g (s)		18.8			18.8		22.3	22.3				
Actuated g/C Ratio		0.38			0.38		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1355			1243		763	740				
v/s Ratio Prot		0.16			c0.24							
v/s Ratio Perm							c0.35	0.34				
v/c Ratio		0.43			0.63		0.78	0.74				
Uniform Delay, d1		11.2			12.3		11.3	11.0				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			1.0		5.0	3.9				
Delay (s)		11.4			13.3		16.3	14.9				
Level of Service		B			B		B	B				
Approach Delay (s)		11.4			13.3		15.6				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					13.8					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.71							
Actuated Cycle Length (s)					49.1					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					76.4%					ICU Level of Service	D	
Analysis Period (min)					15							
c Critical Lane Group												





















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔			↔	↔	
Volume (veh/h)	0	4	5	613	75	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	16	7	851	183	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1048	183	183			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1048	183	183			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	251	860	1392			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	16	858	183			
Volume Left	0	7	0			
Volume Right	16	0	0			
cSH	860	1392	1700			
Volume to Capacity	0.02	0.00	0.11			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	9.3	0.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.3	0.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			46.2%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Volume (veh/h)	0	4043	18	0	1802	246	0	0	915	0	0	56
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4211	19	0	1858	254	0	0	1017	0	0	85
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2131			4250			4965	6372	1453	3428	6255	786
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2131			4250			4965	6372	1453	3428	6255	786
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	44	100	100	74
cM capacity (veh/h)	247			34			0	0	1828	1	0	324
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1685	1685	861	743	743	625	1017	85				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	19	0	0	254	1017	85				
cSH	1700	1700	1700	1700	1700	1700	1828	324				
Volume to Capacity	0.99	0.99	0.51	0.44	0.44	0.37	0.56	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	91	26				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.4	20.0				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.4	20.0				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization			143.8%		ICU Level of Service				H			
Analysis Period (min)			15									

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3806	132	0	1840	0	191	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3924	136	0	1917	0	233	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4080		4671	1416	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4080		4671	1416	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			40		1	123	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1569	1569	921	639	639	639	233
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	136	0	0	0	233
cSH	1700	1700	1700	1700	1700	1700	123
Volume to Capacity	0.92	0.92	0.54	0.38	0.38	0.38	1.90
Queue Length 95th (ft)	0	0	0	0	0	0	463
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	494.5
Lane LOS							F
Approach Delay (s)	0.0			0.0			494.5
Approach LOS							F
Intersection Summary							
Average Delay			18.5				
Intersection Capacity Utilization			97.0%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	↗
Volume (vph)	0	0	0	980	642	110	103	254		0	0	867
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	17
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4637		1770	3539				3526
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4637		1770	3539				3526
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1032	676	116	106	262	0	0	894	17
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	516	1296	0	106	262	0	0	910	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1432		98	1989				1567
v/s Ratio Prot				c0.34	0.28		c0.06	0.07				c0.26
v/s Ratio Perm												
v/c Ratio				1.10	0.98dl		1.08	0.13				0.58
Uniform Delay, d1				31.1	29.8		42.5	9.3				18.7
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				70.8	8.4		114.7	0.0				0.6
Delay (s)				101.9	38.3		157.2	9.3				19.3
Level of Service				F	D		F	A				B
Approach Delay (s)		0.0			56.3			51.9				19.3
Approach LOS		A			E			D				B
Intersection Summary												
HCM 2000 Control Delay		44.9					HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		90.0				Sum of lost time (s)				17.2		
Intersection Capacity Utilization		135.9%				ICU Level of Service				H		
Analysis Period (min)		15										
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	7	2133	111	0	0	0	0	357	418	766	1103	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.95	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3155	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3155	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2344	122	0	0	0	0	415	486	798	1149	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2352	93	0	0	0	0	613	253	798	1149	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.0	53.0	44.2	100.0	
Effective Green, g (s)		63.4	63.4					53.0	53.0	44.2	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					955	408	867	2022	
v/s Ratio Prot		c0.46						c0.19		c0.23	0.32	
v/s Ratio Perm			0.06						0.19			
v/c Ratio		1.28	0.16					0.64	0.62	0.92	0.57	
Uniform Delay, d1		55.8	37.8					52.8	52.3	63.7	23.8	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		129.3	0.1					1.5	2.8	14.8	0.4	
Delay (s)		185.1	37.9					54.3	55.1	78.5	24.2	
Level of Service		F	D					D	E	E	C	
Approach Delay (s)		177.8			0.0			54.6			46.4	
Approach LOS		F			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		108.9									F	
HCM 2000 Volume to Capacity ratio		0.97										
Actuated Cycle Length (s)		175.0							14.4			
Intersection Capacity Utilization		135.9%							H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave













Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑↑
Volume (vph)	203	14	995	793	0	1404
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3255			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3255			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	260	18	1118	891	0	1510
RTOR Reduction (vph)	2	0	69	0	0	0
Lane Group Flow (vph)	276	0	1940	0	0	1510
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	296		2459			2540
v/s Ratio Prot	c0.17		c0.60			0.45
v/s Ratio Perm						
v/c Ratio	0.93		0.79			0.59
Uniform Delay, d1	64.0		11.8			8.7
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	35.0		2.7			1.0
Delay (s)	99.0		14.5			9.7
Level of Service	F		B			A
Approach Delay (s)	99.0		14.5			9.7
Approach LOS	F		B			A
Intersection Summary						
HCM 2000 Control Delay		18.8				B
HCM 2000 Volume to Capacity ratio		0.83				
Actuated Cycle Length (s)		160.0				12.1
Intersection Capacity Utilization		86.4%				E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Horizon Year (2 CVN) with Alternative 3 No Hooper







Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	168	12	34	30	12	29	27	1692	58	79	1666	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1724		1770	3522		1770	3488	
Flt Permitted	0.65	0.65	1.00		0.81		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1153	1158	1583		1422		1770	3522		1770	3488	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	215	15	44	47	19	45	29	1819	62	86	1811	193
RTOR Reduction (vph)	0	0	36	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	114	116	8	0	89	0	29	1880	0	86	2001	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	19.7	19.7	19.7		19.7		4.7	70.9		8.1	74.3	
Effective Green, g (s)	19.7	19.7	19.7		19.7		4.7	70.9		8.1	74.3	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.04	0.62		0.07	0.65	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	200	200	274		246		73	2200		126	2283	
v/s Ratio Prot							0.02	0.53		c0.05	c0.57	
v/s Ratio Perm	0.10	c0.10	0.00		0.06							
v/c Ratio	0.57	0.58	0.03		0.36		0.40	0.85		0.68	0.88	
Uniform Delay, d1	43.0	43.1	38.9		41.3		53.0	17.1		51.4	15.9	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.7	4.0	0.0		0.9		3.5	3.5		14.2	4.1	
Delay (s)	46.7	47.1	39.0		42.3		56.5	20.6		65.6	20.0	
Level of Service	D	D	D		D		E	C		E	C	
Approach Delay (s)		45.7			42.3			21.2			21.9	
Approach LOS		D			D			C			C	
Intersection Summary												
HCM 2000 Control Delay		23.6			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		113.5			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		81.6%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

Horizon Year (2 CVN) with Alternative 3 No Hooper












Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	9	0	169	0	1465	0	38	1828	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	13	0	245	0	1559	0	41	1966	0
RTOR Reduction (vph)	0	0	0	0	198	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	60	0	0	1559	0	41	1966	0
Turn Type				Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					14.0			42.2		2.8	49.2	
Effective Green, g (s)					14.0			42.2		2.8	49.2	
Actuated g/C Ratio					0.19			0.58		0.04	0.67	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					309			2037		67	2375	
v/s Ratio Prot					c0.04			0.44		0.02	c0.56	
v/s Ratio Perm												
v/c Ratio					0.19			0.77		0.61	0.83	
Uniform Delay, d1					24.9			11.8		34.7	8.9	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			1.8		15.4	2.5	
Delay (s)					25.2			13.6		50.1	11.4	
Level of Service					C			B		D	B	
Approach Delay (s)		0.0			25.2			13.6			12.2	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					13.6			HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio					0.80							
Actuated Cycle Length (s)					73.3			Sum of lost time (s)		18.9		
Intersection Capacity Utilization					69.9%			ICU Level of Service		C		
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Horizon Year (2 CVN) with Alternative 3 No Hooper






Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	289	48	123	8	70	402	29	787	3	135	1658	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1515		1853	1510	1770	3539	1346	1770	3515	
Flt Permitted	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1515		1853	1510	1770	3539	1346	1770	3515	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	380	63	162	9	76	437	32	865	3	144	1764	72
RTOR Reduction (vph)	0	0	131	0	0	200	0	0	2	0	2	0
Lane Group Flow (vph)	380	63	31	0	85	237	32	865	1	144	1834	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.7	27.7	27.7		24.8	24.8	4.0	56.8	56.8	16.9	69.7	
Effective Green, g (s)	27.7	27.7	27.7		24.8	24.8	4.0	56.8	56.8	16.9	69.7	
Actuated g/C Ratio	0.19	0.19	0.19		0.17	0.17	0.03	0.39	0.39	0.12	0.48	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	336	354	288		315	257	48	1380	525	205	1682	
v/s Ratio Prot	c0.21	0.03			0.05		0.02	0.24		c0.08	c0.52	
v/s Ratio Perm			0.02			c0.16			0.00			
v/c Ratio	1.13	0.18	0.11		0.27	0.92	0.67	0.63	0.00	0.70	1.09	
Uniform Delay, d1	58.9	49.4	48.7		52.5	59.5	70.1	35.8	27.1	61.9	37.9	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	89.4	0.2	0.2		0.5	35.8	29.8	2.2	0.0	10.4	50.9	
Delay (s)	148.4	49.6	48.9		53.0	95.3	99.9	38.0	27.1	72.3	88.9	
Level of Service	F	D	D		D	F	F	D	C	E	F	
Approach Delay (s)		111.5			88.4			40.2			87.7	
Approach LOS		F			F			D			F	
Intersection Summary												
HCM 2000 Control Delay		80.7			HCM 2000 Level of Service					F		
HCM 2000 Volume to Capacity ratio		1.06										
Actuated Cycle Length (s)		145.6			Sum of lost time (s)					19.4		
Intersection Capacity Utilization		87.2%			ICU Level of Service					E		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	331	478	4	55	180	4
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	368	531	6	77	205	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked	1.00					
vC, conflicting volume	458	44			83	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	456	44			83	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	24	48			86	
cM capacity (veh/h)	485	1026			1514	
Direction, Lane #						
Volume Total	899	83	209			
Volume Left	368	0	205			
Volume Right	531	77	0			
cSH	946	1700	1514			
Volume to Capacity	0.95	0.05	0.14			
Queue Length 95th (ft)	392	0	12			
Control Delay (s)	39.5	0.0	7.6			
Lane LOS	E		A			
Approach Delay (s)	39.5	0.0	7.6			
Approach LOS	E					
Intersection Summary						
Average Delay		31.2				
Intersection Capacity Utilization		41.9%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕		↕
Volume (vph)	337	5	828	58	0	1807
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1771		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1771		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	427	6	920	64	0	2030
RTOR Reduction (vph)	1	0	0	37	0	0
Lane Group Flow (vph)	432	0	920	27	0	2030
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	843		1520	633		1520
v/s Ratio Prot	c0.24		0.26			c0.57
v/s Ratio Perm				0.02		
v/c Ratio	0.51		0.61	0.04		1.34
Uniform Delay, d1	19.1		23.1	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.5		0.7	0.0		155.6
Delay (s)	19.6		23.8	17.4		185.5
Level of Service	B		C	B		F
Approach Delay (s)	19.6		23.4			185.5
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay		118.4		HCM 2000 Level of Service		F
HCM 2000 Volume to Capacity ratio		0.90				
Actuated Cycle Length (s)		105.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		99.9%		ICU Level of Service		F
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕	↕	↕
Volume (veh/h)	5	8	666	4	18	1684
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	10	16	774	5	20	1851
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1742	390			779	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1742	390			779	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	87	97			98	
cM capacity (veh/h)	76	609			834	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	516	263	20	925	925
Volume Left	10	0	0	20	0	0
Volume Right	16	0	5	0	0	0
cSH	165	1700	1700	834	1700	1700
Volume to Capacity	0.16	0.30	0.15	0.02	0.54	0.54
Queue Length 95th (ft)	14	0	0	2	0	0
Control Delay (s)	30.9	0.0	0.0	9.4	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	30.9	0.0		0.1		
Approach LOS	D					
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			56.6%		ICU Level of Service	B
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	35	66	603	14	120	1569
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	38	72	685	16	132	1724
RTOR Reduction (vph)	0	49	0	9	0	0
Lane Group Flow (vph)	38	23	685	7	132	1724
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	11.4	25.2	26.1	26.1	8.7	43.6
Effective Green, g (s)	11.4	20.1	26.1	26.1	8.7	43.6
Actuated g/C Ratio	0.18	0.31	0.41	0.41	0.14	0.68
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	313	494	1436	642	239	2399
v/s Ratio Prot	c0.02	0.01	0.19		0.07	c0.49
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.05	0.48	0.01	0.55	0.72
Uniform Delay, d1	22.2	15.4	14.1	11.4	26.0	6.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.3	0.0	2.7	1.1
Delay (s)	22.4	15.4	14.3	11.4	28.7	7.6
Level of Service	C	B	B	B	C	A
Approach Delay (s)	17.9		14.3			9.1
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay		10.8			HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio		0.71				
Actuated Cycle Length (s)		64.3		Sum of lost time (s)	18.1	
Intersection Capacity Utilization		55.3%		ICU Level of Service	B	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave







Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↕			↕
Volume (veh/h)	0	27	592	22	0	1604
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	36	680	25	0	1743
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1565	353			706	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1565	353			706	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	94			100	
cM capacity (veh/h)	102	643			888	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	36	454	252	872	872	
Volume Left	0	0	0	0	0	
Volume Right	36	0	25	0	0	
cSH	643	1700	1700	1700	1700	
Volume to Capacity	0.06	0.27	0.15	0.51	0.51	
Queue Length 95th (ft)	4	0	0	0	0	
Control Delay (s)	10.9	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.9	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay		0.2				
Intersection Capacity Utilization		47.7%			ICU Level of Service	A
Analysis Period (min)		15				





NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	35	30	584	22	27	1576
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	49	42	621	23	30	1732
RTOR Reduction (vph)	0	36	0	10	0	0
Lane Group Flow (vph)	49	6	621	13	30	1732
Turn Type	Prot	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	4.2	7.0	29.1	29.1	2.8	39.4
Effective Green, g (s)	4.2	7.0	29.1	29.1	2.8	39.4
Actuated g/C Ratio	0.08	0.14	0.58	0.58	0.06	0.78
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	148	220	2051	917	98	2777
v/s Ratio Prot	c0.03	0.00	0.18		0.02	c0.49
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.33	0.03	0.30	0.01	0.31	0.62
Uniform Delay, d1	21.7	18.7	5.4	4.5	22.8	2.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	0.0	0.1	0.0	1.8	0.4
Delay (s)	23.0	18.7	5.5	4.5	24.5	2.7
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.0		5.4			3.1
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			4.3		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.72			
Actuated Cycle Length (s)			50.2		Sum of lost time (s)	14.1
Intersection Capacity Utilization			54.5%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	13	17	98	9	0	208	15	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	14	18	127	12	0	234	17	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	14	18	139	251						
Volume Left (vph)	0	0	127	0						
Volume Right (vph)	0	18	0	17						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.1	3.2	4.1	3.2						
Degree Utilization, x	0.02	0.02	0.16	0.22						
Capacity (veh/h)	867	1121	860	1122						
Control Delay (s)	7.1	6.3	7.9	7.1						
Approach Delay (s)	6.6		7.9	7.1						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.3							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Horizon Year (2 CVN) with Alternative 3 No Hooper












Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱	↰	↱	↰			
Volume (vph)	12	215	0	0	95	160	14	493	80	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.69	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1279	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	14	244	0	0	109	184	15	542	88	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	129	0	53	0	0	0	0
Lane Group Flow (vph)	14	244	0	0	109	55	15	542	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	10.7	10.7			10.7	10.7	16.2	16.2	16.2			
Effective Green, g (s)	10.7	10.7			10.7	10.7	16.2	16.2	16.2			
Actuated g/C Ratio	0.27	0.27			0.27	0.27	0.40	0.40	0.40			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	339	494			494	420	711	1422	636			
v/s Ratio Prot		c0.13			0.06		0.01	c0.15				
v/s Ratio Perm	0.01					0.03		0.02				
v/c Ratio	0.04	0.49			0.22	0.13	0.02	0.38	0.06			
Uniform Delay, d1	11.0	12.5			11.5	11.3	7.3	8.5	7.4			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	0.8			0.2	0.1	0.0	0.2	0.0			
Delay (s)	11.0	13.3			11.8	11.4	7.3	8.7	7.4			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		13.2			11.5		8.5			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.2			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.43										
Actuated Cycle Length (s)		40.3			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		43.1%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations				 		 	
Volume (veh/h)	0	0	0	660	0	1770	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	0	0	750	0	1967	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2342	983	1967		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2342	983	1967		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	30	248	292		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	375	375	1311	656	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.22	0.22	0.77	0.39	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			52.3%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	235	0	79	2	2	0	85	359	14	2	1224	255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3520		1770	3448	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3520		1770	3448	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	313	0	105	4	4	0	93	395	15	2	1360	283
RTOR Reduction (vph)	0	79	0	0	0	0	0	2	0	0	14	0
Lane Group Flow (vph)	313	26	0	4	4	0	93	408	0	2	1629	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	22.9	22.9		0.8	0.8		5.7	48.9		0.8	44.0	
Effective Green, g (s)	22.9	22.9		0.8	0.8		5.7	48.9		0.8	44.0	
Actuated g/C Ratio	0.25	0.25		0.01	0.01		0.06	0.53		0.01	0.48	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	439	392		15	16		109	1864		15	1643	
v/s Ratio Prot	c0.18	0.02		c0.00	0.00		c0.05	0.12		0.00	c0.47	
v/s Ratio Perm												
v/c Ratio	0.71	0.07		0.27	0.25		0.85	0.22		0.13	0.99	
Uniform Delay, d1	31.7	26.5		45.5	45.5		42.9	11.5		45.4	24.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.4	0.1		9.3	8.1		43.8	0.1		4.0	20.1	
Delay (s)	37.1	26.6		54.8	53.5		86.7	11.6		49.4	44.0	
Level of Service	D	C		D	D		F	B		D	D	
Approach Delay (s)		34.5			54.2			25.5			44.0	
Approach LOS		C			D			C			D	
Intersection Summary												
HCM 2000 Control Delay		38.9										
HCM 2000 Volume to Capacity ratio		0.89										
Actuated Cycle Length (s)		92.3										
Intersection Capacity Utilization		78.3%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	66	1174	64	0	402	40	14	46	5	28	30	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6				
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.99			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5046			5016		1770	1836			1759	
Flt Permitted	0.95	1.00			1.00		0.69	1.00			0.12	
Satd. Flow (perm)	1770	5046			5016		1294	1836			217	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	75	1334	73	0	428	43	20	66	7	33	35	28
RTOR Reduction (vph)	0	3	0	0	7	0	0	2	0	0	8	0
Lane Group Flow (vph)	75	1404	0	0	464	0	20	71	0	0	88	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1909			2037		251	357			36	
v/s Ratio Prot	c0.04	c0.28			c0.09		c0.04					
v/s Ratio Perm							0.02				c0.40	
v/c Ratio	0.38	0.74			0.23		0.08	0.20			2.44	
Uniform Delay, d1	74.3	48.2			35.0		59.3	60.7			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.2	2.6			0.3		0.1	0.3			721.7	
Delay (s)	75.5	50.8			35.2		59.5	61.0			796.7	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		52.0			35.2			60.7			796.7	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		82.1										
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		68.1%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑↑	↑↑							↑
Volume (vph)	0	1208	0	679	445	44	0	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3491							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3491							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1357	0	722	473	47	0	0	0	0	0	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	7
Lane Group Flow (vph)	0	1357	0	722	520	0	0	0	0	0	0	4
Turn Type		NA		Prot	NA							Perm
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3172							609
v/s Ratio Prot		c0.27		c0.21	c0.15							
v/s Ratio Perm												0.00
v/c Ratio		0.71		0.38	0.16							0.01
Uniform Delay, d1		47.5		22.1	0.9							34.9
Progression Factor		0.18		1.00	1.00							1.00
Incremental Delay, d2		1.4		0.1	0.0							0.0
Delay (s)		10.0		22.2	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		10.0			13.3		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		11.7										B
HCM 2000 Volume to Capacity ratio		0.54										
Actuated Cycle Length (s)		180.0							22.3			
Intersection Capacity Utilization		51.9%										A
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave



















Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	5	218	0	0	313	176	0	0	0	642	0	14
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	6	253	0	0	356	200	0	0	0	973	0	21
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	556			253			742	821	253	721	721	456
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	556			253			742	821	253	721	721	456
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	0	100	96
cM capacity (veh/h)	1015			1312			319	308	785	341	351	605
Direction, Lane #												
Volume Total	259	556	0	994								
Volume Left	6	0	0	973								
Volume Right	0	200	0	21								
cSH	1015	1312	1700	344								
Volume to Capacity	0.01	0.00	0.00	2.89								
Queue Length 95th (ft)	0	0	0	2139								
Control Delay (s)	0.2	0.0	0.0	879.9								
Lane LOS	A			F								
Approach Delay (s)	0.2	0.0	0.0	879.9								
Approach LOS				F								
Intersection Summary												
Average Delay		483.5										
Intersection Capacity Utilization		70.3%										C
Analysis Period (min)		15										












NBC Coastal Campus
22: 3rd St & Palm Ave

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	836	13	87	461	25	15	40	70	29	34	14
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	10	1072	17	98	518	28	26	70	123	63	74	30
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	10	1088	98	546	219	167						
Volume Left (vph)	10	0	98	0	26	63						
Volume Right (vph)	0	17	0	28	123	30						
Hadj (s)	0.53	0.02	0.53	0.00	-0.28	0.00						
Departure Headway (s)	7.7	7.2	7.6	7.1	7.6	8.1						
Degree Utilization, x	0.02	1.0	0.21	1.0	0.46	0.38						
Capacity (veh/h)	455	508	465	517	451	426						
Control Delay (s)	9.7	553.4	11.4	87.2	17.0	15.9						
Approach Delay (s)	548.3		75.7		17.0	15.9						
Approach LOS	F		F		C	C						
Intersection Summary												
Delay			308.8									
Level of Service			F									
Intersection Capacity Utilization			69.6%		ICU Level of Service				C			
Analysis Period (min)			15									




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			 			
Volume (veh/h)	209	832	566	41	54	175
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	215	858	658	48	64	206
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)	908					
pX, platoon unblocked						
vC, conflicting volume	706				1971	353
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	706				1971	353
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	76				0	68
cM capacity (veh/h)	888				41	643
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	215	858	439	267	269	
Volume Left	215	0	0	0	64	
Volume Right	0	0	0	48	206	
cSH	888	1700	1700	1700	145	
Volume to Capacity	0.24	0.50	0.26	0.16	1.86	
Queue Length 95th (ft)	24	0	0	0	512	
Control Delay (s)	10.3	0.0	0.0	0.0	463.5	
Lane LOS	B				F	
Approach Delay (s)	2.1	0.0			463.5	
Approach LOS				F		
Intersection Summary						
Average Delay	62.0					
Intersection Capacity Utilization	64.2%			ICU Level of Service		C
Analysis Period (min)	15					










NBC Coastal Campus
24: 7th St & Palm Ave

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	835	35	32	567	4	57	19	23	13	39	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3518		1770	3536			1754			1840	1583
Flt Permitted	0.41	1.00		0.23	1.00			0.78			0.91	1.00
Satd. Flow (perm)	771	3518		429	3536			1413			1690	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	35	994	42	35	623	4	70	23	28	17	51	41
RTOR Reduction (vph)	0	4	0	0	0	0	0	21	0	0	0	31
Lane Group Flow (vph)	35	1032	0	35	627	0	0	100	0	0	68	10
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases	2			6			8			4		
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	20.5	20.5		20.5	20.5			9.3			9.3	9.3
Effective Green, g (s)	20.5	20.5		20.5	20.5			9.3			9.3	9.3
Actuated g/C Ratio	0.53	0.53		0.53	0.53			0.24			0.24	0.24
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	405	1849		225	1858			336			403	377
v/s Ratio Prot	0.029			0.18								
v/s Ratio Perm	0.05			0.08				0.07			0.04	0.01
v/c Ratio	0.09			0.16				0.30			0.17	0.03
Uniform Delay, d1	4.6	6.2		4.8	5.3			12.2			11.8	11.4
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.4		0.3	0.1			0.5			0.2	0.0
Delay (s)	4.7	6.6		5.1	5.4			12.7			12.0	11.4
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)	6.5			5.4				12.7			11.8	
Approach LOS	A			A				B			B	
Intersection Summary												
HCM 2000 Control Delay	6.8			HCM 2000 Level of Service				A				
HCM 2000 Volume to Capacity ratio	0.48											
Actuated Cycle Length (s)	39.0			Sum of lost time (s)				9.2				
Intersection Capacity Utilization	46.5%			ICU Level of Service				A				
Analysis Period (min)	15											
c Critical Lane Group												



























NBC Coastal Campus
25: Delaware St & Palm Ave

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	884	9	0	0	7	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1078	11	0	0	10	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh			767			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			1089		1078	1078
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1089		1078	1078
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		96	98
cM capacity (veh/h)			641		242	266
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	1078	11	15			
Volume Left	0	0	10			
Volume Right	0	11	4			
cSH	1700	1700	249			
Volume to Capacity	0.63	0.01	0.06			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.0	0.0	20.4			
Lane LOS			C			
Approach Delay (s)	0.0		20.4			
Approach LOS			C			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			56.5%		ICU Level of Service B	
Analysis Period (min)			15			



























NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			  			  	
Volume (vph)	47	1909	143	66	970	149	111	102	71	197	90	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5032		1770	4983			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5032		1770	4983			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	50	2031	152	67	980	151	122	112	78	221	101	33
RTOR Reduction (vph)	0	5	0	0	11	0	0	19	0	0	4	0
Lane Group Flow (vph)	50	2178	0	67	1120	0	0	293	0	0	351	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2004		196	1984			649			658	
v/s Ratio Prot	0.03	c0.43		c0.04	0.22			c0.09			c0.10	
v/s Ratio Perm												
v/c Ratio	0.26	1.09		0.34	0.56			0.45			0.53	
Uniform Delay, d1	73.2	54.1		73.9	42.0			64.0			65.2	
Progression Factor	1.00	1.00		1.20	0.91			1.00			1.00	
Incremental Delay, d2	0.7	48.2		1.0	1.1			0.5			0.8	
Delay (s)	73.9	102.4		90.0	39.5			64.5			66.0	
Level of Service	E	F		F	D			E			E	
Approach Delay (s)		101.7			42.3			64.5			66.0	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		78.4			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		124.9%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												






















NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			  			  	
Volume (vph)	23	2231	65	56	1432	63	24	12	40	72	15	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5064		1770	5053			1703		1770	1719	
Flt Permitted	0.95	1.00		0.95	1.00			0.89		0.59	1.00	
Satd. Flow (perm)	1770	5064		1770	5053			1541		1103	1719	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	23	2277	66	58	1476	65	29	14	48	85	18	19
RTOR Reduction (vph)	0	1	0	0	2	0	0	24	0	0	17	0
Lane Group Flow (vph)	23	2342	0	58	1539	0	0	67	0	85	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.3		16.0	130.3			22.5		22.5	22.5	
Effective Green, g (s)	12.0	126.3		16.0	130.3			22.5		22.5	22.5	
Actuated g/C Ratio	0.07	0.70		0.09	0.72			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3553		157	3657			192		137	214	
v/s Ratio Prot	0.01	c0.46		c0.03	c0.30						0.01	
v/s Ratio Perm								0.04		c0.08		
v/c Ratio	0.19	0.66		0.37	0.42			0.35		0.62	0.10	
Uniform Delay, d1	79.4	14.9		77.2	9.9			72.1		74.7	69.7	
Progression Factor	1.42	0.16		1.53	0.27			1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.2		1.1	0.3			1.1		8.4	0.2	
Delay (s)	112.7	2.6		119.3	2.9			73.2		83.1	69.9	
Level of Service	F	A		F	A			E		F	E	
Approach Delay (s)		3.7			7.2			73.2			79.1	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.7			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		66.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												




















NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	2096	227	179	1517	93	147	46	146	176	51	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5011		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5011		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	32	2230	241	185	1564	96	160	50	159	238	69	31
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	132	0	4	0
Lane Group Flow (vph)	32	2464	0	185	1564	59	0	210	27	0	334	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2218		192	2364	736		305	269		575	
v/s Ratio Prot	0.02	c0.49		c0.10	c0.31			c0.12			c0.10	
v/s Ratio Perm					0.04			0.02				
v/c Ratio	0.20	1.11		0.96	0.66	0.08		0.69	0.10		0.58	
Uniform Delay, d1	76.1	50.1		79.8	37.2	26.8		70.2	63.0		68.7	
Progression Factor	0.99	1.04		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	55.6		54.0	1.5	0.2		12.0	0.7		4.2	
Delay (s)	76.1	107.7		133.9	38.7	27.0		82.2	63.8		73.0	
Level of Service	E	F		F	D	C		F	E		E	
Approach Delay (s)		107.3			47.6			74.2			73.0	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		80.8			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		0.90										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		109.5%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	2241	57	195	1857	18	45	10	93	27	12	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5066		1770	5078			1680			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.88			0.80	
Satd. Flow (perm)	1770	5066		1770	5078			1503			1451	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.95	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	12	2490	63	205	1955	19	53	12	109	33	15	15
RTOR Reduction (vph)	0	2	0	0	1	0	0	78	0	0	12	0
Lane Group Flow (vph)	12	2551	0	205	1973	0	0	96	0	0	51	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.7			17.7	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.7			17.7	
Actuated g/C Ratio	0.01	0.47		0.13	0.60			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2404		233	3032			313			302	
v/s Ratio Prot	0.01	c0.50		c0.12	0.39							
v/s Ratio Perm								c0.06			0.04	
v/c Ratio	0.75	1.06		0.88	0.65			0.31			0.17	
Uniform Delay, d1	42.0	22.3		36.2	11.3			28.4			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	106.0	37.1		29.1	0.5			0.6			0.3	
Delay (s)	148.0	59.4		65.3	11.8			29.0			27.8	
Level of Service	F	E		E	B			C			C	
Approach Delay (s)		59.8			16.8			29.0			27.8	
Approach LOS		E			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		39.5			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.84										
Actuated Cycle Length (s)		84.9			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		77.8%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑		↔	↑↑↑	↔	↔	↔	↔	↔↔	↔	↔
Volume (vph)	216	2172	30	376	1867	636	75	203	611	674	274	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		1770	5085	1583	1770	1632	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	227	2286	32	404	2008	684	80	216	650	733	298	284
RTOR Reduction (vph)	0	1	0	0	0	86	0	25	309	0	2	122
Lane Group Flow (vph)	227	2317	0	404	2008	598	80	425	107	733	324	134
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2			4				8
Actuated Green, G (s)	11.6	36.3		45.0	69.7	69.7	8.9	40.0	40.0	11.8	42.9	42.9
Effective Green, g (s)	11.6	36.3		45.0	69.7	69.7	8.9	40.0	40.0	11.8	42.9	42.9
Actuated g/C Ratio	0.07	0.23		0.29	0.45	0.45	0.06	0.26	0.26	0.08	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	256	1188		513	2286	711	101	421	388	261	483	416
v/s Ratio Prot	0.07	c0.46		c0.23	c0.39		0.05	c0.26		c0.21	c0.19	
v/s Ratio Perm					0.38			0.07				0.09
v/c Ratio	0.89	1.95		0.79	0.88	0.84	0.79	1.01	0.28	2.81	0.67	0.32
Uniform Delay, d1	71.0	59.4		50.6	38.8	37.7	72.1	57.5	45.9	71.6	49.8	44.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	28.5	430.8		7.8	4.2	8.8	33.3	46.1	0.4	824.4	3.6	0.5
Delay (s)	99.6	490.2		58.4	43.0	46.6	105.5	103.6	46.3	896.0	53.4	44.9
Level of Service	F	F		E	D	D	F	F	D	F	D	D
Approach Delay (s)		455.3			45.8			78.6			521.4	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		260.8			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.37										
Actuated Cycle Length (s)		155.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		139.9%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↔	↔
Volume (vph)	0	581	980	0	504	1904
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	653	1043	0	554	2092
RTOR Reduction (vph)	0	0	0	0	0	2
Lane Group Flow (vph)	0	653	1043	0	554	2090
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.18	c0.29		0.31	c0.75
v/s Ratio Perm						
v/c Ratio		0.37	1.22		0.84	1.18
Uniform Delay, d1		12.0	30.3		22.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	107.7		9.0	85.9
Delay (s)		12.1	138.0		31.7	100.4
Level of Service		B	F		C	F
Approach Delay (s)		12.1	138.0		86.0	
Approach LOS		B	F		F	
Intersection Summary						
HCM 2000 Control Delay		87.4			HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio		1.27				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		97.3%			ICU Level of Service	F
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	1078	0	0	604	287	501	3	123	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1123	0	0	679	322	539	3	132	0	0	0
RTOR Reduction (vph)	0	0	0	0	97	0	0	22	0	0	0	0
Lane Group Flow (vph)	0	1123	0	0	904	0	345	307	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases							2					
Actuated Green, G (s)		21.1			21.1		15.9	15.9				
Effective Green, g (s)		21.1			21.1		15.9	15.9				
Actuated g/C Ratio		0.47			0.47		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1659			1579		593	570				
v/s Ratio Prot		0.32			0.27							
v/s Ratio Perm							0.21	0.19				
v/c Ratio		0.68			0.57		0.58	0.54				
Uniform Delay, d1		9.3			8.7		11.8	11.6				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		1.1			0.5		1.5	1.0				
Delay (s)		10.4			9.2		13.3	12.6				
Level of Service		B			A		B	B				
Approach Delay (s)		10.4			9.2		13.0				0.0	
Approach LOS		B			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		10.6										
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		45.0										
Intersection Capacity Utilization		54.2%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy










Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	11	9	139	578	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	18	10	151	838	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1008	838	838			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1008	838	838			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	95	99			
cM capacity (veh/h)	263	366	797			
Direction, Lane #						
Volume Total	18	161	838			
Volume Left	0	10	0			
Volume Right	18	0	0			
cSH	366	797	1700			
Volume to Capacity	0.05	0.01	0.49			
Queue Length 95th (ft)	4	1	0			
Control Delay (s)	15.3	0.7	0.0			
Lane LOS	C	A				
Approach Delay (s)	15.3	0.7	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		40.4%				
Analysis Period (min)		15				
ICU Level of Service A						

NBC Coastal Campus
46: Tulagi Rd & Strand Wy

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	0	0	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			98			
pX, platoon unblocked						
vC, conflicting volume	0	0			0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0	0			0	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	1023	1085			1623	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		0.0%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
57:

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

NBC Coastal Campus
74: Orange Ave & Fifth St

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	4	18	16	4	14	3	10	526	6	26	1619	29
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	20	17	4	15	3	11	572	7	28	1760	32
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type								Raised			Raised	
Median storage (veh)								2			2	
Upstream signal (ft)								561			644	
pX, platoon unblocked	0.81	0.81	0.79	0.81	0.81	0.96	0.79			0.96		
vC, conflicting volume	2191	2472	936	1600	2485	329	1811			598		
vC1, stage 1 conf vol	1852	1852		617	617							
vC2, stage 2 conf vol	338	620		984	1868							
vCu, unblocked vol	1766	2113	384	1037	2128	211	1494			492		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	95	84	96	98	87	100	97			97		
cM capacity (veh/h)	88	125	469	286	113	736	346			1005		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	41	23	297	292	908	911						
Volume Left	4	4	11	0	28	0						
Volume Right	17	3	0	7	0	32						
cSH	170	148	346	1700	1005	1700						
Volume to Capacity	0.24	0.15	0.03	0.17	0.03	0.54						
Queue Length 95th (ft)	23	13	2	0	2	0						
Control Delay (s)	32.9	33.8	1.2	0.0	0.8	0.0						
Lane LOS	D	D	A		A							
Approach Delay (s)	32.9	33.8	0.6		0.4							
Approach LOS	D	D										
Intersection Summary												
Average Delay			1.3									
Intersection Capacity Utilization			79.0%		ICU Level of Service		D					
Analysis Period (min)			15									

NBC Coastal Campus
76: Orange Ave & Sixth St

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (vph)	13	20	22	5	15	45	24	485	17	28	1573	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		0.99			0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.95			0.91		1.00	1.00		1.00	1.00	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1543			1480		1593	3340		1593	3347	
Flt Permitted		0.92			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1433			1452		1593	3340		1593	3347	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	14	22	24	5	16	49	26	527	18	30	1710	41
RTOR Reduction (vph)	0	21	0	0	43	0	0	2	0	0	1	0
Lane Group Flow (vph)	0	39	0	0	27	0	26	543	0	30	1750	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)		7.9			7.9		1.2	38.2		8.0	45.0	
Effective Green, g (s)		7.9			7.9		1.2	38.2		8.0	45.0	
Actuated g/C Ratio		0.12			0.12		0.02	0.58		0.12	0.68	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		171			173		28	1930		192	2278	
v/s Ratio Prot							c0.02	0.16		0.02	c0.52	
v/s Ratio Perm		c0.03			0.02							
v/c Ratio		0.23			0.16		0.93	0.28		0.16	0.77	
Uniform Delay, d1		26.3			26.1		32.4	7.0		26.0	7.1	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.7			0.4		137.8	0.1		0.4	1.6	
Delay (s)		27.0			26.5		170.2	7.1		26.4	8.7	
Level of Service		C			C		F	A		C	A	
Approach Delay (s)		27.0			26.5			14.5			9.0	
Approach LOS		C			C			B			A	
Intersection Summary												
HCM 2000 Control Delay		11.2			HCM 2000 Level of Service		B					
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		66.1			Sum of lost time (s)		12.0					
Intersection Capacity Utilization		64.1%			ICU Level of Service		C					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
78: Orange Ave & Eighth St

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	33	25	41	6	12	13	70	429	14	31	1355	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Flpb, ped/bikes		0.99			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		0.99			1.00		1.00	1.00		1.00	1.00	
Frt		0.94			0.94		1.00	1.00		1.00	1.00	
Flt Protected		0.98			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1528			1544		1593	3341		1593	3340	
Flt Permitted		0.89			0.94		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1381			1462		1593	3341		1593	3340	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	36	27	45	7	13	14	76	466	15	34	1473	50
RTOR Reduction (vph)	0	35	0	0	12	0	0	2	0	0	2	0
Lane Group Flow (vph)	0	73	0	0	22	0	76	479	0	34	1521	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)		9.7			9.7		5.9	41.7		1.8	37.6	
Effective Green, g (s)		9.7			9.7		5.9	41.7		1.8	37.6	
Actuated g/C Ratio		0.15			0.15		0.09	0.64		0.03	0.58	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		205			217		144	2136		43	1926	
v/s Ratio Prot							c0.05	0.14		0.02	c0.46	
v/s Ratio Perm		c0.05			0.02							
v/c Ratio		0.36			0.10		0.53	0.22		0.79	0.79	
Uniform Delay, d1		24.9			24.0		28.3	4.9		31.5	10.7	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.1			0.2		3.5	0.1		63.1	2.2	
Delay (s)		26.0			24.2		31.8	5.0		94.6	13.0	
Level of Service		C			C		C	A		F	B	
Approach Delay (s)		26.0			24.2			8.7			14.7	
Approach LOS		C			C			A			B	
Intersection Summary												
HCM 2000 Control Delay		13.9										
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		65.2										
Intersection Capacity Utilization		67.1%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
80: NB SR-75 (Silver Strand Blvd)

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Volume (veh/h)	0	0	0	0	0	0
Sign Control		Free	Free		Yield	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			779			
pX, platoon unblocked						
vC, conflicting volume	0				0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0				0	0
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1622				1023	1084
Direction, Lane #	NB 1	NB 2	SB 1	SB 2	SE 1	
Volume Total	0	0	0	0	0	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	0	0	
cSH	1700	1700	1700	1700	1700	
Volume to Capacity	0.00	0.00	0.00	0.00	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	
Lane LOS					A	
Approach Delay (s)	0.0		0.0		0.0	
Approach LOS					A	
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			0.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
84: Orange Ave & Tenth St

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	35	22	7	6	5	4	20	433	3	13	1338	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Flpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.97		1.00	1.00		1.00	0.99	
Flt Protected		0.97			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1600			1571		1593	3358		1593	3336	
Flt Permitted		0.97			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1600			1571		1593	3358		1593	3336	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	38	24	8	7	5	4	22	471	3	14	1454	55
RTOR Reduction (vph)	0	4	0	0	4	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	66	0	0	12	0	22	474	0	14	1507	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		10.4			7.7		1.2	54.3		4.5	57.6	
Effective Green, g (s)		10.4			7.7		1.2	54.3		4.5	57.6	
Actuated g/C Ratio		0.11			0.08		0.01	0.58		0.05	0.62	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		179			130		20	1962		77	2068	
v/s Ratio Prot		c0.04			c0.01		c0.01	0.14		0.01	c0.45	
v/s Ratio Perm												
v/c Ratio		0.37			0.09		1.10	0.24		0.18	0.73	
Uniform Delay, d1		38.2			39.4		45.9	9.3		42.4	12.2	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.3			0.3		234.8	0.1		1.1	1.3	
Delay (s)		39.5			39.7		280.6	9.4		43.6	13.6	
Level of Service		D			D		F	A		D	B	
Approach Delay (s)		39.5			39.7		21.4			13.8		
Approach LOS		D			D		C			B		
Intersection Summary												
HCM 2000 Control Delay		16.7			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		92.9			Sum of lost time (s)			16.0				
Intersection Capacity Utilization		57.0%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
85: Coronado Cays Blvd

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Right Turn Channelized						
Volume (veh/h)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Approach Volume (veh/h)	0			0	0	
Crossing Volume (veh/h)	0			0	0	
High Capacity (veh/h)	1385			1385	1385	
High v/c (veh/h)	0.00			0.00	0.00	
Low Capacity (veh/h)	1161			1161	1161	
Low v/c (veh/h)	0.00			0.00	0.00	
Intersection Summary						
Maximum v/c High					0.00	
Maximum v/c Low					0.00	
Intersection Capacity Utilization		0.0%		ICU Level of Service		A

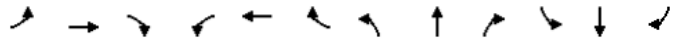
NBC Coastal Campus
86: Palm Ave

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Intersection Sign configuration not allowed in HCM analysis.

NBC Coastal Campus
88: Orange Ave & R. H. Dana Pl/Adella Ave

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔		↔	↔		↔	↔	
Volume (vph)	12	7	101	14	7	2	830	409	2	15	1313	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	0.88		1.00		1.00	0.95		1.00	0.95	
Frbp, ped/bikes		1.00	0.91		1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		0.98	1.00		0.98		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		0.99		1.00	1.00		1.00	1.00	
Flt Protected		0.97	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1587	2416		1565		1593	3359		1593	3345	
Flt Permitted		0.86	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1400	2416		1379		1593	3359		1593	3345	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	8	110	15	8	2	902	445	2	16	1427	32
RTOR Reduction (vph)	0	0	99	0	2	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	21	11	0	23	0	902	447	0	16	1458	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8								
Actuated Green, G (s)		15.2	15.2		15.2		68.6	121.5		2.3	55.2	
Effective Green, g (s)		15.2	15.2		15.2		68.6	121.5		2.3	55.2	
Actuated g/C Ratio		0.10	0.10		0.10		0.45	0.80		0.02	0.37	
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		140	243		138		723	2702		24	1222	
v/s Ratio Prot							c0.57	0.13		0.01	c0.44	
v/s Ratio Perm		0.01	0.00		c0.02							
v/c Ratio		0.15	0.05		0.17		1.25	0.17		0.67	1.19	
Uniform Delay, d1		62.0	61.3		62.1		41.2	3.3		74.0	47.9	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.5	0.1		0.6		122.8	0.0		52.8	95.3	
Delay (s)		62.5	61.4		62.7		164.0	3.4		126.8	143.2	
Level of Service		E	E		E		F	A		F	F	
Approach Delay (s)		61.6			62.7		110.8				143.1	
Approach LOS		E			E		F				F	
Intersection Summary												
HCM 2000 Control Delay			124.2				HCM 2000 Level of Service			F		
HCM 2000 Volume to Capacity ratio			1.11									
Actuated Cycle Length (s)			151.0				Sum of lost time (s)			12.0		
Intersection Capacity Utilization			106.3%				ICU Level of Service			G		
Analysis Period (min)			15									
c Critical Lane Group												

Intersection Sign configuration not allowed in HCM analysis.

Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations		↑↑	↑↑			
Volume (veh/h)	0	0	0	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)		300	460			
pX, platoon unblocked						
vC, conflicting volume	0				0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0				0	0
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1622				1023	1084
Direction, Lane #	EB 1	EB 2	WB 1	WB 2		
Volume Total	0	0	0	0		
Volume Left	0	0	0	0		
Volume Right	0	0	0	0		
cSH	1700	1700	1700	1700		
Volume to Capacity	0.00	0.00	0.00	0.00		
Queue Length 95th (ft)	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0		
Lane LOS						
Approach Delay (s)	0.0		0.0			
Approach LOS						
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			54.2%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
131: SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

	→	↗	↖	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	↑↑	↑		↑↑↑		
Volume (veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	666			520		
pX, platoon unblocked						
vC, conflicting volume			0		0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		0	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1622		1023	1084
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3
Volume Total	0	0	0	0	0	0
Volume Left	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS						
Approach Delay (s)	0.0			0.0		
Approach LOS						
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			0.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (2 CVN) with Alternative 1 Mitigated
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑	↑		↑↑
Volume (vph)	49	3	1507	421	0	467
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1755		3539	1519		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1755		3539	1519		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	65	4	1586	443	0	730
RTOR Reduction (vph)	4	0	0	131	0	0
Lane Group Flow (vph)	65	0	1586	312	0	730
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.1		31.0	31.0		31.0
Effective Green, g (s)	3.1		31.0	31.0		31.0
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	123		2493	1070		2493
v/s Ratio Prot	c0.04		c0.45			0.21
v/s Ratio Perm				0.21		
v/c Ratio	0.53		0.64	0.29		0.29
Uniform Delay, d1	19.7		3.5	2.4		2.4
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.3		0.5	0.2		0.1
Delay (s)	24.1		4.0	2.6		2.5
Level of Service	C		A	A		A
Approach Delay (s)	24.1		3.7			2.5
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.9		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.63			
Actuated Cycle Length (s)			44.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			54.1%		ICU Level of Service	A
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Horizon Year (2 CVN) with Alternative 1 Mitigated















Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↖	↖	↖	↖
Volume (veh/h)	0	18	2410	7	7	516
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	31	2591	8	10	759
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2995	1299			2599	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2995	1299			2599	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	80			94	
cM capacity (veh/h)	10	152			164	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	31	1728	871	10	379	379
Volume Left	0	0	0	10	0	0
Volume Right	31	0	8	0	0	0
cSH	152	1700	1700	164	1700	1700
Volume to Capacity	0.20	1.02	0.51	0.06	0.22	0.22
Queue Length 95th (ft)	18	0	0	5	0	0
Control Delay (s)	34.7	0.0	0.0	28.4	0.0	0.0
Lane LOS	D			D		
Approach Delay (s)	34.7	0.0		0.4		
Approach LOS	D					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		76.8%		ICU Level of Service		D
Analysis Period (min)		15				

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (2 CVN) with Alternative 1 Mitigated









Timing Plan: AM PEAK

							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	26	47	426	1828	0	198	229
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Frt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.96	0.96	0.92	0.79	0.79
Adj. Flow (vph)	28	51	444	1904	0	251	290
RTOR Reduction (vph)	0	0	0	0	0	0	194
Lane Group Flow (vph)	28	51	444	1904	0	251	96
Turn Type	Perm	Prot	Prot	NA	Prot	NA	Perm
Protected Phases		4	5	2	1	6	
Permitted Phases	4						6
Actuated Green, G (s)	14.3	14.3	28.9	63.0		29.1	29.1
Effective Green, g (s)	14.3	14.3	28.9	63.0		29.1	29.1
Actuated g/C Ratio	0.16	0.16	0.33	0.71		0.33	0.33
Clearance Time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	286	256	579	2527		1167	522
v/s Ratio Prot		c0.03	0.25	c0.54		0.07	
v/s Ratio Perm	0.02						0.06
v/c Ratio	0.10	0.20	0.77	0.75		0.22	0.18
Uniform Delay, d1	31.5	32.0	26.6	7.8		21.3	21.1
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.2	0.4	6.0	1.3		0.1	0.2
Delay (s)	31.6	32.4	32.7	9.1		21.4	21.2
Level of Service	C	C	C	A		C	C
Approach Delay (s)	32.1			13.6		21.3	
Approach LOS	C			B		C	
Intersection Summary							
HCM 2000 Control Delay			15.5	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio			0.70				
Actuated Cycle Length (s)			88.2	Sum of lost time (s)		15.9	
Intersection Capacity Utilization			72.1%	ICU Level of Service		C	
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (2 CVN) with Alternative 1 Mitigated









Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	459	2	45	50	8	21	30	2111	11	4	192	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	0.95	0.95		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.97		1.00	0.89		1.00	1.00		1.00	0.97	
Flt Protected	0.95	0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1655		1770	1661		1770	3536		1770	3428	
Flt Permitted	0.95	0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1655		1770	1661		1770	3536		1770	3428	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	522	2	51	161	26	68	32	2222	12	6	278	74
RTOR Reduction (vph)	0	0	0	0	62	0	0	0	0	0	15	0
Lane Group Flow (vph)	292	283	0	161	32	0	32	2234	0	6	337	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	28.0	28.0		11.5	11.5		4.0	73.7		1.0	70.7	
Effective Green, g (s)	28.0	28.0		11.5	11.5		4.0	73.7		1.0	70.7	
Actuated g/C Ratio	0.21	0.21		0.09	0.09		0.03	0.55		0.01	0.53	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	353	348		152	143		53	1957		13	1820	
v/s Ratio Prot	c0.17	0.17		c0.09	0.02		c0.02	c0.63		0.00	0.10	
v/s Ratio Perm												
v/c Ratio	0.83	0.81		1.06	0.22		0.60	1.14		0.46	0.18	
Uniform Delay, d1	50.2	50.1		60.8	56.6		63.8	29.7		65.8	16.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	14.6	13.5		89.6	0.8		17.9	70.3		23.8	0.0	
Delay (s)	64.9	63.6		150.4	57.4		81.6	100.0		89.6	16.3	
Level of Service	E	E		F	E		F	F		F	B	
Approach Delay (s)		64.2			116.1			99.8			17.5	
Approach LOS		E			F			F			B	
Intersection Summary												
HCM 2000 Control Delay		86.5										
HCM 2000 Volume to Capacity ratio		1.06										
Actuated Cycle Length (s)		133.1			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		87.9%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (2 CVN) with Alternative 1 Mitigated

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	259	20	0	1943	20	47	27	2	23	48	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99			1.00		1.00	0.99		1.00	0.92	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5032			5078		1770	1846		1770	1707	
Flt Permitted	0.95	1.00			1.00		0.67	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5032			5078		1244	1846		248	1707	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	10	291	22	0	2135	22	56	32	2	30	62	78
RTOR Reduction (vph)	0	5	0	0	1	0	0	2	0	0	25	0
Lane Group Flow (vph)	10	308	0	0	2156	0	56	32	0	30	115	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1903			2062		241	358		41	284	
v/s Ratio Prot	c0.01	0.06			c0.42			0.02			0.07	
v/s Ratio Perm							c0.05			c0.12		
v/c Ratio	0.05	0.16			1.05		0.23	0.09		0.73	0.40	
Uniform Delay, d1	71.5	37.1			53.5		61.2	59.4		71.2	67.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.2			31.4		0.5	0.1		49.4	0.9	
Delay (s)	71.6	37.2			84.9		61.7	59.6		120.6	68.0	
Level of Service	E	D			F		E	E		F	E	
Approach Delay (s)		38.3			84.9			60.9			77.3	
Approach LOS		D			F			E			E	
Intersection Summary												
HCM 2000 Control Delay		78.1										
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		76.4%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1 Mitigated
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰		↰	↰		↰	↰	
Volume (vph)	24	776	40	27	2079	50	188	42	58	102	52	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00		1.00	0.91		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5048		1770	5067		1770	1701		1770	1765	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5048		1770	5067		1770	1701		1770	1765	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	29	924	48	30	2285	55	227	51	70	124	63	34
RTOR Reduction (vph)	0	3	0	0	1	0	0	27	0	0	11	0
Lane Group Flow (vph)	29	969	0	30	2339	0	227	94	0	124	86	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	12.0	90.4		12.0	90.4		24.8	44.0		18.8	38.0	
Effective Green, g (s)	12.0	90.4		12.0	90.4		24.8	44.0		18.8	38.0	
Actuated g/C Ratio	0.07	0.49		0.07	0.49		0.14	0.24		0.10	0.21	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	115	2486		115	2496		239	407		181	365	
v/s Ratio Prot	0.02	0.19		c0.02	c0.46		c0.13	c0.06		0.07	0.05	
v/s Ratio Perm												
v/c Ratio	0.25	0.39		0.26	0.94		0.95	0.23		0.69	0.24	
Uniform Delay, d1	81.5	29.2		81.5	43.9		78.7	56.1		79.5	60.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.2	0.5		1.2	8.3		43.8	0.3		10.2	0.3	
Delay (s)	82.6	29.7		82.7	52.2		122.5	56.4		89.7	61.0	
Level of Service	F	C		F	D		F	E		F	E	
Approach Delay (s)		31.2			52.6			99.6			77.1	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		52.7			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		183.5			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		78.4%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1 Mitigated
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰		↰↰	
Volume (vph)	4	1120	72	110	2111	59	168	22	104	192	41	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1258	81	133	2543	71	189	25	117	256	55	23
RTOR Reduction (vph)	0	4	0	0	0	27	0	0	105	0	3	0
Lane Group Flow (vph)	4	1335	0	133	2543	44	0	214	12	0	331	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Effective Green, g (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Actuated g/C Ratio	0.02	0.48		0.11	0.57	0.57		0.10	0.10		0.20	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2427		196	2901	903		184	163		682	
v/s Ratio Prot	0.00	0.26		c0.08	c0.50			c0.12			c0.10	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.10	0.55		0.68	0.88	0.05		1.16	0.07		0.49	
Uniform Delay, d1	86.2	32.9		76.9	33.2	17.1		80.7	72.9		63.5	
Progression Factor	1.07	0.81		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.9		9.0	4.1	0.1		117.1	0.2		0.5	
Delay (s)	93.8	27.4		85.9	37.3	17.2		197.8	73.1		64.1	
Level of Service	F	C		F	D	B		F	E		E	
Approach Delay (s)		27.6			39.1			153.7			64.1	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		45.6			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		94.7%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1 Mitigated

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	105	1438	34	280	2187	246	87	83	884	269	106	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		3433	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		3433	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	122	1672	40	298	2327	262	97	92	982	320	126	105
RTOR Reduction (vph)	0	2	0	0	0	49	0	114	132	0	2	67
Lane Group Flow (vph)	122	1710	0	298	2327	213	97	430	398	320	135	27
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2			4				8
Actuated Green, G (s)	6.2	59.5		17.4	70.7	70.7	11.3	41.4	41.4	14.8	44.9	44.9
Effective Green, g (s)	6.2	59.5		17.4	70.7	70.7	11.3	41.4	41.4	14.8	44.9	44.9
Actuated g/C Ratio	0.04	0.38		0.11	0.46	0.46	0.07	0.27	0.27	0.10	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	137	1945		385	2319	722	129	413	401	327	506	435
v/s Ratio Prot	0.04	0.34		c0.09	c0.46		0.05	c0.28		c0.09	c0.08	
v/s Ratio Perm					0.13			0.26				0.02
v/c Ratio	0.89	0.88		0.77	1.00	0.29	0.75	1.04	0.99	0.98	0.27	0.06
Uniform Delay, d1	74.1	44.4		66.9	42.1	26.5	70.5	56.8	56.6	69.9	42.4	39.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	45.7	4.9		9.4	19.5	0.2	21.6	55.2	42.8	43.5	0.3	0.1
Delay (s)	119.7	49.3		76.2	61.7	26.7	92.1	112.0	99.5	113.4	42.7	39.9
Level of Service	F	D		E	E	C	F	F	F	F	D	D
Approach Delay (s)		54.0			60.0			104.7			83.3	
Approach LOS		D			E			F			F	
Intersection Summary												
HCM 2000 Control Delay		68.4			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		1.01										
Actuated Cycle Length (s)		155.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		94.9%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (2 CVN) with Alternative 1 Mitigated

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	↔
Volume (vph)	0	326	1280	0	178	1435
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	366	1376	0	198	1594
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	366	1376	0	198	1591
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.10	c0.39		0.11	c0.57
v/s Ratio Perm						
v/c Ratio		0.14	1.18		0.96	1.04
Uniform Delay, d1		2.5	26.8		35.1	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	89.7		49.7	33.7
Delay (s)		2.5	116.5		84.8	51.7
Level of Service		A	F		F	D
Approach Delay (s)		2.5	116.5		55.4	
Approach LOS		A	F		E	
Intersection Summary						
HCM 2000 Control Delay		73.7			HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio		1.17				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		73.9%			ICU Level of Service	D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (2 CVN) with Alternative 1 Mitigated

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕		↕
Volume (vph)	318	4	927	57	0	1829
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.92		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1772		3539	1452		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1772		3539	1452		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	403	5	1030	63	0	2055
RTOR Reduction (vph)	1	0	0	28	0	0
Lane Group Flow (vph)	407	0	1030	35	0	2055
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		75.1	75.1		75.1
Effective Green, g (s)	50.0		75.1	75.1		75.1
Actuated g/C Ratio	0.37		0.56	0.56		0.56
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	656		1968	807		1968
v/s Ratio Prot	c0.23		0.29			c0.58
v/s Ratio Perm				0.02		
v/c Ratio	0.62		0.52	0.04		1.04
Uniform Delay, d1	34.8		18.7	13.6		30.0
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	1.8		0.3	0.0		32.9
Delay (s)	36.6		19.0	13.6		62.9
Level of Service	D		B	B		E
Approach Delay (s)	36.6		18.7			62.9
Approach LOS	D		B			E
Intersection Summary						
HCM 2000 Control Delay			46.3		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.87			
Actuated Cycle Length (s)			135.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			100.5%		ICU Level of Service	G
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Horizon Year (2 CVN) with Alternative 1 Mitigated








Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↕	↕		↕	↕
Volume (veh/h)	0	13	750	4	18	1680
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	0	26	872	5	20	1846
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1837	438			877	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1837	438			877	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			97	
cM capacity (veh/h)	65	566			766	
Direction, Lane #						
Volume Total	26	581	295	20	923	923
Volume Left	0	0	0	20	0	0
Volume Right	26	0	5	0	0	0
cSH	566	1700	1700	766	1700	1700
Volume to Capacity	0.05	0.34	0.17	0.03	0.54	0.54
Queue Length 95th (ft)	4	0	0	2	0	0
Control Delay (s)	11.7	0.0	0.0	9.8	0.0	0.0
Lane LOS	B			A		
Approach Delay (s)	11.7	0.0		0.1		
Approach LOS	B					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			49.8%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (2 CVN) with Alternative 1 Mitigated













Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	226	421	105	518	0	1709	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.92	0.90	0.90
Adj. Flow (vph)	246	458	119	589	0	1899	63
RTOR Reduction (vph)	0	0	0	0	0	0	29
Lane Group Flow (vph)	246	458	119	589	0	1899	34
Turn Type	Perm	Prot	Prot	NA	Prot	NA	Perm
Protected Phases		4	5	2	1	6	
Permitted Phases	4						6
Actuated Green, G (s)	39.0	39.0	9.0	90.1		76.1	76.1
Effective Green, g (s)	39.0	39.0	9.0	90.1		76.1	76.1
Actuated g/C Ratio	0.28	0.28	0.06	0.64		0.54	0.54
Clearance Time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	493	440	113	2277		1923	860
v/s Ratio Prot		c0.29	c0.07	0.17		c0.54	
v/s Ratio Perm	0.14						0.02
v/c Ratio	0.50	1.04	1.05	0.26		0.99	0.04
Uniform Delay, d1	42.3	50.5	65.5	10.7		31.5	14.9
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.8	53.9	99.6	0.1		17.5	0.0
Delay (s)	43.1	104.4	165.1	10.7		48.9	14.9
Level of Service	D	F	F	B		D	B
Approach Delay (s)	83.0			36.7		47.8	
Approach LOS	F			D		D	
Intersection Summary							
HCM 2000 Control Delay		52.8			HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio		1.01					
Actuated Cycle Length (s)		140.0			Sum of lost time (s)	15.9	
Intersection Capacity Utilization		82.4%			ICU Level of Service		E
Analysis Period (min)		15					
c Critical Lane Group							

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (2 CVN) with Alternative 1 Mitigated

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	102	7	79	19	4		85	456	58	19	1612	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	0.95	0.95		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.88		1.00	0.90		1.00	0.98		1.00	0.98	
Flt Protected	0.95	0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1543		1770	1685		1770	3479		1770	3474	
Flt Permitted	0.95	0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1543		1770	1685		1770	3479		1770	3474	
Peak-hour factor, PHF	0.75	0.75		0.75	0.50		0.91	0.91		0.90	0.90	
Adj. Flow (vph)	136	9	105	38	8	14	93	501	64	21	1791	251
RTOR Reduction (vph)	0	0	0	0	14	0	0	6	0	0	7	0
Lane Group Flow (vph)	122	128	0	38	8	0	93	559	0	21	2035	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	24.9	24.9		3.8	3.8		7.9	84.9		3.3	80.3	
Effective Green, g (s)	24.9	24.9		3.8	3.8		7.9	84.9		3.3	80.3	
Actuated g/C Ratio	0.18	0.18		0.03	0.03		0.06	0.63		0.02	0.59	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	308	282		49	47		102	2175		43	2054	
v/s Ratio Prot	0.07	c0.08		c0.02	0.00		c0.05	0.16		0.01	c0.59	
v/s Ratio Perm												
v/c Ratio	0.40	0.45		0.78	0.18		0.91	0.26		0.49	0.99	
Uniform Delay, d1	48.8	49.4		65.6	64.5		63.6	11.4		65.4	27.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.8	1.2		53.1	1.8		61.3	0.1		8.5	17.7	
Delay (s)	49.7	50.6		118.7	66.3		124.9	11.4		73.9	45.1	
Level of Service	D	D		F	E		F	B		E	D	
Approach Delay (s)		50.1			99.5			27.5			45.4	
Approach LOS		D			F			C			D	
Intersection Summary												
HCM 2000 Control Delay		42.9										
HCM 2000 Volume to Capacity ratio		0.86										
Actuated Cycle Length (s)		135.8								18.9		
Intersection Capacity Utilization		80.5%								D		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (2 CVN) with Alternative 1 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰		↰	↰	
Volume (vph)	66	1557	69	0	498	40	20	46	5	28	30	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99			0.99		1.00	0.99		1.00	0.93	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5053			5028		1770	1836		1770	1739	
Flt Permitted	0.95	1.00			1.00		0.72	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5053			5028		1334	1836		248	1739	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	75	1769	78	0	530	43	29	66	7	33	35	28
RTOR Reduction (vph)	0	2	0	0	5	0	0	2	0	0	16	0
Lane Group Flow (vph)	75	1845	0	0	568	0	29	71	0	33	47	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1911			2041		259	357		41	289	
v/s Ratio Prot	c0.04	c0.37			c0.11			c0.04			0.03	
v/s Ratio Perm							0.02			c0.13		
v/c Ratio	0.38	0.97			0.28		0.11	0.20		0.80	0.16	
Uniform Delay, d1	74.3	54.8			35.8		59.7	60.7		72.2	64.2	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.2	13.9			0.3		0.2	0.3		69.0	0.3	
Delay (s)	75.5	68.7			36.1		59.9	61.0		141.2	64.5	
Level of Service	E	E			D		E	E		F	E	
Approach Delay (s)		68.9			36.1			60.7			90.9	
Approach LOS		E			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		62.4			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			22.3				
Intersection Capacity Utilization		70.0%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰		↰	↰	
Volume (vph)	47	1897	143	66	967	149	112	102		197	90	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9			4.2		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91			1.00		0.91	1.00		1.00	1.00	
Frt	1.00	0.99			1.00		0.98	1.00		0.94	1.00	0.96
Flt Protected	0.95	1.00			0.95		1.00	0.95		1.00	0.95	1.00
Satd. Flow (prot)	1770	5032			1770		4983	1770		1748	1770	1794
Flt Permitted	0.95	1.00			0.95		1.00	0.95		1.00	0.95	1.00
Satd. Flow (perm)	1770	5032			1770		4983	1770		1748	1770	1794
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	50	2018	152	67	977	151	123	112	78	221	101	33
RTOR Reduction (vph)	0	4	0	0	10	0	0	14	0	0	6	0
Lane Group Flow (vph)	50	2166	0	67	1118	0	123	176	0	221	128	0
Turn Type	Prot	NA			Prot		NA	Prot		NA	Prot	NA
Protected Phases	1	6			5		2	7		4	3	8
Permitted Phases												
Actuated Green, G (s)	12.0	83.3			15.4		86.7	25.0		38.0	25.0	38.0
Effective Green, g (s)	12.0	83.3			15.4		86.7	25.0		38.0	25.0	38.0
Actuated g/C Ratio	0.07	0.46			0.09		0.48	0.14		0.21	0.14	0.21
Clearance Time (s)	4.2	4.9			4.2		4.9	4.6		4.6	4.6	4.6
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	118	2328			151		2400	245		369	245	378
v/s Ratio Prot	0.03	c0.43			c0.04		c0.22	0.07		c0.10	c0.12	0.07
v/s Ratio Perm												
v/c Ratio	0.42	0.93			0.44		0.47	0.50		0.48	0.90	0.34
Uniform Delay, d1	80.7	45.6			78.2		31.2	71.7		62.3	76.3	60.3
Progression Factor	1.00	1.00			0.92		1.31	1.00		1.00	1.00	1.00
Incremental Delay, d2	2.4	7.4			1.9		0.6	1.6		1.0	32.6	0.5
Delay (s)	83.1	53.0			74.1		41.6	73.4		63.2	108.9	60.8
Level of Service	F	D			E		D	E		E	F	E
Approach Delay (s)		53.7					43.4			67.2		90.8
Approach LOS		D					D			E		F
Intersection Summary												
HCM 2000 Control Delay		54.9			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		116.6%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	2085	227	179	1514	93	148	46	146	176	51	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5011		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5011		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	32	2218	241	185	1561	96	161	50	159	238	69	31
RTOR Reduction (vph)	0	7	0	0	0	32	0	0	146	0	4	0
Lane Group Flow (vph)	32	2452	0	185	1561	64	0	211	13	0	334	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	8.4	86.3		19.4	97.7	97.7		15.0	15.0		40.0	
Effective Green, g (s)	8.4	86.3		19.4	97.7	97.7		15.0	15.0		40.0	
Actuated g/C Ratio	0.05	0.48		0.11	0.54	0.54		0.08	0.08		0.22	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	82	2402		190	2760	859		149	131		749	
v/s Ratio Prot	0.02	c0.49		c0.10	0.31			c0.12			c0.10	
v/s Ratio Perm						0.04			0.01			
v/c Ratio	0.39	1.02		0.97	0.57	0.07		1.42	0.10		0.45	
Uniform Delay, d1	83.3	46.9		80.0	27.1	19.6		82.5	76.3		60.4	
Progression Factor	1.19	0.45		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	2.4	21.8		57.2	0.8	0.2		221.9	1.5		1.9	
Delay (s)	101.8	42.8		137.3	28.0	19.8		304.4	77.8		62.4	
Level of Service	F	D		F	C	B		F	E		E	
Approach Delay (s)		43.6			38.5			207.0			62.4	
Approach LOS		D			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		55.0			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.91										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		95.9%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 1 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	216	2161	30	376	1863	636	76	203	611	674	274	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	227	2275	32	404	2003	684	81	216	650	733	298	284
RTOR Reduction (vph)	0	1	0	0	0	86	0	25	153	0	2	133
Lane Group Flow (vph)	227	2306	0	404	2003	598	81	425	263	733	324	123
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	10.2	49.9		20.4	60.1	60.1	11.5	40.0	40.0	22.8	51.3	51.3
Effective Green, g (s)	10.2	49.9		20.4	60.1	60.1	11.5	40.0	40.0	22.8	51.3	51.3
Actuated g/C Ratio	0.07	0.32		0.13	0.39	0.39	0.07	0.26	0.26	0.15	0.33	0.33
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	225	1633		451	1971	613	131	421	388	504	578	497
v/s Ratio Prot	0.07	c0.45		c0.12	c0.39		0.05	c0.26		c0.21	0.19	
v/s Ratio Perm						0.38			0.17			0.08
v/c Ratio	1.01	1.41		0.90	1.02	0.97	0.62	1.01	0.68	1.45	0.56	0.25
Uniform Delay, d1	72.4	52.5		66.3	47.4	46.7	69.6	57.5	51.7	66.1	42.6	37.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	62.3	189.2		19.9	24.4	29.8	8.4	46.1	4.7	215.3	1.2	0.3
Delay (s)	134.7	241.8		86.1	71.9	76.6	78.0	103.6	56.4	281.4	43.8	38.0
Level of Service	F	F		F	E	E	E	F	E	F	D	D
Approach Delay (s)		232.2			74.8			80.7			175.1	
Approach LOS		F			E			F			F	
Intersection Summary												
HCM 2000 Control Delay		142.8			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.23										
Actuated Cycle Length (s)		155.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		113.8%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (2 CVN) with Alternative 1 Mitigated

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	581	980	0	504	1901
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	653	1043	0	554	2089
RTOR Reduction (vph)	0	0	0	0	0	2
Lane Group Flow (vph)	0	653	1043	0	554	2087
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.18	c0.29		0.31	c0.75
v/s Ratio Perm						
v/c Ratio		0.37	1.22		0.84	1.18
Uniform Delay, d1		12.0	30.3		22.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	107.7		9.0	85.1
Delay (s)		12.1	138.0		31.7	99.6
Level of Service		B	F		C	F
Approach Delay (s)		12.1	138.0		85.4	
Approach LOS		B	F		F	
Intersection Summary						
HCM 2000 Control Delay		87.0			HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio		1.27				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		97.2%			ICU Level of Service	F
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Mitigated Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑	↗		↑↑
Volume (vph)	49	3	1498	421	0	402
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flrpb, ped/bikes	0.99		1.00	0.96		1.00
Flrpb, ped/bikes	1.00		1.00	1.00		1.00
Flt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1755		3539	1519		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1755		3539	1519		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	65	4	1577	443	0	628
RTOR Reduction (vph)	4	0	0	131	0	0
Lane Group Flow (vph)	65	0	1577	312	0	628
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.1		31.0	31.0		31.0
Effective Green, g (s)	3.1		31.0	31.0		31.0
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	123		2493	1070		2493
v/s Ratio Prot	c0.04		c0.45			0.18
v/s Ratio Perm				0.21		
v/c Ratio	0.53		0.63	0.29		0.25
Uniform Delay, d1	19.7		3.5	2.4		2.3
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.3		0.5	0.2		0.1
Delay (s)	24.1		4.0	2.6		2.4
Level of Service	C		A	A		A
Approach Delay (s)	24.1		3.7			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.9		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.62			
Actuated Cycle Length (s)			44.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			53.8%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus Mitigated Horizon Year (2 CVN) with Alternative 1 No Hooper
19: 7th St & SR-75 (Silver Strand Blvd) Timing Plan: AM PEAK







Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰		↰	↰	
Volume (vph)	9	213	19	0	1530	20	40	27	2	23	48	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99			1.00		1.00	0.99		1.00	0.92	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5024			5075		1770	1846		1770	1707	
Flt Permitted	0.95	1.00			1.00		0.67	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5024			5075		1244	1846		248	1707	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	0.77
Adj. Flow (vph)	10	239	21	0	1681	22	48	32	2	30	62	78
RTOR Reduction (vph)	0	6	0	0	1	0	0	2	0	0	25	0
Lane Group Flow (vph)	10	254	0	0	1702	0	48	32	0	30	115	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1900			2061		241	358		41	284	
v/s Ratio Prot	c0.01	0.05			c0.34			0.02			0.07	
v/s Ratio Perm							c0.04			c0.12		
v/c Ratio	0.05	0.13			0.83		0.20	0.09		0.73	0.40	
Uniform Delay, d1	71.5	36.6			47.8		60.8	59.4		71.2	67.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1			3.6		0.4	0.1		49.4	0.9	
Delay (s)	71.6	36.8			51.4		61.2	59.6		120.6	68.0	
Level of Service	E	D			D		E	E		F	E	
Approach Delay (s)		38.1			51.4			60.5			77.3	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		52.1			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		68.4%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus Mitigated Horizon Year (2 CVN) with Alternative 1 No Hooper
21: Dwy/Silver Strand Blvd & Palm Ave Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰			↰	↰		↰↰		↰	↰	
Volume (vph)	17	238	0	0	131	755	0	0	0	121	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00				1.00	1.00	
Flt		1.00			1.00	0.85				1.00	0.85	
Flt Protected		1.00			1.00	1.00				0.95	1.00	
Satd. Flow (prot)		1857			1863	1583				1770	1583	
Flt Permitted		0.98			1.00	1.00				0.76	1.00	
Satd. Flow (perm)		1825			1863	1583				1410	1583	
Peak-hour factor, PHF	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Adj. Flow (vph)	20	283	0	0	141	812	0	0	0	133	0	7
RTOR Reduction (vph)	0	0	0	0	0	454	0	0	0	0	5	0
Lane Group Flow (vph)	0	303	0	0	141	358	0	0	0	133	2	0
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)		14.2			14.2	14.2				10.0	10.0	
Effective Green, g (s)		14.2			14.2	14.2				10.0	10.0	
Actuated g/C Ratio		0.44			0.44	0.44				0.31	0.31	
Clearance Time (s)		4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)		804			821	698				437	491	
v/s Ratio Prot					0.08						0.00	
v/s Ratio Perm		0.17				c0.23				c0.09		
v/c Ratio		0.38			0.17	0.51				0.30	0.00	
Uniform Delay, d1		6.0			5.4	6.5				8.5	7.7	
Progression Factor		1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2		0.3			0.1	0.6				0.4	0.0	
Delay (s)		6.3			5.5	7.1				8.8	7.7	
Level of Service		A			A	A				A	A	
Approach Delay (s)		6.3			6.9			0.0			8.8	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay		7.0			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.43										
Actuated Cycle Length (s)		32.2			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		66.9%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												







NBC Coastal Campus
22: 3rd St & Palm Ave

Mitigated Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	350	5	27	862	25	12	15	129	12	11	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.89			0.95	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.98	
Satd. Flow (prot)	1770	1859		1770	1855			1649			1736	
Flt Permitted	0.17	1.00		0.50	1.00			0.98			0.91	
Satd. Flow (perm)	314	1859		938	1855			1615			1610	
Peak-hour factor, PHF	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Adj. Flow (vph)	9	407	6	29	927	27	15	19	159	15	14	19
RTOR Reduction (vph)	0	1	0	0	1	0	0	130	0	0	16	0
Lane Group Flow (vph)	9	412	0	29	953	0	0	63	0	0	32	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	32.4	32.4		32.4	32.4			8.9			8.9	
Effective Green, g (s)	32.4	32.4		32.4	32.4			8.9			8.9	
Actuated g/C Ratio	0.66	0.66		0.66	0.66			0.18			0.18	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	206	1221		616	1219			291			290	
v/s Ratio Prot		0.22			c0.51							
v/s Ratio Perm	0.03			0.03				c0.04			0.02	
v/c Ratio	0.04	0.34		0.05	0.78			0.22			0.11	
Uniform Delay, d1	3.0	3.7		3.0	6.0			17.2			16.9	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	0.2		0.0	3.3			0.4			0.2	
Delay (s)	3.1	3.9		3.0	9.3			17.6			17.1	
Level of Service	A	A		A	A			B			B	
Approach Delay (s)		3.9			9.1			17.6			17.1	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay		9.0			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		49.3			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		63.4%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Mitigated Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	244	489	825	156	0	252
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	309	619	1006	190	0	355
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked	0.80				0.80	0.80
vC, conflicting volume	1196				2338	598
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	751				2174	5
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	55				100	59
cM capacity (veh/h)	685				17	863
Direction, Lane #						
Volume Total	309	619	671	526	355	
Volume Left	309	0	0	0	0	
Volume Right	0	0	0	190	355	
cSH	685	1700	1700	1700	863	
Volume to Capacity	0.45	0.36	0.39	0.31	0.41	
Queue Length 95th (ft)	59	0	0	0	51	
Control Delay (s)	14.5	0.0	0.0	0.0	12.1	
Lane LOS	B				B	
Approach Delay (s)	4.8		0.0		12.1	
Approach LOS					B	
Intersection Summary						
Average Delay			3.5			
Intersection Capacity Utilization			50.1%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Mitigated Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰		↰	↰		↰	↰	
Volume (vph)	24	784	40	27	2145	50	188	42	58	102	52	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00		1.00	0.91		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5048		1770	5068		1770	1701		1770	1765	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5048		1770	5068		1770	1701		1770	1765	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	29	933	48	30	2357	55	227	51	70	124	63	34
RTOR Reduction (vph)	0	3	0	0	1	0	0	26	0	0	11	0
Lane Group Flow (vph)	29	978	0	30	2411	0	227	95	0	124	86	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	12.0	83.1		16.0	87.1		24.6	44.7		17.9	38.0	
Effective Green, g (s)	12.0	83.1		16.0	87.1		24.6	44.7		17.9	38.0	
Actuated g/C Ratio	0.07	0.46		0.09	0.48		0.14	0.25		0.10	0.21	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	118	2330		157	2452		241	422		176	372	
v/s Ratio Prot	c0.02	0.19		0.02	c0.48		c0.13	c0.06		0.07	0.05	
v/s Ratio Perm												
v/c Ratio	0.25	0.42		0.19	0.98		0.94	0.22		0.70	0.23	
Uniform Delay, d1	79.7	32.4		76.0	45.7		77.0	53.9		78.5	58.9	
Progression Factor	1.00	1.00		1.10	0.88		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.1	0.6		0.4	11.9		42.0	0.3		12.1	0.3	
Delay (s)	80.8	32.9		83.7	52.3		119.0	54.1		90.6	59.2	
Level of Service	F	C		F	D		F	D		F	E	
Approach Delay (s)		34.3			52.7			96.4			76.8	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		53.2			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		79.6%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Mitigated Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰		↰	↰		↰	↰	
Volume (vph)	4	1127	72	110	2176	59	168	22	104	192	41	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1266	81	133	2622	71	189	25	117	256	55	23
RTOR Reduction (vph)	0	4	0	0	0	27	0	0	105	0	3	0
Lane Group Flow (vph)	4	1343	0	133	2622	44	0	214	12	0	331	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Effective Green, g (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Actuated g/C Ratio	0.02	0.48		0.11	0.57	0.57		0.10	0.10		0.20	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2427		196	2901	903		184	163		682	
v/s Ratio Prot	0.00	0.27		c0.08	c0.52			c0.12			c0.10	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.10	0.55		0.68	0.90	0.05		1.16	0.07		0.49	
Uniform Delay, d1	86.2	33.0		76.9	34.3	17.1		80.7	72.9		63.5	
Progression Factor	1.13	0.66		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.9		9.0	5.2	0.1		117.1	0.2		0.5	
Delay (s)	98.5	22.5		85.9	39.5	17.2		197.8	73.1		64.1	
Level of Service	F	C		F	D	B		F	E		E	
Approach Delay (s)		22.8			41.1			153.7			64.1	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		45.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.84										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		96.0%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus Mitigated Horizon Year (2 CVN) with Alternative 1 No Hooper
30: Saturn Blvd/19th St & SR-75 (Palm Ave) Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	105	1445	34	280	2253	246	87	83	884	269	106	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		3433	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		3433	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	122	1680	40	298	2397	262	97	92	982	320	126	105
RTOR Reduction (vph)	0	2	0	0	0	61	0	133	162	0	2	66
Lane Group Flow (vph)	122	1718	0	298	2397	201	97	411	368	320	135	28
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2			4				8
Actuated Green, G (s)	5.1	45.1		16.3	56.3	56.3	9.5	38.0	38.0	11.8	40.3	40.3
Effective Green, g (s)	5.1	45.1		16.3	56.3	56.3	9.5	38.0	38.0	11.8	40.3	40.3
Actuated g/C Ratio	0.04	0.34		0.12	0.42	0.42	0.07	0.29	0.29	0.09	0.30	0.30
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	131	1717		420	2150	669	126	442	429	304	529	455
v/s Ratio Prot	0.04	0.34		c0.09	c0.47		0.05	c0.27		c0.09	0.08	
v/s Ratio Perm					0.13			0.24			0.02	
v/c Ratio	0.93	1.00		0.71	1.11	0.30	0.77	0.93	0.86	1.05	0.26	0.06
Uniform Delay, d1	63.8	44.0		56.1	38.4	25.4	60.7	46.3	45.0	60.6	35.1	33.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	57.7	21.9		5.4	58.8	0.3	24.2	26.2	15.4	66.1	0.3	0.1
Delay (s)	121.5	65.9		61.6	97.2	25.6	84.9	72.5	60.4	126.8	35.3	33.0
Level of Service	F	E		E	F	C	F	E	E	F	D	C
Approach Delay (s)		69.5			87.3			68.1			88.0	
Approach LOS		E			F			E			F	
Intersection Summary												
HCM 2000 Control Delay		78.9			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		1.04										
Actuated Cycle Length (s)		133.1			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		96.1%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus Mitigated Horizon Year (2 CVN) with Alternative 1 No Hooper
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp Timing Plan: AM PEAK

	EBL	EBT	WBT	WBR	SBL	SBR
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Volume (vph)	0	326	1280	0	178	1500
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF		0.89	0.89	0.93	0.90	0.90
Adj. Flow (vph)		0	366	1376	0	198
RTOR Reduction (vph)		0	0	0	0	3
Lane Group Flow (vph)		0	366	1376	0	198
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.10	c0.39		0.11	c0.60
v/s Ratio Perm						
v/c Ratio		0.14	1.18		0.96	1.09
Uniform Delay, d1		2.5	26.8		35.1	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	89.7		49.7	50.3
Delay (s)		2.5	116.5		84.8	68.3
Level of Service		A	F		F	E
Approach Delay (s)		2.5	116.5		70.0	
Approach LOS		A	F		E	
Intersection Summary						
HCM 2000 Control Delay		80.9			HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio		1.20				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		76.2%			ICU Level of Service	D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus Mitigated Horizon Year (2 CVN) with Alternative 1 No Hooper
10: SR-75 (Silver Strand Blvd) & Tulagi Rd Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	318	4	849	57	0	1813
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1772		3539	1467		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1772		3539	1467		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	403	5	943	63	0	2037
RTOR Reduction (vph)	1	0	0	33	0	0
Lane Group Flow (vph)	407	0	943	30	0	2037
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		55.1	55.1		55.1
Effective Green, g (s)	50.0		55.1	55.1		55.1
Actuated g/C Ratio	0.43		0.48	0.48		0.48
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	770		1695	702		1695
v/s Ratio Prot	c0.23		0.27			c0.58
v/s Ratio Perm				0.02		
v/c Ratio	0.53		0.56	0.04		1.20
Uniform Delay, d1	23.9		21.3	15.9		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.7		0.4	0.0		96.7
Delay (s)	24.5		21.7	16.0		126.7
Level of Service	C		C	B		F
Approach Delay (s)	24.5		21.3			126.7
Approach LOS	C		C			F
Intersection Summary						
HCM 2000 Control Delay			83.9		HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio			0.88			
Actuated Cycle Length (s)			115.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			100.0%		ICU Level of Service	G
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus Mitigated Horizon Year (2 CVN) with Alternative 1 No Hooper
19: 7th St & SR-75 (Silver Strand Blvd) Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↗	↖	↗	↗	↖	↖	↖	↖	↖	↖
Volume (vph)	66	1149	63	0	396	40	18	46	5	28	30	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99			0.99		1.00	0.99		1.00	0.93	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5045			5015		1770	1836		1770	1739	
Flt Permitted	0.95	1.00			1.00		0.72	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5045			5015		1334	1836		248	1739	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	75	1306	72	0	421	43	26	66	7	33	35	28
RTOR Reduction (vph)	0	3	0	0	7	0	0	2	0	0	16	0
Lane Group Flow (vph)	75	1375	0	0	457	0	26	71	0	33	47	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1908			2036		259	357		41	289	
v/s Ratio Prot	c0.04	c0.27			c0.09			c0.04			0.03	
v/s Ratio Perm							0.02			c0.13		
v/c Ratio	0.38	0.72			0.22		0.10	0.20		0.80	0.16	
Uniform Delay, d1	74.3	47.8			34.9		59.6	60.7		72.2	64.2	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.2	2.4			0.3		0.2	0.3		69.0	0.3	
Delay (s)	75.5	50.2			35.2		59.7	61.0		141.2	64.5	
Level of Service	E	D			D		E	E		F	E	
Approach Delay (s)		51.5			35.2			60.7			90.9	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		50.1								HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)			22.3			
Intersection Capacity Utilization		68.0%				ICU Level of Service			C			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

Mitigated Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	6	218	0	0	313	202	0	0	0	748	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00				1.00	1.00	
Flt		1.00			1.00	0.85				1.00	0.85	
Flt Protected		1.00			1.00	1.00				0.95	1.00	
Satd. Flow (prot)		1860			1863	1583				1770	1583	
Flt Permitted		0.99			1.00	1.00				0.76	1.00	
Satd. Flow (perm)		1842			1863	1583				1410	1583	
Peak-hour factor, PHF	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.92	0.66	0.66
Adj. Flow (vph)	7	253	0	0	356	230	0	0	0	813	0	23
RTOR Reduction (vph)	0	0	0	0	0	170	0	0	0	0	9	0
Lane Group Flow (vph)	0	260	0	0	356	60	0	0	0	813	14	0
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)		18.4			18.4	18.4				44.7	44.7	
Effective Green, g (s)		18.4			18.4	18.4				44.7	44.7	
Actuated g/C Ratio		0.26			0.26	0.26				0.63	0.63	
Clearance Time (s)		4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)		476			482	409				886	995	
v/s Ratio Prot					c0.19						0.01	
v/s Ratio Perm		0.14				0.04				c0.58		
v/c Ratio		0.55			0.74	0.15				0.92	0.01	
Uniform Delay, d1		22.7			24.1	20.3				11.6	4.9	
Progression Factor		1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2		1.3			5.8	0.2				14.0	0.0	
Delay (s)		24.0			30.0	20.5				25.6	5.0	
Level of Service		C			C	C				C	A	
Approach Delay (s)		24.0			26.3			0.0			25.1	
Approach LOS		C			C			A			C	
Intersection Summary												
HCM 2000 Control Delay		25.3			HCM 2000 Level of Service					C		
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		71.1			Sum of lost time (s)					8.0		
Intersection Capacity Utilization		64.6%			ICU Level of Service					C		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
22: 3rd St & Palm Ave

Mitigated Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	942	13	87	487	1900	15	40	70	29	34	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Flt	1.00	1.00		1.00	0.99			0.92			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1770	1859		1770	1849			1711			1784	
Flt Permitted	0.40	1.00		0.09	1.00			0.94			0.57	
Satd. Flow (perm)	748	1859		160	1849			1624			1045	
Peak-hour factor, PHF	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Adj. Flow (vph)	10	1208	17	98	547	28	26	70	123	63	74	30
RTOR Reduction (vph)	0	0	0	0	1	0	0	43	0	0	7	0
Lane Group Flow (vph)	10	1225	0	98	574	0	0	176	0	0	160	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	80.1	80.1		80.1	80.1			18.2			18.2	
Effective Green, g (s)	80.1	80.1		80.1	80.1			18.2			18.2	
Actuated g/C Ratio	0.75	0.75		0.75	0.75			0.17			0.17	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	563	1400		120	1393			278			178	
v/s Ratio Prot		c0.66			0.31							
v/s Ratio Perm	0.01			0.61				0.11			c0.15	
v/c Ratio	0.02	0.87		0.82	0.41			0.63			0.90	
Uniform Delay, d1	3.3	9.5		8.4	4.7			40.9			43.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	6.4		33.2	0.2			4.6			39.2	
Delay (s)	3.3	15.9		41.6	4.9			45.6			82.3	
Level of Service	A	B		D	A			D			F	
Approach Delay (s)		15.8			10.2			45.6			82.3	
Approach LOS		B			B			D			F	
Intersection Summary												
HCM 2000 Control Delay		21.8			HCM 2000 Level of Service					C		
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		106.3			Sum of lost time (s)					8.0		
Intersection Capacity Utilization		75.1%			ICU Level of Service					D		
Analysis Period (min)		15										
c Critical Lane Group												





















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Mitigated Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↗	↕			↗
Volume (veh/h)	236	911	586	41	0	235
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	243	939	681	48	0	276
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	729			2131	365	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	729			2131	365	
tC, single (s)	4.1			6.8	6.9	
tC, 2 stage (s)						
tF (s)	2.2			3.5	3.3	
p0 queue free %	72			100	56	
cM capacity (veh/h)	871			31	632	
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	243	939	454	275	276	
Volume Left	243	0	0	0	0	
Volume Right	0	0	0	48	276	
cSH	871	1700	1700	1700	632	
Volume to Capacity	0.28	0.55	0.27	0.16	0.44	
Queue Length 95th (ft)	29	0	0	0	56	
Control Delay (s)	10.7	0.0	0.0	0.0	15.0	
Lane LOS	B				C	
Approach Delay (s)	2.2		0.0		15.0	
Approach LOS					C	
Intersection Summary						
Average Delay			3.1			
Intersection Capacity Utilization			51.3%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Mitigated Horizon Year (2 CVN) with Alternative 1 No Hooper
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	1962	143	66	984	149	112	102	71	197	90	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.94		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5034		1770	4985		1770	1748		1770	1794	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5034		1770	4985		1770	1748		1770	1794	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	50	2087	152	67	994	151	123	112	78	221	101	33
RTOR Reduction (vph)	0	4	0	0	9	0	0	14	0	0	7	0
Lane Group Flow (vph)	50	2235	0	67	1136	0	123	176	0	221	127	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	9.5	87.6		12.7	90.8		17.2	38.0		23.4	44.2	
Effective Green, g (s)	9.5	87.6		12.7	90.8		17.2	38.0		23.4	44.2	
Actuated g/C Ratio	0.05	0.49		0.07	0.50		0.10	0.21		0.13	0.25	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	93	2449		124	2514		169	369		230	440	
v/s Ratio Prot	0.03	c0.44		c0.04	c0.23		0.07	c0.10		c0.12	0.07	
v/s Ratio Perm												
v/c Ratio	0.54	0.91		0.54	0.45		0.73	0.48		0.96	0.29	
Uniform Delay, d1	83.1	42.7		80.8	28.6		79.1	62.3		77.8	55.1	
Progression Factor	1.00	1.00		0.93	1.22		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.9	5.7		4.4	0.5		14.5	1.0		48.2	0.4	
Delay (s)	89.0	48.4		79.5	35.5		93.6	63.2		126.0	55.5	
Level of Service	F	D		E	D		F	E		F	E	
Approach Delay (s)		49.3			37.9			75.2			99.4	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay	52.2			HCM 2000 Level of Service					D			
HCM 2000 Volume to Capacity ratio	0.78											
Actuated Cycle Length (s)	180.0			Sum of lost time (s)					18.3			
Intersection Capacity Utilization	104.8%			ICU Level of Service					G			
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus Mitigated Horizon Year (2 CVN) with Alternative 1 No Hooper
28: 13th St & SR-75 (Palm Ave) Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰		↰↰	
Volume (vph)	30	2149	227	179	1530	93	148	46	146	176	51	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5013		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5013		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	32	2286	241	185	1577	96	161	50	159	238	69	31
RTOR Reduction (vph)	0	7	0	0	0	43	0	0	146	0	4	0
Lane Group Flow (vph)	32	2520	0	185	1577	53	0	211	13	0	334	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	7.6	91.5		14.2	98.5	98.5		15.0	15.0		40.0	
Effective Green, g (s)	7.6	91.5		14.2	98.5	98.5		15.0	15.0		40.0	
Actuated g/C Ratio	0.04	0.51		0.08	0.55	0.55		0.08	0.08		0.22	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	74	2548		139	2782	866		149	131		749	
v/s Ratio Prot	0.02	c0.50		c0.10	0.31			c0.12			c0.10	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.43	0.99		1.33	0.57	0.06		1.42	0.10		0.45	
Uniform Delay, d1	84.1	43.8		82.9	26.7	19.1		82.5	76.3		60.4	
Progression Factor	1.15	0.47		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	3.1	13.3		189.8	0.8	0.1		221.9	0.3		1.9	
Delay (s)	100.2	33.7		272.7	27.6	19.2		304.4	76.6		62.4	
Level of Service	F	C		F	C	B		F	E		E	
Approach Delay (s)		34.5			51.6			206.5			62.4	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		55.0			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.92										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		94.3%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus Mitigated Horizon Year (2 CVN) with Alternative 1 No Hooper
30: Saturn Blvd/19th St & SR-75 (Palm Ave) Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰		↰↰	
Volume (vph)	216	2226	30	376	1879	636	76	203	611	674	274	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9		5.2	5.6	5.6	5.2	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00		1.00	0.95	0.95	0.97	0.95
Flt	1.00	1.00		1.00	1.00	0.85		1.00	0.92	0.85	1.00	0.99
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	5075		3433	5085	1583		1770	1632	1504	3433	1747
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	5075		3433	5085	1583		1770	1632	1504	3433	1747
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.94	0.92	0.92
Adj. Flow (vph)	227	2343	32	404	2020	684	81	216	650	733	298	284
RTOR Reduction (vph)	0	1	0	0	0	86	0	25	98	0	2	127
Lane Group Flow (vph)	227	2374	0	404	2020	598	81	425	318	733	324	129
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	10.2	55.5		13.8	59.1	59.1	11.2	40.0	40.0	23.8	52.6	52.6
Effective Green, g (s)	10.2	55.5		13.8	59.1	59.1	11.2	40.0	40.0	23.8	52.6	52.6
Actuated g/C Ratio	0.07	0.36		0.09	0.38	0.38	0.07	0.26	0.26	0.15	0.34	0.34
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	225	1817		305	1938	603	127	421	388	527	592	510
v/s Ratio Prot	0.07	c0.47		c0.12	c0.40		0.05	c0.26		c0.21	0.19	
v/s Ratio Perm						0.38			0.21			0.09
v/c Ratio	1.01	1.31		1.32	1.04	0.99	0.64	1.01	0.82	1.39	0.55	0.25
Uniform Delay, d1	72.4	49.8		70.6	48.0	47.7	69.9	57.5	54.1	65.6	41.5	37.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	62.3	142.1		167.1	32.5	34.4	10.1	46.1	12.7	187.3	1.0	0.3
Delay (s)	134.7	191.9		237.7	80.4	82.1	80.0	103.6	66.8	252.9	42.6	37.3
Level of Service	F	F		F	F	F	E	F	E	F	D	D
Approach Delay (s)		186.9			101.2			85.4			158.8	
Approach LOS		F			F			F			F	
Intersection Summary												
HCM 2000 Control Delay		136.8			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.23										
Actuated Cycle Length (s)		155.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		115.0%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Mitigated Horizon Year (2 CVN) with Alternative 1 No Hooper

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	581	980	0	504	1917
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	653	1043	0	554	2107
RTOR Reduction (vph)	0	0	0	0	0	2
Lane Group Flow (vph)	0	653	1043	0	554	2105
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	18
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.18	c0.29		0.31	c0.76
v/s Ratio Perm						
v/c Ratio		0.37	1.22		0.84	1.19
Uniform Delay, d1		12.0	30.3		22.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	107.7		9.0	89.5
Delay (s)		12.1	138.0		31.7	104.0
Level of Service		B	F		C	F
Approach Delay (s)		12.1	138.0		88.9	
Approach LOS		B	F		F	
Intersection Summary						
HCM 2000 Control Delay			89.2		HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio			1.28			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			97.8%		ICU Level of Service	F
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (2 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗					↑↑	↗	↖	↗	↑↑
Volume (vph)	1	588	81	0	0	0	0	200	222	455	1473	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3244	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3244	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	639	88	0	0	0	0	233	241	495	1534	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	23	47	0	0	0
Lane Group Flow (vph)	0	640	59	0	0	0	0	304	100	495	1534	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1172	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.43	
v/s Ratio Perm		0.13	0.04						0.07			
v/c Ratio		0.36	0.11					0.26	0.19	0.70	0.74	
Uniform Delay, d1		41.5	37.7					38.6	37.6	63.3	26.4	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.2	1.5	
Delay (s)		41.6	37.8					38.7	37.8	66.5	27.9	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.4			37.3	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay			38.3					HCM 2000 Level of Service		D		
HCM 2000 Volume to Capacity ratio			0.61									
Actuated Cycle Length (s)			171.6					Sum of lost time (s)		14.4		
Intersection Capacity Utilization			201.0%					ICU Level of Service		H		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Horizon Year (2 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↗		↗
Volume (vph)	47	3	1510	440	0	433
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Flt Protected	0.96		1.00	1.00		1.00
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1754		3539	1519		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	63	4	1589	463	0	677
RTOR Reduction (vph)	4	0	0	136	0	0
Lane Group Flow (vph)	63	0	1589	327	0	677
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		30.9	30.9		30.9
Effective Green, g (s)	3.0		30.9	30.9		30.9
Actuated g/C Ratio	0.07		0.71	0.71		0.71
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	120		2496	1071		2496
v/s Ratio Prot	c0.04		c0.45			0.19
v/s Ratio Perm				0.21		
v/c Ratio	0.53		0.64	0.30		0.27
Uniform Delay, d1	19.7		3.4	2.4		2.3
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.1		0.5	0.2		0.1
Delay (s)	23.9		4.0	2.6		2.4
Level of Service	C		A	A		A
Approach Delay (s)	23.9		3.7			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.8		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.63			
Actuated Cycle Length (s)			43.8		Sum of lost time (s)	9.9
Intersection Capacity Utilization			54.2%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (2 CVN) with Alternative 3





















Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↗
Volume (vph)	21	40	355	1855	0	201	191
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.96	0.96	0.92	0.79	0.79
Adj. Flow (vph)	23	43	370	1932	0	254	242
RTOR Reduction (vph)	0	0	0	0	0	0	144
Lane Group Flow (vph)	23	43	370	1932	0	254	98
Turn Type	Perm	Prot	Prot	NA	Prot	NA	Perm
Protected Phases		4	5	2	1	6	
Permitted Phases	4						6
Actuated Green, G (s)	15.2	15.2	23.0	64.6		36.6	36.6
Effective Green, g (s)	15.2	15.2	23.0	64.6		36.6	36.6
Actuated g/C Ratio	0.17	0.17	0.25	0.71		0.40	0.40
Clearance Time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	296	265	448	2520		1428	638
v/s Ratio Prot		c0.03	0.21	c0.55		0.07	
v/s Ratio Perm	0.01						0.06
v/c Ratio	0.08	0.16	0.83	0.77		0.18	0.15
Uniform Delay, d1	31.8	32.3	32.0	8.3		17.4	17.2
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	0.3	11.8	1.4		0.1	0.1
Delay (s)	32.0	32.6	43.8	9.7		17.4	17.3
Level of Service	C	C	D	A		B	B
Approach Delay (s)	32.4			15.2		17.4	
Approach LOS	C			B		B	
Intersection Summary							
HCM 2000 Control Delay			16.0		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio			0.69				
Actuated Cycle Length (s)			90.7		Sum of lost time (s)		15.9
Intersection Capacity Utilization			72.9%		ICU Level of Service		C
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Horizon Year (2 CVN) with Alternative 3


















Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	458	2	45	50	8	21	30	2067	11	4	187	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	0.95	0.95		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.97		1.00	0.89		1.00	1.00		1.00	0.97	
Flt Protected	0.95	0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1654		1770	1661		1770	3536		1770	3425	
Flt Permitted	0.95	0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1654		1770	1661		1770	3536		1770	3425	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	520	2	51	161	26	68	32	2176	12	6	271	74
RTOR Reduction (vph)	0	0	0	0	62	0	0	0	0	0	16	0
Lane Group Flow (vph)	291	282	0	161	32	0	32	2188	0	6	329	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	28.0	28.0		11.5	11.5		4.0	73.7		1.0	70.7	
Effective Green, g (s)	28.0	28.0		11.5	11.5		4.0	73.7		1.0	70.7	
Actuated g/C Ratio	0.21	0.21		0.09	0.09		0.03	0.55		0.01	0.53	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	353	347		152	143		53	1957		13	1819	
v/s Ratio Prot	c0.17	0.17		c0.09	0.02		c0.02	c0.62		0.00	0.10	
v/s Ratio Perm												
v/c Ratio	0.82	0.81		1.06	0.22		0.60	1.12		0.46	0.18	
Uniform Delay, d1	50.2	50.1		60.8	56.6		63.8	29.7		65.8	16.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	14.4	13.5		89.6	0.8		17.9	60.6		23.8	0.0	
Delay (s)	64.6	63.6		150.4	57.4		81.6	90.3		89.6	16.2	
Level of Service	E	E		F	E		F	F		F	B	
Approach Delay (s)		64.1			116.1			90.2			17.5	
Approach LOS		E			F			F			B	
Intersection Summary												
HCM 2000 Control Delay	80.2			HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio	1.04											
Actuated Cycle Length (s)	133.1			Sum of lost time (s)				18.9				
Intersection Capacity Utilization	86.7%			ICU Level of Service				E				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (2 CVN) with Alternative 3

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	254	20	0	1899	20	46	27	2	23	48	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99			1.00		1.00	0.99		1.00	0.92	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5031			5077		1770	1846		1770	1707	
Flt Permitted	0.95	1.00			1.00		0.67	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5031			5077		1244	1846		248	1707	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	10	285	22	0	2087	22	55	32	2	30	62	78
RTOR Reduction (vph)	0	5	0	0	1	0	0	2	0	0	25	0
Lane Group Flow (vph)	10	302	0	0	2108	0	55	32	0	30	115	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1903			2061		241	358		41	284	
v/s Ratio Prot	c0.01	0.06			c0.42			0.02			0.07	
v/s Ratio Perm							c0.04			c0.12		
v/c Ratio	0.05	0.16			1.02		0.23	0.09		0.73	0.40	
Uniform Delay, d1	71.5	37.0			53.5		61.1	59.4		71.2	67.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.2			24.3		0.5	0.1		49.4	0.9	
Delay (s)	71.6	37.2			77.7		61.6	59.6		120.6	68.0	
Level of Service	E	D			E		E	E		F	E	
Approach Delay (s)		38.3			77.7			60.8			77.3	
Approach LOS		D			E			E			E	
Intersection Summary												
HCM 2000 Control Delay	72.5			HCM 2000 Level of Service				E				
HCM 2000 Volume to Capacity ratio	0.67											
Actuated Cycle Length (s)	180.0			Sum of lost time (s)				21.9				
Intersection Capacity Utilization	75.6%			ICU Level of Service				D				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰		↰	↰		↰	↰	
Volume (vph)	24	771	40	27	2036	50	187	42	58	102	52	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00		1.00	0.91		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5047		1770	5067		1770	1701		1770	1765	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5047		1770	5067		1770	1701		1770	1765	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	29	918	48	30	2237	55	225	51	70	124	63	34
RTOR Reduction (vph)	0	3	0	0	1	0	0	28	0	0	11	0
Lane Group Flow (vph)	29	963	0	30	2291	0	225	93	0	124	86	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	20.0	82.7		16.0	78.7		25.0	38.0		25.0	38.0	
Effective Green, g (s)	20.0	82.7		16.0	78.7		25.0	38.0		25.0	38.0	
Actuated g/C Ratio	0.11	0.46		0.09	0.44		0.14	0.21		0.14	0.21	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	2318		157	2215		245	359		245	372	
v/s Ratio Prot	0.02	c0.19		c0.02	c0.45		c0.13	c0.05		0.07	0.05	
v/s Ratio Perm												
v/c Ratio	0.15	0.42		0.19	1.03		0.92	0.26		0.51	0.23	
Uniform Delay, d1	72.3	32.5		76.0	50.6		76.5	59.3		71.8	58.9	
Progression Factor	1.00	1.00		1.43	0.50		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.6		0.4	26.2		35.8	0.4		1.6	0.3	
Delay (s)	72.7	33.1		109.0	51.3		112.3	59.7		73.4	59.2	
Level of Service	E	C		F	D		F	E		E	E	
Approach Delay (s)		34.2			52.0			93.9			67.2	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		52.1			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		77.5%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰		↰	↰	
Volume (vph)	4	1114	72	110	2067	59	167	22	104	192	41	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1252	81	133	2490	71	188	25	117	256	55	23
RTOR Reduction (vph)	0	4	0	0	0	27	0	0	105	0	3	0
Lane Group Flow (vph)	4	1329	0	133	2490	44	0	213	12	0	331	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Effective Green, g (s)	4.0	86.7		20.0	102.7	102.7		18.6	18.6		36.4	
Actuated g/C Ratio	0.02	0.48		0.11	0.57	0.57		0.10	0.10		0.20	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2427		196	2901	903		184	163		682	
v/s Ratio Prot	0.00	0.26		c0.08	c0.49			c0.12			c0.10	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.10	0.55		0.68	0.86	0.05		1.16	0.07		0.49	
Uniform Delay, d1	86.2	32.8		76.9	32.5	17.1		80.7	72.9		63.5	
Progression Factor	0.93	1.30		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.9		9.0	3.6	0.1		115.2	0.2		0.5	
Delay (s)	81.0	43.6		85.9	36.1	17.2		195.9	73.1		64.1	
Level of Service	F	D		F	D	B		F	E		E	
Approach Delay (s)		43.7			38.0			152.3			64.1	
Approach LOS		D			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		49.6			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		93.9%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑		↔↔	↑↑↑	↔	↔	↔	↔	↔↔	↔	↔
Volume (vph)	105	1434	34	280	2144	246	86	83	884	269	106	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		3433	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		3433	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	122	1667	40	298	2281	262	96	92	982	320	126	105
RTOR Reduction (vph)	0	2	0	0	0	49	0	114	132	0	2	67
Lane Group Flow (vph)	122	1705	0	298	2281	213	96	430	398	320	135	27
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2			4				8
Actuated Green, G (s)	6.2	59.5		17.4	70.7	70.7	11.3	41.4	41.4	14.8	44.9	44.9
Effective Green, g (s)	6.2	59.5		17.4	70.7	70.7	11.3	41.4	41.4	14.8	44.9	44.9
Actuated g/C Ratio	0.04	0.38		0.11	0.46	0.46	0.07	0.27	0.27	0.10	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	137	1945		385	2319	722	129	413	401	327	506	435
v/s Ratio Prot	0.04	0.34		c0.09	c0.45		0.05	c0.28		c0.09	c0.08	
v/s Ratio Perm						0.13		0.26				0.02
v/c Ratio	0.89	0.88		0.77	0.98	0.29	0.74	1.04	0.99	0.98	0.27	0.06
Uniform Delay, d1	74.1	44.3		66.9	41.6	26.5	70.4	56.8	56.6	69.9	42.4	39.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	45.7	4.8		9.4	14.9	0.2	20.5	55.2	42.8	43.5	0.3	0.1
Delay (s)	119.7	49.1		76.2	56.5	26.7	91.0	112.0	99.5	113.4	42.7	39.9
Level of Service	F	D		E	E	C	F	F	F	F	D	D
Approach Delay (s)		53.8			55.8			104.6			83.3	
Approach LOS		D			E			F			F	
Intersection Summary												
HCM 2000 Control Delay		66.5			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		1.00										
Actuated Cycle Length (s)		155.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		94.0%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (2 CVN) with Alternative 3

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↔	↔↔
Volume (vph)	0	326	1281	0	178	1392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	366	1377	0	198	1547
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	366	1377	0	198	1544
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.10	c0.39		0.11	c0.55
v/s Ratio Perm						
v/c Ratio		0.14	1.18		0.96	1.01
Uniform Delay, d1		2.5	26.8		35.1	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	90.1		49.7	25.0
Delay (s)		2.5	116.9		84.8	43.0
Level of Service		A	F		F	D
Approach Delay (s)		2.5	116.9		47.7	
Approach LOS		A	F		D	
Intersection Summary						
HCM 2000 Control Delay		70.3			HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio		1.15				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		72.4%			ICU Level of Service	C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
4: Orange Ave & Fourth St

Horizon Year (2 CVN) with Alternative 3 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	7	2133	111	0	0	0	0	357	472	766	1116	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Flpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3125	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3125	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2344	122	0	0	0	0	415	549	798	1162	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2352	93	0	0	0	0	656	273	798	1162	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm				NA	Perm	Prot	NA		
Protected Phases	4	4					2		1	6		
Permitted Phases			4					2				
Actuated Green, G (s)		63.4	63.4				53.0	53.0	44.2	100.0		
Effective Green, g (s)		63.4	63.4				53.0	53.0	44.2	100.0		
Actuated g/C Ratio		0.36	0.36				0.30	0.30	0.25	0.57		
Clearance Time (s)		5.6	5.6				4.6	4.6	4.2	6.0		
Vehicle Extension (s)		3.0	3.0				3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)		1841	573				946	408	867	2022		
v/s Ratio Prot		c0.46					c0.21		c0.23	0.33		
v/s Ratio Perm			0.06					0.20				
v/c Ratio		1.28	0.16				0.69	0.67	0.92	0.57		
Uniform Delay, d1		55.8	37.8				53.8	53.3	63.7	23.9		
Progression Factor		1.00	1.00				1.00	1.00	1.00	1.00		
Incremental Delay, d2		129.3	0.1				2.2	4.1	14.8	0.4		
Delay (s)		185.1	37.9				56.1	57.4	78.5	24.3		
Level of Service		F	D				E	E	E	C		
Approach Delay (s)		177.8			0.0		56.5			46.4		
Approach LOS		F			A		E			D		
Intersection Summary												
HCM 2000 Control Delay		108.4		HCM 2000 Level of Service					F			
HCM 2000 Volume to Capacity ratio		0.99										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		136.1%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd








Horizon Year (2 CVN) with Alternative 3 Mitigated
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑		↑↑	↑		↑↑
Volume (vph)	337	5	893	58	0	1821
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.92		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1771		3539	1452		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1771		3539	1452		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	427	6	992	64	0	2046
RTOR Reduction (vph)	1	0	0	28	0	0
Lane Group Flow (vph)	432	0	992	36	0	2046
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		75.1	75.1		75.1
Effective Green, g (s)	50.0		75.1	75.1		75.1
Actuated g/C Ratio	0.37		0.56	0.56		0.56
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	655		1968	807		1968
v/s Ratio Prot	c0.24		0.28			c0.58
v/s Ratio Perm				0.02		
v/c Ratio	0.66		0.50	0.04		1.04
Uniform Delay, d1	35.4		18.5	13.6		30.0
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	2.5		0.2	0.0		31.4
Delay (s)	37.9		18.7	13.6		61.4
Level of Service	D		B	B		E
Approach Delay (s)	37.9		18.4			61.4
Approach LOS	D		B			E
Intersection Summary						
HCM 2000 Control Delay		45.7		HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio		0.89				
Actuated Cycle Length (s)		135.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		100.3%		ICU Level of Service		G
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Horizon Year (2 CVN) with Alternative 3 Mitigated













Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	189	351	88	525	0	1736	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.92	0.90	0.90
Adj. Flow (vph)	205	382	100	597	0	1929	52
RTOR Reduction (vph)	0	0	0	0	0	0	23
Lane Group Flow (vph)	205	382	100	597	0	1929	29
Turn Type	Perm	Prot	Prot	NA	Prot	NA	Perm
Protected Phases		4	5	2	1	6	
Permitted Phases	4					6	
Actuated Green, G (s)	34.5	34.5	8.0	87.2		74.2	74.2
Effective Green, g (s)	34.5	34.5	8.0	87.2		74.2	74.2
Actuated g/C Ratio	0.26	0.26	0.06	0.66		0.56	0.56
Clearance Time (s)	5.0	5.0	5.0	5.9		5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	460	411	106	2327		1980	885
v/s Ratio Prot		c0.24	c0.06	0.17		c0.55	
v/s Ratio Perm	0.12						0.02
v/c Ratio	0.45	0.93	0.94	0.26		0.97	0.03
Uniform Delay, d1	41.0	47.9	62.1	9.3		28.3	13.1
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.7	27.1	69.0	0.1		14.5	0.0
Delay (s)	41.7	75.0	131.1	9.4		42.8	13.1
Level of Service	D	E	F	A		D	B
Approach Delay (s)	63.4			26.9		42.0	
Approach LOS	E			C		D	
Intersection Summary							
HCM 2000 Control Delay		42.6		HCM 2000 Level of Service		D	
HCM 2000 Volume to Capacity ratio		0.96					
Actuated Cycle Length (s)		132.6		Sum of lost time (s)		15.9	
Intersection Capacity Utilization		78.8%		ICU Level of Service		D	
Analysis Period (min)		15					
c Critical Lane Group							

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

Horizon Year (2 CVN) with Alternative 3 Mitigated

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	1514	69	0	487		19	46	5	28	30	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99			0.99		1.00	0.99		1.00	0.93	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5052			5027		1770	1836		1770	1739	
Flt Permitted	0.95	1.00			1.00		0.72	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5052			5027		1334	1836		248	1739	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	75	1720	78	0	518	43	27	66	7	33	35	28
RTOR Reduction (vph)	0	2	0	0	5	0	0	2	0	0	16	0
Lane Group Flow (vph)	75	1796	0	0	556	0	27	71	0	33	47	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4					
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1911			2041		259	357		41	289	
v/s Ratio Prot	c0.04	c0.36			c0.11			c0.04			0.03	
v/s Ratio Perm							0.02			c0.13		
v/c Ratio	0.38	0.94			0.27		0.10	0.20		0.80	0.16	
Uniform Delay, d1	74.3	54.0			35.7		59.6	60.7		72.2	64.2	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.2	10.6			0.3		0.2	0.3		69.0	0.3	
Delay (s)	75.5	64.5			36.0		59.8	61.0		141.2	64.5	
Level of Service	E	E			D		E	E		F	E	
Approach Delay (s)		65.0			36.0			60.7			90.9	
Approach LOS		E			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		59.6			HCM 2000 Level of Service		E					
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)		22.3					
Intersection Capacity Utilization		69.7%			ICU Level of Service		C					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	1855	143	66	957	149	111	102	71	197	90	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99		1.00	0.98		1.00	0.94		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5031		1770	4982		1770	1748		1770	1794	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5031		1770	4982		1770	1748		1770	1794	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	50	1973	152	67	967	151	122	112	78	221	101	33
RTOR Reduction (vph)	0	4	0	0	10	0	0	14	0	0	6	0
Lane Group Flow (vph)	50	2121	0	67	1108	0	122	176	0	221	128	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	12.0	83.3		15.4	86.7		25.0	38.0		25.0	38.0	
Effective Green, g (s)	12.0	83.3		15.4	86.7		25.0	38.0		25.0	38.0	
Actuated g/C Ratio	0.07	0.46		0.09	0.48		0.14	0.21		0.14	0.21	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	118	2328		151	2399		245	369		245	378	
v/s Ratio Prot	0.03	c0.42		c0.04	c0.22		0.07	c0.10		c0.12	0.07	
v/s Ratio Perm												
v/c Ratio	0.42	0.91		0.44	0.46		0.50	0.48		0.90	0.34	
Uniform Delay, d1	80.7	44.9		78.2	31.1		71.7	62.3		76.3	60.3	
Progression Factor	1.00	1.00		0.94	1.24		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.4	5.9		1.9	0.6		1.6	1.0		32.6	0.5	
Delay (s)	83.1	50.8		75.8	39.2		73.3	63.2		108.9	60.8	
Level of Service	F	D		E	D		E	E		F	E	
Approach Delay (s)		51.6			41.3			67.2			90.8	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		53.2			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		116.6%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3 Mitigated
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	2042	227	179	1503	93	147	46	146	176	51	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.85	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5009		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5009		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	32	2172	241	185	1549	96	160	50	159	238	69	31
RTOR Reduction (vph)	0	7	0	0	0	32	0	0	146	0	4	0
Lane Group Flow (vph)	32	2406	0	185	1549	64	0	210	13	0	334	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	8.4	85.7		20.0	97.7	97.7		15.0	15.0		40.0	
Effective Green, g (s)	8.4	85.7		20.0	97.7	97.7		15.0	15.0		40.0	
Actuated g/C Ratio	0.05	0.48		0.11	0.54	0.54		0.08	0.08		0.22	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	82	2384		196	2760	859		149	131		749	
v/s Ratio Prot	0.02	c0.48		c0.10	0.30			c0.12			c0.10	
v/s Ratio Perm						0.04			0.01			
v/c Ratio	0.39	1.01		0.94	0.56	0.07		1.41	0.10		0.45	
Uniform Delay, d1	83.3	47.1		79.4	27.1	19.6		82.5	76.3		60.4	
Progression Factor	1.18	0.46		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	2.4	18.7		48.1	0.8	0.2		219.2	0.3		1.9	
Delay (s)	100.6	40.3		127.5	27.9	19.8		301.7	76.6		62.4	
Level of Service	F	D		F	C	B		F	E		E	
Approach Delay (s)		41.1			37.5			204.7			62.4	
Approach LOS		D			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		53.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.90										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		95.1%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Horizon Year (2 CVN) with Alternative 3 Mitigated

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	216	2118	30	376	1853	636	75	203	611	674	274	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5074		3433	5085	1583	1770	1632	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5074		3433	5085	1583	1770	1632	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	227	2229	32	404	1992	684	80	216	650	733	298	284
RTOR Reduction (vph)	0	1	0	0	0	87	0	25	96	0	2	126
Lane Group Flow (vph)	227	2260	0	404	1992	597	80	425	320	733	324	130
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2			4				8
Actuated Green, G (s)	9.5	55.5		13.8	59.8	59.8	11.5	40.0	40.0	23.8	52.3	52.3
Effective Green, g (s)	9.5	55.5		13.8	59.8	59.8	11.5	40.0	40.0	23.8	52.3	52.3
Actuated g/C Ratio	0.06	0.36		0.09	0.39	0.39	0.07	0.26	0.26	0.15	0.34	0.34
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	210	1816		305	1961	610	131	421	388	527	589	507
v/s Ratio Prot	0.07	c0.45		c0.12	c0.39		0.05	c0.26		c0.21	0.19	
v/s Ratio Perm						0.38		0.21				0.09
v/c Ratio	1.08	1.24		1.32	1.02	0.98	0.61	1.01	0.82	1.39	0.55	0.26
Uniform Delay, d1	72.8	49.8		70.6	47.6	47.0	69.6	57.5	54.2	65.6	41.8	37.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	85.3	114.9		167.1	24.3	30.6	8.2	46.1	13.2	187.3	1.1	0.3
Delay (s)	158.1	164.7		237.7	71.9	77.6	77.7	103.6	67.4	252.9	42.9	37.5
Level of Service	F	F		F	E	E	E	F	E	F	D	D
Approach Delay (s)		164.1			94.9			85.5			158.9	
Approach LOS		F			F			F			F	
Intersection Summary												
HCM 2000 Control Delay		126.5			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.21										
Actuated Cycle Length (s)		155.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		112.9%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Horizon Year (2 CVN) with Alternative 3 Mitigated

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	↔
Volume (vph)	0	581	980	0	504	1891
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	653	1043	0	554	2078
RTOR Reduction (vph)	0	0	0	0	0	2
Lane Group Flow (vph)	0	653	1043	0	554	2076
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.18	c0.29		0.31	c0.75
v/s Ratio Perm						
v/c Ratio		0.37	1.22		0.84	1.17
Uniform Delay, d1		12.0	30.3		22.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	107.7		9.0	82.5
Delay (s)		12.1	138.0		31.7	97.0
Level of Service		B	F		C	F
Approach Delay (s)		12.1	138.0		83.3	
Approach LOS		B	F		F	
Intersection Summary						
HCM 2000 Control Delay		85.7			HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio		1.26				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		96.9%			ICU Level of Service	F
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
4: Orange Ave & Fourth St

Mitigated Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	1	588	81	0	0	0	0	200	216	455	1418	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3246	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3246	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	639	88	0	0	0	0	233	235	495	1477	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	22	47	0	0	0
Lane Group Flow (vph)	0	640	59	0	0	0	0	303	96	495	1477	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4					2				
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1172	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.42	
v/s Ratio Perm		0.13	0.04					0.07				
v/c Ratio		0.36	0.11					0.26	0.18	0.70	0.72	
Uniform Delay, d1		41.5	37.7					38.6	37.5	63.3	25.6	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.2	1.2	
Delay (s)		41.6	37.8					38.7	37.7	66.5	26.8	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.4			36.8	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.1										
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		171.6							14.4			
Intersection Capacity Utilization		201.0%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Mitigated Horizon Year (2 CVN) with Alternative 3 No Hooper

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑	↑		↑↑
Volume (vph)	47	3	1503	440	0	379
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frbp, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1754		3539	1519		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1754		3539	1519		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	63	4	1582	463	0	592
RTOR Reduction (vph)	4	0	0	136	0	0
Lane Group Flow (vph)	63	0	1582	327	0	592
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		30.9	30.9		30.9
Effective Green, g (s)	3.0		30.9	30.9		30.9
Actuated g/C Ratio	0.07		0.71	0.71		0.71
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	120		2496	1071		2496
v/s Ratio Prot	c0.04		c0.45			0.17
v/s Ratio Perm				0.21		
v/c Ratio	0.53		0.63	0.30		0.24
Uniform Delay, d1	19.7		3.4	2.4		2.3
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.1		0.5	0.2		0.0
Delay (s)	23.9		4.0	2.6		2.3
Level of Service	C		A	A		A
Approach Delay (s)	23.9		3.7			2.3
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.9			
HCM 2000 Volume to Capacity ratio			0.62			
Actuated Cycle Length (s)			43.8			9.9
Intersection Capacity Utilization			54.0%			A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus Mitigated Horizon Year (2 CVN) with Alternative 3 No Hooper
19: 7th St & SR-75 (Silver Strand Blvd) Timing Plan: AM PEAK







Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰		↰	↰	
Volume (vph)	9	216	19	0	1555	20	41	27	2	23	48	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99			1.00		1.00	0.99		1.00	0.92	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5025			5076		1770	1846		1770	1707	
Flt Permitted	0.95	1.00			1.00		0.67	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5025			5076		1244	1846		248	1707	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	0.77
Adj. Flow (vph)	10	243	21	0	1709	22	49	32	2	30	62	78
RTOR Reduction (vph)	0	6	0	0	1	0	0	2	0	0	25	0
Lane Group Flow (vph)	10	258	0	0	1730	0	49	32	0	30	115	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1901			2061		241	358		41	284	
v/s Ratio Prot	c0.01	0.05			c0.34			0.02			0.07	
v/s Ratio Perm							c0.04			c0.12		
v/c Ratio	0.05	0.14			0.84		0.20	0.09		0.73	0.40	
Uniform Delay, d1	71.5	36.7			48.2		60.8	59.4		71.2	67.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1			3.9		0.4	0.1		49.4	0.9	
Delay (s)	71.6	36.8			52.1		61.2	59.6		120.6	68.0	
Level of Service	E	D			D		E	E		F	E	
Approach Delay (s)		38.1			52.1			60.5			77.3	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		52.6			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		68.9%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus Mitigated Horizon Year (2 CVN) with Alternative 3 No Hooper
21: Dwy/Silver Strand Blvd & Palm Ave Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰			↰	↰		↰↰		↰	↰	
Volume (vph)	15	238	0	0	131	648	0	0	0	109	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00				1.00	1.00	
Flt		1.00			1.00	0.85				1.00	0.85	
Flt Protected		1.00			1.00	1.00				0.95	1.00	
Satd. Flow (prot)		1857			1863	1583				1770	1583	
Flt Permitted		0.98			1.00	1.00				0.76	1.00	
Satd. Flow (perm)		1828			1863	1583				1410	1583	
Peak-hour factor, PHF	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Adj. Flow (vph)	18	283	0	0	141	697	0	0	0	120	0	7
RTOR Reduction (vph)	0	0	0	0	0	402	0	0	0	0	5	0
Lane Group Flow (vph)	0	301	0	0	141	295	0	0	0	120	2	0
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)		12.9			12.9	12.9				9.6	9.6	
Effective Green, g (s)		12.9			12.9	12.9				9.6	9.6	
Actuated g/C Ratio		0.42			0.42	0.42				0.31	0.31	
Clearance Time (s)		4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)		773			787	669				443	498	
v/s Ratio Prot					0.08						0.00	
v/s Ratio Perm		0.16				c0.19				c0.09		
v/c Ratio		0.39			0.18	0.44				0.27	0.00	
Uniform Delay, d1		6.1			5.5	6.2				7.8	7.2	
Progression Factor		1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2		0.3			0.1	0.5				0.3	0.0	
Delay (s)		6.4			5.6	6.7				8.2	7.2	
Level of Service		A			A	A				A	A	
Approach Delay (s)		6.4			6.5			0.0			8.1	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay		6.7			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.37										
Actuated Cycle Length (s)		30.5			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		60.1%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												







NBC Coastal Campus
22: 3rd St & Palm Ave

Mitigated Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	338	5	27	755	25	12	15	129	12	11	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.89			0.95	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.98	
Satd. Flow (prot)	1770	1859		1770	1854			1649			1736	
Flt Permitted	0.20	1.00		0.51	1.00			0.98			0.91	
Satd. Flow (perm)	382	1859		952	1854			1616			1601	
Peak-hour factor, PHF	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Adj. Flow (vph)	9	393	6	29	812	27	15	19	159	15	14	19
RTOR Reduction (vph)	0	1	0	0	2	0	0	126	0	0	15	0
Lane Group Flow (vph)	9	398	0	29	837	0	0	67	0	0	33	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	25.7	25.7		25.7	25.7			8.8			8.8	
Effective Green, g (s)	25.7	25.7		25.7	25.7			8.8			8.8	
Actuated g/C Ratio	0.60	0.60		0.60	0.60			0.21			0.21	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	230	1124		575	1121			334			331	
v/s Ratio Prot		0.21			c0.45							
v/s Ratio Perm	0.02			0.03				c0.04			0.02	
v/c Ratio	0.04	0.35		0.05	0.75			0.20			0.10	
Uniform Delay, d1	3.4	4.2		3.4	6.1			13.9			13.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	0.2		0.0	2.8			0.3			0.1	
Delay (s)	3.5	4.4		3.5	8.8			14.2			13.8	
Level of Service	A	A		A	A			B			B	
Approach Delay (s)		4.4			8.6			14.2			13.8	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay		8.4			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		42.5			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		57.8%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Mitigated Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	242	480	744	156	0	225
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	306	608	907	190	0	317
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked	0.83				0.83	0.83
vC, conflicting volume	1098				2223	549
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	717				2067	58
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	58				100	62
cM capacity (veh/h)	733				23	830
Direction, Lane #						
Volume Total	306	608	605	493	317	
Volume Left	306	0	0	0	0	
Volume Right	0	0	0	190	317	
cSH	733	1700	1700	1700	830	
Volume to Capacity	0.42	0.36	0.36	0.29	0.38	
Queue Length 95th (ft)	52	0	0	0	45	
Control Delay (s)	13.4	0.0	0.0	0.0	12.0	
Lane LOS	B				B	
Approach Delay (s)	4.5		0.0		12.0	
Approach LOS					B	
Intersection Summary						
Average Delay			3.4			
Intersection Capacity Utilization			46.1%		ICU Level of Service	A
Analysis Period (min)			15			









NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Mitigated Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	777	40	27	2090	50	187	42	58	102	52	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00		1.00	0.91		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5048		1770	5067		1770	1701		1770	1765	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5048		1770	5067		1770	1701		1770	1765	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	29	925	48	30	2297	55	225	51	70	124	63	34
RTOR Reduction (vph)	0	3	0	0	1	0	0	27	0	0	11	0
Lane Group Flow (vph)	29	970	0	30	2351	0	225	94	0	124	86	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	8.3	93.6		8.3	93.6		21.4	42.1		17.7	38.4	
Effective Green, g (s)	8.3	93.6		8.3	93.6		21.4	42.1		17.7	38.4	
Actuated g/C Ratio	0.05	0.52		0.05	0.52		0.12	0.23		0.10	0.21	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	81	2624		81	2634		210	397		174	376	
v/s Ratio Prot	0.02	0.19		c0.02	c0.46		c0.13	c0.06		0.07	0.05	
v/s Ratio Perm												
v/c Ratio	0.36	0.37		0.37	0.89		1.07	0.24		0.71	0.23	
Uniform Delay, d1	83.3	25.7		83.3	38.7		79.3	55.9		78.7	58.6	
Progression Factor	1.00	1.00		0.97	0.88		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.7	0.4		2.1	3.8		82.3	0.3		12.9	0.3	
Delay (s)	86.0	26.1		82.8	38.0		161.6	56.2		91.6	58.9	
Level of Service	F	C		F	D		F	E		F	E	
Approach Delay (s)		27.8			38.6			124.8			77.2	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		45.5			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		78.6%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Mitigated Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	1120	72	110	2122	59	167	22	104	192	41	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	4	1258	81	133	2557	71	188	25	117	256	55	23
RTOR Reduction (vph)	0	4	0	0	0	27	0	0	105	0	3	0
Lane Group Flow (vph)	4	1335	0	133	2557	44	0	213	12	0	331	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	89.3		16.8	102.1	102.1		19.2	19.2		36.4	
Effective Green, g (s)	4.0	89.3		16.8	102.1	102.1		19.2	19.2		36.4	
Actuated g/C Ratio	0.02	0.50		0.09	0.57	0.57		0.11	0.11		0.20	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2499		165	2884	897		190	168		682	
v/s Ratio Prot	0.00	0.26		c0.08	c0.50			c0.12			c0.10	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.10	0.53		0.81	0.89	0.05		1.12	0.07		0.49	
Uniform Delay, d1	86.2	31.1		80.0	33.9	17.3		80.4	72.4		63.5	
Progression Factor	1.17	0.67		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	1.1	0.8		24.1	4.5	0.1		101.5	0.2		0.5	
Delay (s)	101.7	21.5		104.2	38.4	17.4		181.9	72.6		64.1	
Level of Service	F	C		F	D	B		F	E		E	
Approach Delay (s)		21.7			41.0			143.2			64.1	
Approach LOS		C			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		44.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		94.9%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus Mitigated Horizon Year (2 CVN) with Alternative 3 No Hooper
30: Saturn Blvd/19th St & SR-75 (Palm Ave) Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰↱	↰↱↰↱		↰↱	↰↱↰↱	↰↱	↰↱	↰↱	↰↱	↰↱	↰↱	↰↱
Volume (vph)	105	1440	34	280	2198	246	86	83	884	269	106	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		3433	5085	1583	1770	1549	1504	3433	1748	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		3433	5085	1583	1770	1549	1504	3433	1748	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	122	1674	40	298	2338	262	96	92	982	320	126	105
RTOR Reduction (vph)	0	2	0	0	0	49	0	114	132	0	2	67
Lane Group Flow (vph)	122	1712	0	298	2338	213	96	430	398	320	135	27
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2			4				8
Actuated Green, G (s)	6.2	59.5		17.4	70.7	70.7	11.3	41.4	41.4	14.8	44.9	44.9
Effective Green, g (s)	6.2	59.5		17.4	70.7	70.7	11.3	41.4	41.4	14.8	44.9	44.9
Actuated g/C Ratio	0.04	0.38		0.11	0.46	0.46	0.07	0.27	0.27	0.10	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	137	1945		385	2319	722	129	413	401	327	506	435
v/s Ratio Prot	0.04	0.34		c0.09	c0.46		0.05	c0.28		c0.09	c0.08	
v/s Ratio Perm					0.13			0.26				0.02
v/c Ratio	0.89	0.88		0.77	1.01	0.29	0.74	1.04	0.99	0.98	0.27	0.06
Uniform Delay, d1	74.1	44.4		66.9	42.1	26.5	70.4	56.8	56.6	69.9	42.4	39.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	45.7	5.0		9.4	20.7	0.2	20.5	55.2	42.8	43.5	0.3	0.1
Delay (s)	119.7	49.5		76.2	62.8	26.7	91.0	112.0	99.5	113.4	42.7	39.9
Level of Service	F	D		E	E	C	F	F	F	F	D	D
Approach Delay (s)		54.1			61.0			104.6			83.3	
Approach LOS		D			E			F			F	
Intersection Summary												
HCM 2000 Control Delay		68.8			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		1.01										
Actuated Cycle Length (s)		155.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		95.1%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus Mitigated Horizon Year (2 CVN) with Alternative 3 No Hooper
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰↱	↰↱		↰↱	↰↱
Volume (vph)	0	326	1281	0	178	1446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	366	1377	0	198	1607
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	366	1377	0	198	1604
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.10	c0.39		0.11	c0.58
v/s Ratio Perm						
v/c Ratio		0.14	1.18		0.96	1.05
Uniform Delay, d1		2.5	26.8		35.1	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	90.1		49.7	36.4
Delay (s)		2.5	116.9		84.8	54.4
Level of Service		A	F		F	D
Approach Delay (s)		2.5	116.9		57.8	
Approach LOS		A	F		E	
Intersection Summary						
HCM 2000 Control Delay		75.0			HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio		1.17				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		74.3%			ICU Level of Service	D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
4: Orange Ave & Fourth St

Mitigated Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑↑	↑	↑↑	↑↑	
Volume (vph)	7	2133	111					357	418	766	1103	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.95	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3155	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3155	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2344	122	0	0	0	0	415	486	798	1149	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2352	93	0	0	0	0	613	253	798	1149	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm				NA	Perm	Prot	NA		
Protected Phases	4	4					2		1	6		
Permitted Phases			4					2				
Actuated Green, G (s)		63.4	63.4				53.0	53.0	44.2	100.0		
Effective Green, g (s)		63.4	63.4				53.0	53.0	44.2	100.0		
Actuated g/C Ratio		0.36	0.36				0.30	0.30	0.25	0.57		
Clearance Time (s)		5.6	5.6				4.6	4.6	4.2	6.0		
Vehicle Extension (s)		3.0	3.0				3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)		1841	573				955	408	867	2022		
v/s Ratio Prot		c0.46					c0.19		c0.23	0.32		
v/s Ratio Perm			0.06					0.19				
v/c Ratio		1.28	0.16				0.64	0.62	0.92	0.57		
Uniform Delay, d1		55.8	37.8				52.8	52.3	63.7	23.8		
Progression Factor		1.00	1.00				1.00	1.00	1.00	1.00		
Incremental Delay, d2		129.3	0.1				1.5	2.8	14.8	0.4		
Delay (s)		185.1	37.9				54.3	55.1	78.5	24.2		
Level of Service		F	D				D	E	E	C		
Approach Delay (s)		177.8			0.0		54.6			46.4		
Approach LOS		F			A		D			D		
Intersection Summary												
HCM 2000 Control Delay		108.9										F
HCM 2000 Volume to Capacity ratio		0.97										
Actuated Cycle Length (s)		175.0						14.4				
Intersection Capacity Utilization		135.9%							H			
Analysis Period (min)		15										

c Critical Lane Group

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Mitigated Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑	↑		↑↑
Volume (vph)	337	5	828	58	0	1807
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1771		3539	1467		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1771		3539	1467		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	427	6	920	64	0	2030
RTOR Reduction (vph)	1	0	0	33	0	0
Lane Group Flow (vph)	432	0	920	31	0	2030
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	Prot		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		55.1	55.1		55.1
Effective Green, g (s)	50.0		55.1	55.1		55.1
Actuated g/C Ratio	0.43		0.48	0.48		0.48
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	770		1695	702		1695
v/s Ratio Prot	c0.24		0.26			c0.57
v/s Ratio Perm				0.02		
v/c Ratio	0.56		0.54	0.04		1.20
Uniform Delay, d1	24.3		21.1	15.9		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.9		0.4	0.0		95.0
Delay (s)	25.2		21.4	16.0		124.9
Level of Service	C		C	B		F
Approach Delay (s)	25.2		21.1			124.9
Approach LOS	C		C			F
Intersection Summary						
HCM 2000 Control Delay			82.8			F
HCM 2000 Volume to Capacity ratio			0.89			
Actuated Cycle Length (s)			115.0			9.9
Intersection Capacity Utilization			99.9%			F
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus Mitigated Horizon Year (2 CVN) with Alternative 3 No Hooper
19: 7th St & SR-75 (Silver Strand Blvd) Timing Plan: PM PEAK







Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰		↰	↰	
Volume (vph)	66	1174	64	0	402	40	18	46	5	28	30	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99			1.00		0.99	1.00		1.00	0.93	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5046			5016		1770	1836		1770	1739	
Flt Permitted	0.95	1.00			1.00		0.72	1.00		0.13	1.00	
Satd. Flow (perm)	1770	5046			5016		1334	1836		248	1739	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	75	1334	73	0	428	43	26	66	7	33	35	28
RTOR Reduction (vph)	0	3	0	0	7	0	0	2	0	0	16	0
Lane Group Flow (vph)	75	1404	0	0	464	0	26	71	0	33	47	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0		30.0	30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19		0.17	0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6		5.6	5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	1909			2037		259	357		41	289	
v/s Ratio Prot	c0.04	c0.28			c0.09		c0.04			0.03		
v/s Ratio Perm							0.02			c0.13		
v/c Ratio	0.38	0.74			0.23		0.10	0.20		0.80	0.16	
Uniform Delay, d1	74.3	48.2			35.0		59.6	60.7		72.2	64.2	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.2	2.6			0.3		0.2	0.3		69.0	0.3	
Delay (s)	75.5	50.8			35.2		59.7	61.0		141.2	64.5	
Level of Service	E	D			D		E	E		F	E	
Approach Delay (s)		52.0			35.2			60.7			90.9	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		50.5			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			22.3				
Intersection Capacity Utilization		68.1%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus Mitigated Horizon Year (2 CVN) with Alternative 3 No Hooper
21: Dwy/Silver Strand Blvd & Palm Ave Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰			↰	↰		↰↰		↰	↰	
Volume (vph)	5	218	0	0	313	176	0	0	0	642	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00				1.00	1.00	
Flt		1.00			1.00	0.85				1.00	0.85	
Flt Protected		1.00			1.00	1.00				0.95	1.00	
Satd. Flow (prot)		1861			1863	1583				1770	1583	
Flt Permitted		0.99			1.00	1.00				0.76	1.00	
Satd. Flow (perm)		1845			1863	1583				1410	1583	
Peak-hour factor, PHF	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.92	0.66	0.66
Adj. Flow (vph)	6	253	0	0	356	200	0	0	0	698	0	21
RTOR Reduction (vph)	0	0	0	0	0	142	0	0	0	0	9	0
Lane Group Flow (vph)	0	259	0	0	356	58	0	0	0	698	12	0
Turn Type	Perm	NA			NA	Perm				Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8		2			6	
Actuated Green, G (s)		16.3			16.3	16.3				31.8	31.8	
Effective Green, g (s)		16.3			16.3	16.3				31.8	31.8	
Actuated g/C Ratio		0.29			0.29	0.29				0.57	0.57	
Clearance Time (s)		4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)		536			541	459				799	897	
v/s Ratio Prot					c0.19						0.01	
v/s Ratio Perm		0.14				0.04				c0.49		
v/c Ratio		0.48			0.66	0.13				0.87	0.01	
Uniform Delay, d1		16.4			17.5	14.7				10.4	5.3	
Progression Factor		1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2		0.7			2.9	0.1				10.4	0.0	
Delay (s)		17.1			20.3	14.8				20.8	5.3	
Level of Service		B			C	B				C	A	
Approach Delay (s)		17.1			18.3			0.0			20.4	
Approach LOS		B			B			A			C	
Intersection Summary												
HCM 2000 Control Delay		19.1			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.80										
Actuated Cycle Length (s)		56.1			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		58.7%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												







NBC Coastal Campus
22: 3rd St & Palm Ave

Mitigated Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	836	13	87	461	25	15	40	70	29	34	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.92			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1770	1858		1770	1848			1711			1784	
Flt Permitted	0.41	1.00		0.13	1.00			0.96			0.66	
Satd. Flow (perm)	767	1858		236	1848			1646			1199	
Peak-hour factor, PHF	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Adj. Flow (vph)	10	1072	17	98	518	28	26	70	123	63	74	30
RTOR Reduction (vph)	0	1	0	0	2	0	0	55	0	0	10	0
Lane Group Flow (vph)	10	1088	0	98	544	0	0	164	0	0	157	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	57.8	57.8		57.8	57.8			15.1			15.1	
Effective Green, g (s)	57.8	57.8		57.8	57.8			15.1			15.1	
Actuated g/C Ratio	0.71	0.71		0.71	0.71			0.19			0.19	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	547	1327		168	1320			307			223	
v/s Ratio Prot		c0.59			0.29							
v/s Ratio Perm	0.01			0.42				0.10			c0.13	
v/c Ratio	0.02	0.82		0.58	0.41			0.53			0.71	
Uniform Delay, d1	3.3	8.0		5.7	4.7			29.7			30.8	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	4.2		5.1	0.2			1.8			9.7	
Delay (s)	3.4	12.2		10.7	4.9			31.5			40.5	
Level of Service	A	B		B	A			C			D	
Approach Delay (s)		12.1			5.8			31.5			40.5	
Approach LOS		B			A			C			D	
Intersection Summary												
HCM 2000 Control Delay		14.4			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.80										
Actuated Cycle Length (s)		80.9			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		69.6%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

Mitigated Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	209	832	566	41	0	229
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	215	858	658	48	0	269
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	706				1971	353
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	706				1971	353
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	76				100	58
cM capacity (veh/h)	888				41	643
Direction, Lane #						
Volume Total	215	858	439	267	269	
Volume Left	215	0	0	0	0	
Volume Right	0	0	0	48	269	
cSH	888	1700	1700	1700	643	
Volume to Capacity	0.24	0.50	0.26	0.16	0.42	
Queue Length 95th (ft)	24	0	0	0	52	
Control Delay (s)	10.3	0.0	0.0	0.0	14.6	
Lane LOS	B				B	
Approach Delay (s)	2.1		0.0		14.6	
Approach LOS					B	
Intersection Summary						
Average Delay			3.0			
Intersection Capacity Utilization			47.1%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

Mitigated Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK























Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑↑↑	↔	↔	↑↑↑	↔	↔	↑	↔	↔	↑	↔
Volume (vph)	47	1909	143	66	970	149	111	102	71	197	90	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Flt	1.00	0.99		1.00	0.98		1.00	0.94		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5032		1770	4983		1770	1748		1770	1794	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5032		1770	4983		1770	1748		1770	1794	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	50	2031	152	67	980	151	122	112	78	221	101	33
RTOR Reduction (vph)	0	4	0	0	9	0	0	14	0	0	7	0
Lane Group Flow (vph)	50	2179	0	67	1122	0	122	176	0	221	127	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	9.5	87.6		12.7	90.8		17.2	38.0		23.4	44.2	
Effective Green, g (s)	9.5	87.6		12.7	90.8		17.2	38.0		23.4	44.2	
Actuated g/C Ratio	0.05	0.49		0.07	0.50		0.10	0.21		0.13	0.25	
Clearance Time (s)	4.2	4.9		4.2	4.9		4.6	4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	93	2448		124	2513		169	369		230	440	
v/s Ratio Prot	0.03	c0.43		c0.04	c0.23		0.07	c0.10		c0.12	0.07	
v/s Ratio Perm												
v/c Ratio	0.54	0.89		0.54	0.45		0.72	0.48		0.96	0.29	
Uniform Delay, d1	83.1	41.8		80.8	28.5		79.1	62.3		77.8	55.1	
Progression Factor	1.00	1.00		0.94	1.18		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.9	4.5		4.4	0.5		14.1	1.0		48.2	0.4	
Delay (s)	89.0	46.3		80.2	34.1		93.2	63.2		126.0	55.5	
Level of Service	F	D		F	C		F	E		F	E	
Approach Delay (s)		47.3			36.7			75.0			99.4	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		50.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		103.7%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

Mitigated Horizon Year (2 CVN) with Alternative 3 No Hooper
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑↑↑	↔	↔	↑↑↑	↔	↔	↑	↔	↔	↑	↔
Volume (vph)	30	2096	227	179	1517	93	147	46	146	176	51	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.85		1.00	0.85		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5011		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5011		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	32	2230	241	185	1564	96	160	50	159	238	69	31
RTOR Reduction (vph)	0	7	0	0	0	32	0	0	146	0	4	0
Lane Group Flow (vph)	32	2464	0	185	1564	64	0	210	13	0	334	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	7.6	89.3		16.4	98.5	98.5		15.0	15.0		40.0	
Effective Green, g (s)	7.6	89.3		16.4	98.5	98.5		15.0	15.0		40.0	
Actuated g/C Ratio	0.04	0.50		0.09	0.55	0.55		0.08	0.08		0.22	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	74	2486		161	2782	866		149	131		749	
v/s Ratio Prot	0.02	c0.49		c0.10	0.31			c0.12			c0.10	
v/s Ratio Perm						0.04			0.01			
v/c Ratio	0.43	0.99		1.15	0.56	0.07		1.41	0.10		0.45	
Uniform Delay, d1	84.1	45.0		81.8	26.6	19.2		82.5	76.3		60.4	
Progression Factor	1.15	0.47		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	3.2	14.1		116.6	0.8	0.2		219.2	0.3		1.9	
Delay (s)	100.2	35.2		198.4	27.5	19.4		301.7	76.6		62.4	
Level of Service	F	D		F	C	B		F	E		E	
Approach Delay (s)		36.0			44.2			204.7			62.4	
Approach LOS		D			D			F			E	
Intersection Summary												
HCM 2000 Control Delay		53.1			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.91										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		93.3%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus Mitigated Horizon Year (2 CVN) with Alternative 3 No Hooper
30: Saturn Blvd/19th St & SR-75 (Palm Ave) Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	216	2172	30	376	1867	636	75	203	611	674	274	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		3433	5085	1583	1770	1632	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	227	2286	32	404	2008	684	80	216	650	733	298	284
RTOR Reduction (vph)	0	1	0	0	0	87	0	25	98	0	2	128
Lane Group Flow (vph)	227	2317	0	404	2008	597	80	425	318	733	324	128
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	10.2	55.5		13.8	59.1	59.1	11.2	40.0	40.0	23.8	52.6	52.6
Effective Green, g (s)	10.2	55.5		13.8	59.1	59.1	11.2	40.0	40.0	23.8	52.6	52.6
Actuated g/C Ratio	0.07	0.36		0.09	0.38	0.38	0.07	0.26	0.26	0.15	0.34	0.34
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	225	1817		305	1938	603	127	421	388	527	592	510
v/s Ratio Prot	0.07	c0.46		c0.12	c0.39		0.05	c0.26		c0.21	0.19	
v/s Ratio Perm						0.38			0.21			0.09
v/c Ratio	1.01	1.28		1.32	1.04	0.99	0.63	1.01	0.82	1.39	0.55	0.25
Uniform Delay, d1	72.4	49.8		70.6	48.0	47.7	69.9	57.5	54.1	65.6	41.5	37.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	62.3	128.3		167.1	30.5	34.2	9.4	46.1	12.7	187.3	1.0	0.3
Delay (s)	134.7	178.1		237.7	78.4	81.8	79.3	103.6	66.8	252.9	42.6	37.2
Level of Service	F	F		F	E	F	E	F	E	F	D	D
Approach Delay (s)		174.2			100.0			85.4			158.8	
Approach LOS		F			F			F			F	
Intersection Summary												
HCM 2000 Control Delay	131.9			HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio	1.22											
Actuated Cycle Length (s)	155.0			Sum of lost time (s)				21.9				
Intersection Capacity Utilization	114.0%			ICU Level of Service				H				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus Mitigated Horizon Year (2 CVN) with Alternative 3 No Hooper
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↖	↖↖
Volume (vph)	0	581	980	0	504	1904
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	653	1043	0	554	2092
RTOR Reduction (vph)	0	0	0	0	0	2
Lane Group Flow (vph)	0	653	1043	0	554	2090
Turn Type		NA	NA		Prot	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.18	c0.29		0.31	c0.75
v/s Ratio Perm						
v/c Ratio		0.37	1.22		0.84	1.18
Uniform Delay, d1		12.0	30.3		22.8	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	107.7		9.0	85.9
Delay (s)		12.1	138.0		31.7	100.4
Level of Service		B	F		C	F
Approach Delay (s)		12.1	138.0		86.0	
Approach LOS		B	F		F	
Intersection Summary						
HCM 2000 Control Delay	87.4		HCM 2000 Level of Service		F	
HCM 2000 Volume to Capacity ratio	1.27					
Actuated Cycle Length (s)	80.0		Sum of lost time (s)		14.2	
Intersection Capacity Utilization	97.3%		ICU Level of Service		F	
Analysis Period (min)	15					
c Critical Lane Group						

APPENDIX H

- ILV Analysis Worksheets

SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp

Date: 06/11/2013

Scenario: Existing (1 CVN)

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	PM Phase 1	PM Phase 2
Total Phase 1= 414	Total Phase 2= 500	Total Phase 1= 253	Total Phase 2= 447

AM TOTAL= 914

AM LOS= Below Capacity

PM TOTAL= 700

PM LOS= Below Capacity



NOT TO SCALE

SR-75/I-5 SB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Date: 06/11/2013

Scenario: Existing (1 CVN)

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1 	AM Phase 2 	AM Phase 3 	
Total Phase 1= 148	Total Phase 2= 334	Total Phase 3= 498	
PM Phase 1 	PM Phase 2 	PM Phase 3 	
Total Phase 1= 420	Total Phase 2= 344	Total Phase 3= 400	

AM TOTAL= 980

AM LOS= Below Capacity

PM TOTAL= 1164

PM LOS= Below Capacity



NOT TO SCALE

SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp

Date: 06/11/2013

Scenario: Existing (2 CVNs)

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	PM Phase 1	PM Phase 2
Total Phase 1= 433	Total Phase 2= 500	Total Phase 1= 257	Total Phase 2= 447

AM TOTAL= 933

AM LOS= Below Capacity

PM TOTAL= 704

PM LOS= Below Capacity



NOT TO SCALE

SR-75/I-5 SB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Date: 06/11/2013

Scenario: Existing (2 CVNs)

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	AM Phase 3	
Total Phase 1= 148	Total Phase 2= 334	Total Phase 3= 516	
PM Phase 1	PM Phase 2	PM Phase 3	
Total Phase 1= 420	Total Phase 2= 344	Total Phase 3= 405	

AM TOTAL= 998

AM LOS= Below Capacity

PM TOTAL= 1169

PM LOS= Below Capacity



NOT TO SCALE

SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp
Date: 06/11/2013
Scenario: Year 2024 (1 CVN)

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	PM Phase 1	PM Phase 2
Total Phase 1= 451	Total Phase 2= 543	Total Phase 1= 275	Total Phase 2= 485

AM TOTAL= 994

AM LOS= Below Capacity

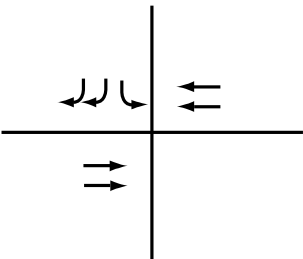
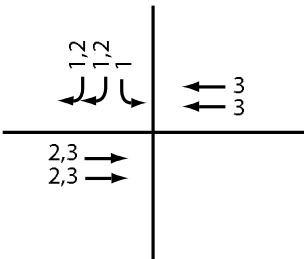
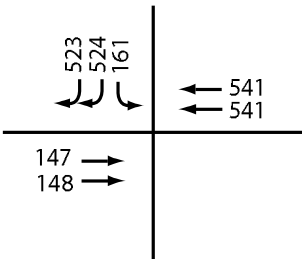
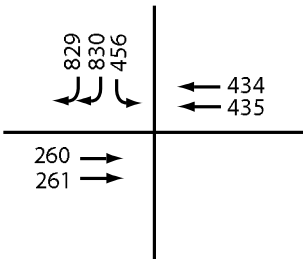
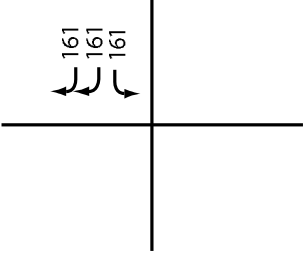
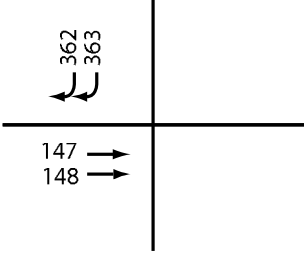
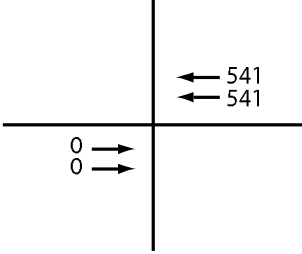
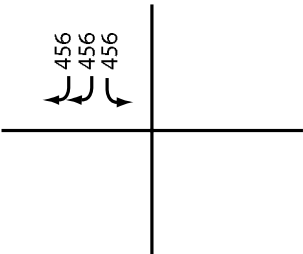
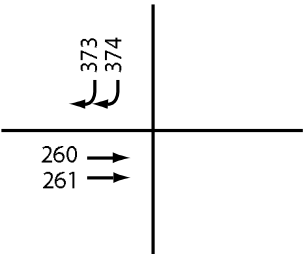
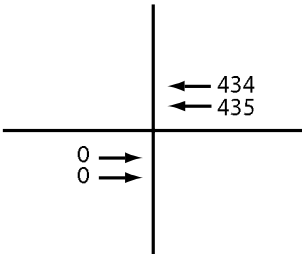
PM TOTAL= 760

PM LOS= Below Capacity



NOT TO SCALE

Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp
Date: 06/11/2013
Scenario: Year 2024 (1 CVN)

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
			
AM Phase 1  Total Phase 1= 161	AM Phase 2  Total Phase 2= 363	AM Phase 3  Total Phase 3= 541	
PM Phase 1  Total Phase 1= 456	PM Phase 2  Total Phase 2= 374	PM Phase 3  Total Phase 3= 435	

AM TOTAL= 1065

AM LOS= Below Capacity

PM TOTAL= 1265

PM LOS= Approaching Capacity



SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp
Date: 06/11/2013
Scenario: Year 2024 (1 CVN) with Alternative 1

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	PM Phase 1	PM Phase 2
Total Phase 1= 472	Total Phase 2= 543	Total Phase 1= 280	Total Phase 2= 488

AM TOTAL= 1015

AM LOS= Below Capacity

PM TOTAL= 768

PM LOS= Below Capacity



NOT TO SCALE

Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Date: 06/11/2013

Scenario: Year 2024 (1 CVN) with Alternative 1

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	AM Phase 3	
Total Phase 1= 161	Total Phase 2= 502	Total Phase 3= 565	
PM Phase 1	PM Phase 2	PM Phase 3	
Total Phase 1= 456	Total Phase 2= 408	Total Phase 3= 440	

AM TOTAL= 1228

AM LOS= Approaching Capacity

PM TOTAL= 1304

PM LOS= Approaching Capacity



NOT TO SCALE

SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp
Date: 06/11/2013
Scenario: Year 2024 (1 CVN) with Alternative 3

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	PM Phase 1	PM Phase 2
Total Phase 1= 472	Total Phase 2= 543	Total Phase 1= 280	Total Phase 2= 488

AM TOTAL= 1015

AM LOS= Below Capacity

PM TOTAL= 768

PM LOS= Below Capacity

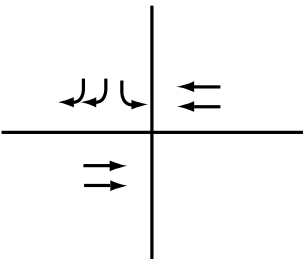
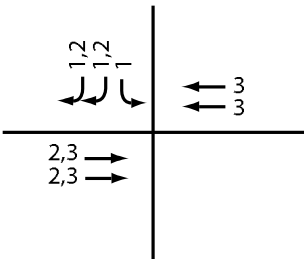
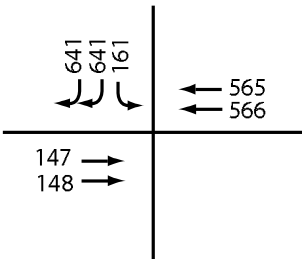
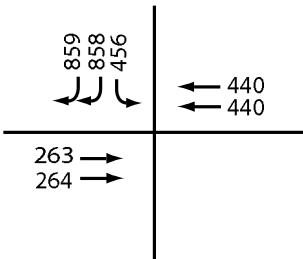
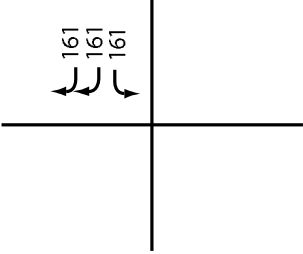
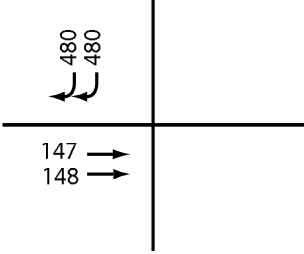
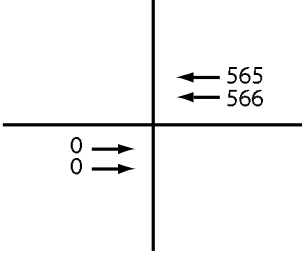
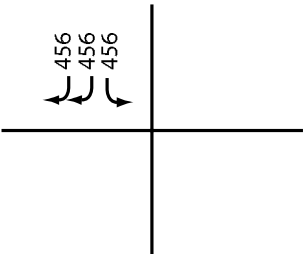
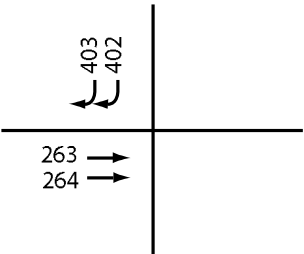
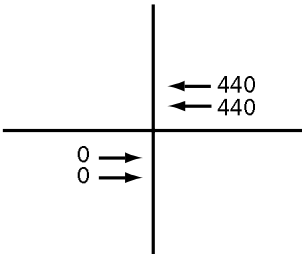


NOT TO SCALE

Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Date: 06/11/2013

Scenario: Year 2024 (1 CVN) with Alternative 3

<div>Number of Lanes</div> 	<div>Phasing</div> 	<div>AM Turning Movements</div> 	<div>PM Turning Movements</div> 
<div>AM Phase 1</div>  <div>Total Phase 1= 161</div>	<div>AM Phase 2</div>  <div>Total Phase 2= 480</div>	<div>AM Phase 3</div>  <div>Total Phase 3= 566</div>	
<div>PM Phase 1</div>  <div>Total Phase 1= 456</div>	<div>PM Phase 2</div>  <div>Total Phase 2= 403</div>	<div>PM Phase 3</div>  <div>Total Phase 3= 440</div>	

AM TOTAL= 1207

AM LOS= Approaching Capacity

PM TOTAL= 1299

PM LOS= Approaching Capacity



SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp
Date: 06/11/2013
Scenario: Year 2024 (1 CVN) with Alternative 1 without P947

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	PM Phase 1	PM Phase 2
Total Phase 1= 472	Total Phase 2= 543	Total Phase 1= 280	Total Phase 2= 488

AM TOTAL= 1015

AM LOS= Below Capacity

PM TOTAL= 768

PM LOS= Below Capacity



Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Date: 06/11/2013

Scenario: Year 2024 (1 CVN) with Alternative 1 without P947

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	AM Phase 3	
Total Phase 1= 161	Total Phase 2= 534	Total Phase 3= 565	
PM Phase 1	PM Phase 2	PM Phase 3	
Total Phase 1= 456	Total Phase 2= 416	Total Phase 3= 440	

AM TOTAL= 1260

AM LOS= Approaching Capacity

PM TOTAL= 1312

PM LOS= Approaching Capacity



NOT TO SCALE



Kimley-Horn
and Associates, Inc.

SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp
Date: 06/11/2013
Scenario: Year 2024 (1 CVN) with Alternative 3 without P947

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	PM Phase 1	PM Phase 2
Total Phase 1= 472	Total Phase 2= 543	Total Phase 1= 280	Total Phase 2= 488

AM TOTAL= 1015

AM LOS= Below Capacity

PM TOTAL= 768

PM LOS= Below Capacity



NOT TO SCALE



Kimley-Horn
and Associates, Inc.

Year 2024 (1 CVN) with Alternative 3 w/o P947 Conditions I-5 Northbound Ramp ILV Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Date: 06/11/2013

Scenario: Year 2024 (1 CVN) with Alternative 3 without P947

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1 	AM Phase 2 	AM Phase 3 	
Total Phase 1= 161	Total Phase 2= 507	Total Phase 3= 566	
PM Phase 1 	PM Phase 2 	PM Phase 3 	
Total Phase 1= 456	Total Phase 2= 409	Total Phase 3= 440	

AM TOTAL= 1234

AM LOS= Approaching Capacity

PM TOTAL= 1305

PM LOS= Approaching Capacity



SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp
Date: 06/11/2013
Scenario: Year 2024 (2 CVNs)

<p>Number of Lanes</p>	<p>Phasing</p>	<p>AM Turning Movements</p>	<p>PM Turning Movements</p>
<p>AM Phase 1</p> <p>Total Phase 1= 469</p>	<p>AM Phase 2</p> <p>Total Phase 2= 543</p>	<p>PM Phase 1</p> <p>Total Phase 1= 280</p>	<p>PM Phase 2</p> <p>Total Phase 2= 485</p>

AM TOTAL= 1012

AM LOS= Below Capacity

PM TOTAL= 765

PM LOS= Below Capacity



NOT TO SCALE

SR-75/I-5 SB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp
Date: 06/11/2013
Scenario: Year 2024 (2 CVNs)

<div>Number of Lanes</div> <div></div>	<div>Phasing</div> <div></div>	<div>AM Turning Movements</div> <div></div>	<div>PM Turning Movements</div> <div></div>
<div>AM Phase 1</div> <div></div> <div>Total Phase 1= 161</div>	<div>AM Phase 2</div> <div></div> <div>Total Phase 2= 363</div>	<div>AM Phase 3</div> <div></div> <div>Total Phase 3= 559</div>	
<div>PM Phase 1</div> <div></div> <div>Total Phase 1= 456</div>	<div>PM Phase 2</div> <div></div> <div>Total Phase 2= 374</div>	<div>PM Phase 3</div> <div></div> <div>Total Phase 3= 439</div>	

AM TOTAL= 1083

AM LOS= Below Capacity

PM TOTAL= 1269

PM LOS= Approaching Capacity



SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp
Date: 06/11/2013
Scenario: Year 2024 (2 CVNs) with Alternative 1

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	PM Phase 1	PM Phase 2
Total Phase 1= 490	Total Phase 2= 543	Total Phase 1= 285	Total Phase 2= 488

AM TOTAL= 1033

AM LOS= Below Capacity

PM TOTAL= 773

PM LOS= Below Capacity



NOT TO SCALE

Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Date: 06/11/2013

Scenario: Year 2024 (2 CVNs) with Alternative 1

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1 	AM Phase 2 	AM Phase 3 	
Total Phase 1= 161	Total Phase 2= 502	Total Phase 3= 583	
PM Phase 1 	PM Phase 2 	PM Phase 3 	
Total Phase 1= 456	Total Phase 2= 408	Total Phase 3= 445	

AM TOTAL= 1246

AM LOS= Approaching Capacity

PM TOTAL= 1309

PM LOS= Approaching Capacity



SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp
Date: 06/11/2013
Scenario: Year 2024 (2 CVNs) with Alternative 3

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	PM Phase 1	PM Phase 2
Total Phase 1= 490	Total Phase 2= 543	Total Phase 1= 285	Total Phase 2= 488

AM TOTAL= 1033

AM LOS= Below Capacity

PM TOTAL= 773

PM LOS= Below Capacity



NOT TO SCALE

SR-75/I-5 SB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Date: 06/11/2013

Scenario: Year 2024 (2 CVNs) with Alternative 3

<p>Number of Lanes</p>	<p>Phasing</p>	<p>AM Turning Movements</p>	<p>PM Turning Movements</p>
<p>AM Phase 1</p>	<p>AM Phase 2</p>	<p>AM Phase 3</p>	
<p>Total Phase 1= 161</p>	<p>Total Phase 2= 480</p>	<p>Total Phase 3= 584</p>	
<p>PM Phase 1</p>	<p>PM Phase 2</p>	<p>PM Phase 3</p>	
<p>Total Phase 1= 456</p>	<p>Total Phase 2= 403</p>	<p>Total Phase 3= 445</p>	

AM TOTAL= 1225

AM LOS= Approaching Capacity

PM TOTAL= 1304

PM LOS= Approaching Capacity



SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp
Date: 06/11/2013
Scenario: Year 2024 (2 CVNs) with Alternative 1 without P947

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	PM Phase 1	PM Phase 2
Total Phase 1= 490	Total Phase 2= 543	Total Phase 1= 285	Total Phase 2= 488

AM TOTAL= 1033 AM LOS= Below Capacity
PM TOTAL= 773 PM LOS= Below Capacity



NOT TO SCALE

Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Date: 06/11/2013

Scenario: Year 2024 (2 CVNs) with Alternative 1 without P947

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	AM Phase 3	
Total Phase 1= 161	Total Phase 2= 534	Total Phase 3= 583	
PM Phase 1	PM Phase 2	PM Phase 3	
Total Phase 1= 456	Total Phase 2= 416	Total Phase 3= 445	

AM TOTAL= 1278

AM LOS= Approaching Capacity

PM TOTAL= 1317

PM LOS= Approaching Capacity



NOT TO SCALE

SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp
Date: 06/11/2013
Scenario: Year 2024 (2 CVNs) with Alternative 3 without P947

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	PM Phase 1	PM Phase 2
Total Phase 1= 490	Total Phase 2= 543	Total Phase 1= 285	Total Phase 2= 488

AM TOTAL= 1033

AM LOS= Below Capacity

PM TOTAL= 773

PM LOS= Below Capacity



Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Date: 06/11/2013

Scenario: Year 2024 (2 CVNs) with Alternative 3 without P947

<p>Number of Lanes</p>	<p>Phasing</p>	<p>AM Turning Movements</p>	<p>PM Turning Movements</p>
<p>AM Phase 1</p> <p>Total Phase 1= 161</p>	<p>AM Phase 2</p> <p>Total Phase 2= 507</p>	<p>AM Phase 3</p> <p>Total Phase 3= 584</p>	
<p>PM Phase 1</p> <p>Total Phase 1= 456</p>	<p>PM Phase 2</p> <p>Total Phase 2= 409</p>	<p>PM Phase 3</p> <p>Total Phase 3= 445</p>	

AM TOTAL= 1252

AM LOS= Approaching Capacity

PM TOTAL= 1310

PM LOS= Approaching Capacity



SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp

Date: 06/11/2013

Scenario: Year 2040 (1 CVN)

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	PM Phase 1	PM Phase 2
Total Phase 1= 499	Total Phase 2= 600	Total Phase 1= 304	Total Phase 2= 536

AM TOTAL= 1099

AM LOS= Below Capacity

PM TOTAL= 840

PM LOS= Below Capacity



NOT TO SCALE

SR-75/I-5 SB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Date: 06/11/2013

Scenario: Year 2040 (1 CVN)

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1 	AM Phase 2 	AM Phase 3 	
Total Phase 1= 178	Total Phase 2= 401	Total Phase 3= 598	
PM Phase 1 	PM Phase 2 	PM Phase 3 	
Total Phase 1= 504	Total Phase 2= 413	Total Phase 3= 480	

AM TOTAL= 1177

AM LOS= Below Capacity

PM TOTAL= 1397

PM LOS= Approaching Capacity



NOT TO SCALE

SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp

Date: 06/11/2013

Scenario: Year 2040 (1 CVN) with Alternative 1

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	PM Phase 1	PM Phase 2
Total Phase 1= 520	Total Phase 2= 600	Total Phase 1= 309	Total Phase 2= 539

AM TOTAL= 1120

AM LOS= Below Capacity

PM TOTAL= 848

PM LOS= Below Capacity



NOT TO SCALE

SR-75/I-5 SB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Date: 06/11/2013

Scenario: Year 2040 (1 CVN) with Alternative 1

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1 	AM Phase 2 	AM Phase 3 	
Total Phase 1= 178	Total Phase 2= 540	Total Phase 3= 622	
PM Phase 1 	PM Phase 2 	PM Phase 3 	
Total Phase 1= 504	Total Phase 2= 447	Total Phase 3= 486	

AM TOTAL= 1340

AM LOS= Approaching Capacity

PM TOTAL= 1437

PM LOS= Approaching Capacity



NOT TO SCALE

SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp

Date: 06/11/2013

Scenario: Year 2040 (1 CVN) with Alternative 3

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	PM Phase 1	PM Phase 2
Total Phase 1= 520	Total Phase 2= 600	Total Phase 1= 309	Total Phase 2= 539

AM TOTAL= 1120

AM LOS= Below Capacity

PM TOTAL= 848

PM LOS= Below Capacity



NOT TO SCALE



Kimley-Horn
and Associates, Inc.

Year 2040 (1 CVN) with Alternative 3 Conditions I-5 Northbound Ramp ILV Analysis

SR-75/I-5 SB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Date: 06/11/2013

Scenario: Year 2040 (1 CVN) with Alternative 3

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1 	AM Phase 2 	AM Phase 3 	
Total Phase 1= 178	Total Phase 2= 518	Total Phase 3= 623	
PM Phase 1 	PM Phase 2 	PM Phase 3 	
Total Phase 1= 504	Total Phase 2= 442	Total Phase 3= 486	

AM TOTAL= 1319

AM LOS= Approaching Capacity

PM TOTAL= 1432

PM LOS= Approaching Capacity



NOT TO SCALE

SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp

Date: 06/11/2013

Scenario: Year 2040 (1 CVN) with Alternative 1 without P947

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	PM Phase 1	PM Phase 2
Total Phase 1= 520	Total Phase 2= 600	Total Phase 1= 309	Total Phase 2= 539

AM TOTAL= 1120

AM LOS= Below Capacity

PM TOTAL= 848

PM LOS= Below Capacity



NOT TO SCALE



Kimley-Horn
and Associates, Inc.

Year 2040 (1 CVN) with Alternative 1 w/o P947 Conditions I-5 Northbound Ramp ILV Analysis

SR-75/I-5 SB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Date: 06/11/2013

Scenario: Year 2040 (1 CVN) with Alternative 1 without P947

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1 	AM Phase 2 	AM Phase 3 	
Total Phase 1= 178	Total Phase 2= 572	Total Phase 3= 622	
PM Phase 1 	PM Phase 2 	PM Phase 3 	
Total Phase 1= 504	Total Phase 2= 453	Total Phase 3= 486	

AM TOTAL= 1372

AM LOS= Approaching Capacity

PM TOTAL= 1443

PM LOS= Approaching Capacity



NOT TO SCALE

SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp

Date: 06/11/2013

Scenario: Year 2040 (1 CVN) with Alternative 3 without P947

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	PM Phase 1	PM Phase 2
Total Phase 1= 520	Total Phase 2= 600	Total Phase 1= 309	Total Phase 2= 539

AM TOTAL= 1120

AM LOS= Below Capacity

PM TOTAL= 848

PM LOS= Below Capacity



NOT TO SCALE



Kimley-Horn
and Associates, Inc.

Year 2040 (1 CVN) with Alternative 3 w/o P947 Conditions I-5 Northbound Ramp ILV Analysis

SR-75/I-5 SB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Date: 06/11/2013

Scenario: Year 2040 (1 CVN) with Alternative 3 without P947

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1 	AM Phase 2 	AM Phase 3 	
Total Phase 1= 178	Total Phase 2= 545	Total Phase 3= 623	
PM Phase 1 	PM Phase 2 	PM Phase 3 	
Total Phase 1= 504	Total Phase 2= 448	Total Phase 3= 486	

AM TOTAL= 1346

AM LOS= Approaching Capacity

PM TOTAL= 1438

PM LOS= Approaching Capacity



NOT TO SCALE

SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp

Date: 06/11/2013

Scenario: Year 2040 (2 CVNs)

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	PM Phase 1	PM Phase 2
Total Phase 1= 517	Total Phase 2= 600	Total Phase 1= 309	Total Phase 2= 536

AM TOTAL= 1117

AM LOS= Below Capacity

PM TOTAL= 845

PM LOS= Below Capacity



NOT TO SCALE

SR-75/I-5 SB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Date: 06/11/2013

Scenario: Year 2040 (2 CVNs)

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1 	AM Phase 2 	AM Phase 3 	
Total Phase 1= 178	Total Phase 2= 401	Total Phase 3= 616	
PM Phase 1 	PM Phase 2 	PM Phase 3 	
Total Phase 1= 504	Total Phase 2= 413	Total Phase 3= 485	

AM TOTAL= 1195

AM LOS= Below Capacity

PM TOTAL= 1402

PM LOS= Approaching Capacity



NOT TO SCALE

SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp

Date: 06/11/2013

Scenario: Year 2040 (2 CVNs) with Alternative 1

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	PM Phase 1	PM Phase 2
Total Phase 1= 538	Total Phase 2= 600	Total Phase 1= 314	Total Phase 2= 539

AM TOTAL= 1138

AM LOS= Below Capacity

PM TOTAL= 853

PM LOS= Below Capacity



NOT TO SCALE

SR-75/I-5 SB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Date: 06/11/2013

Scenario: Year 2040 (2 CVNs) with Alternative 1

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1 	AM Phase 2 	AM Phase 3 	
Total Phase 1= 178	Total Phase 2= 540	Total Phase 3= 640	
PM Phase 1 	PM Phase 2 	PM Phase 3 	
Total Phase 1= 504	Total Phase 2= 447	Total Phase 3= 490	

AM TOTAL= 1358

AM LOS= Approaching Capacity

PM TOTAL= 1441

PM LOS= Approaching Capacity



NOT TO SCALE

SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp

Date: 06/11/2013

Scenario: Year 2040 (2 CVNs) with Alternative 3

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	PM Phase 1	PM Phase 2
Total Phase 1= 538	Total Phase 2= 600	Total Phase 1= 314	Total Phase 2= 539

AM TOTAL= 1138

AM LOS= Below Capacity

PM TOTAL= 853

PM LOS= Below Capacity



NOT TO SCALE

SR-75/I-5 SB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Date: 06/11/2013

Scenario: Year 2040 (2 CVNs) with Alternative 3

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1 	AM Phase 2 	AM Phase 3 	
Total Phase 1= 178	Total Phase 2= 518	Total Phase 3= 641	
PM Phase 1 	PM Phase 2 	PM Phase 3 	
Total Phase 1= 504	Total Phase 2= 442	Total Phase 3= 490	

AM TOTAL= 1337

AM LOS= Approaching Capacity

PM TOTAL= 1436

PM LOS= Approaching Capacity



NOT TO SCALE

SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp

Date: 06/11/2013

Scenario: Year 2040 (2 CVNs) with Alternative 1 without P947

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	PM Phase 1	PM Phase 2
Total Phase 1= 538	Total Phase 2= 600	Total Phase 1= 314	Total Phase 2= 539

AM TOTAL= 1138

AM LOS= Below Capacity

PM TOTAL= 853

PM LOS= Below Capacity



NOT TO SCALE



Kimley-Horn
and Associates, Inc.

Year 2040 (2 CVNs) with Alternative 1 w/o P947 Conditions I-5 Northbound Ramp ILV Analysis

SR-75/I-5 SB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Date: 06/11/2013

Scenario: Year 2040 (2 CVNs) with Alternative 1 without P947

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	AM Phase 3	
Total Phase 1= 178	Total Phase 2= 572	Total Phase 3= 640	
PM Phase 1	PM Phase 2	PM Phase 3	
Total Phase 1= 504	Total Phase 2= 455	Total Phase 3= 490	

AM TOTAL= 1390

AM LOS= Approaching Capacity

PM TOTAL= 1449

PM LOS= Approaching Capacity



NOT TO SCALE



Kimley-Horn
and Associates, Inc.

Year 2040 (2 CVNs) with Alternative 1 without P947 Conditions I-5 SB Exit Ramp ILV Analysis

SR-75/I-5 NB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 NB Exit Ramp

Date: 06/11/2013

Scenario: Year 2040 (2 CVNs) with Alternative 3 without P947

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1	AM Phase 2	PM Phase 1	PM Phase 2
Total Phase 1= 538	Total Phase 2= 600	Total Phase 1= 314	Total Phase 2= 539

AM TOTAL= 1138

AM LOS= Below Capacity

PM TOTAL= 853

PM LOS= Below Capacity



NOT TO SCALE



Kimley-Horn
and Associates, Inc.

Year 2040 (2 CVNs) with Alternative 3 w/o P947 Conditions I-5 Northbound Ramp ILV Analysis

SR-75/I-5 SB Traffic Operations Analysis

Intersection Name: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Date: 06/11/2013

Scenario: Year 2040 (2 CVNs) with Alternative 3 without P947

Number of Lanes	Phasing	AM Turning Movements	PM Turning Movements
AM Phase 1 	AM Phase 2 	AM Phase 3 	
Total Phase 1= 178	Total Phase 2= 545	Total Phase 3= 641	
PM Phase 1 	PM Phase 2 	PM Phase 3 	
Total Phase 1= 504	Total Phase 2= 448	Total Phase 3= 490	

AM TOTAL= 1364

AM LOS= Approaching Capacity

PM TOTAL= 1442

PM LOS= Approaching Capacity



NOT TO SCALE

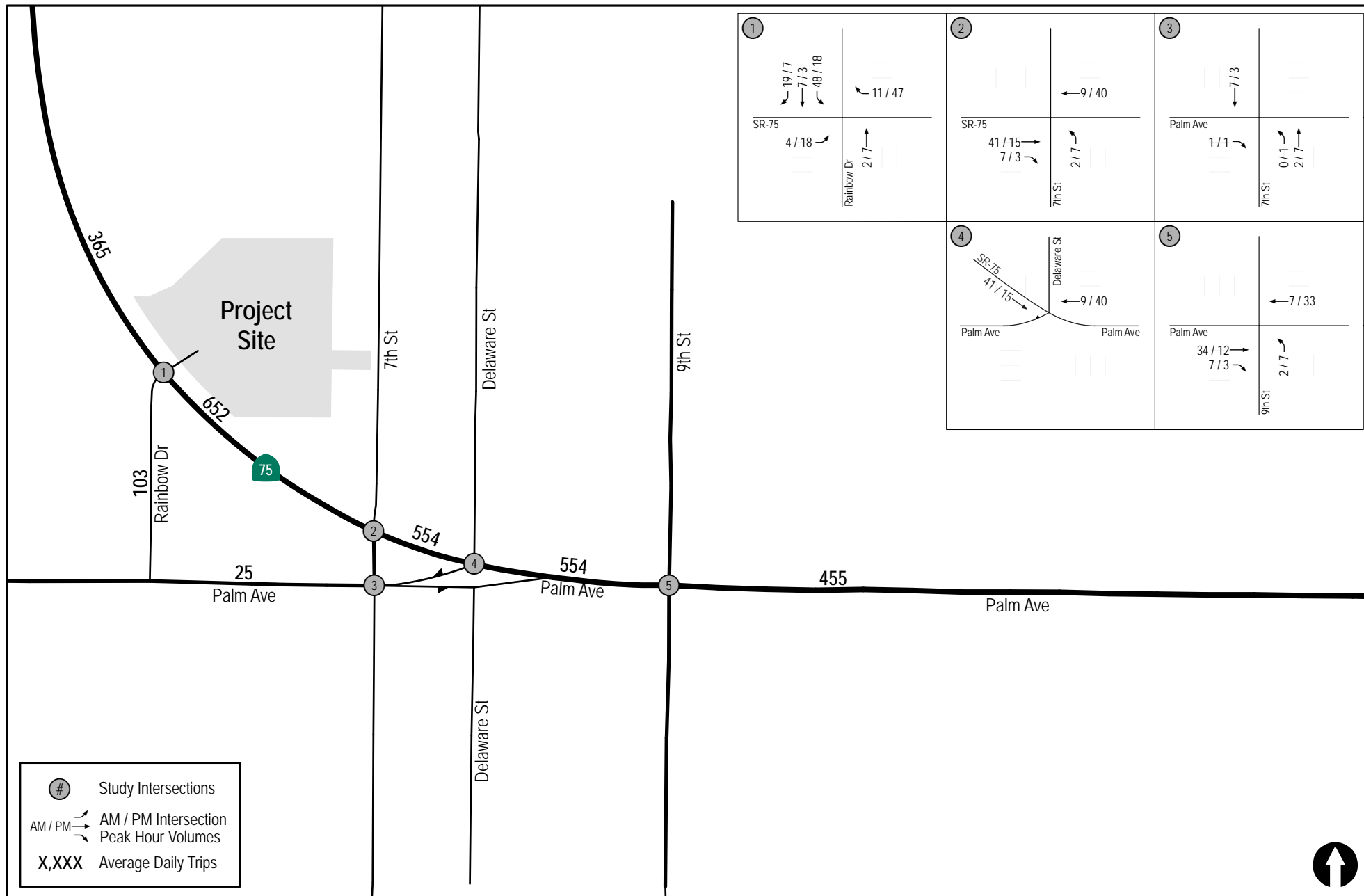


Kimley-Horn
and Associates, Inc.

Year 2040 (2 CVNs) with Alternative 3 without P947 Conditions I-5 SB Exit Ramp ILV Analysis

APPENDIX I

- Cumulative Project Information



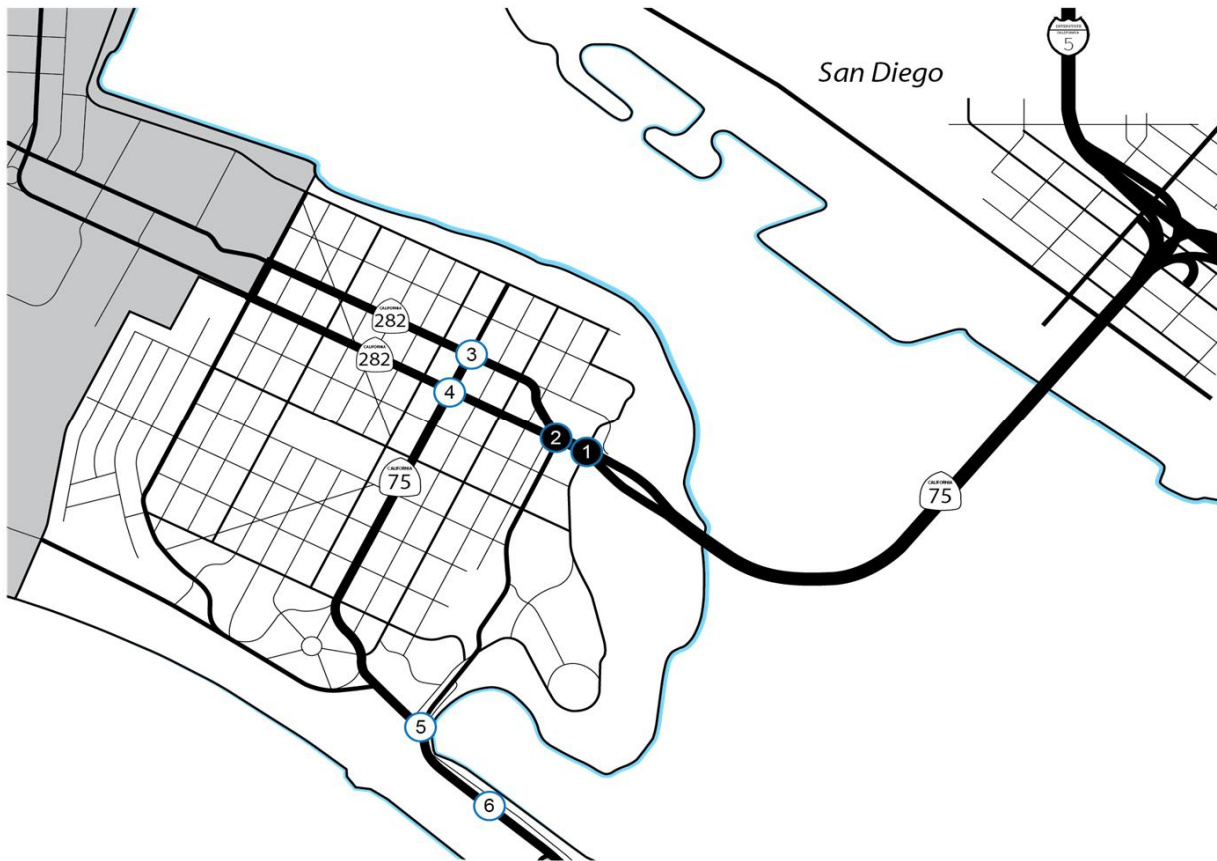
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TRIP GENERATION SUMMARY

Land UseLand Use as listed in ITEUnits ¹ Trip Rate ² Daily Trips					AM Peak-Hour					PM Peak-Hour				
					% of ADT ²	In:Out Ratio ²	In	Out	Total	% of ADT ²	In:Out Ratio ²	In	Out	Total
Driveway Trips ³														
<i>Proposed</i>														
	Hotel	144 rm	8.17 / rm	1,176	7%	0.61 : 0.39	49	32	81	7%	0.53 : 0.47	45	40	85
NET TRIP GENERATION =				1,176			49	32	81			45	40	85

Note:
1. rm = rooms
2. Trip rates references from ITE Trip Generation, 8th Edition.
3. Driveway trips are the total number of trips generated by a site.

NBC Coastal Campus

<div>1</div> <div>Glorietta Blvd</div> <div>Fourth St (SR-75)</div> <div>23 / 28 ↕</div>	<div>2</div> <div>Fourth St (SR-75)</div> <div>23 / 28 ↕</div> <div>Pomona Ave</div>	<div>3</div> <div>Orange Ave (SR-75)</div> <div>35 / 32 Third Street (SR-75)</div>	<div>4</div> <div>35 / 32 Orange Ave (SR-75)</div> <div>Fourth St (SR-75)</div> <div>23 / 28 ↕</div>
<div>5</div> <div>35 / 32 Orange Ave (SR-75)</div> <div>Silver Strand Blvd (SR-75)</div> <div>Pomona Ave</div> <div>23 / 28 ↕</div>	<div>6</div> <div>10 / 12 Silver Strand Blvd (SR-75)</div> <div>Avenidas De Las Arenas</div> <div>15 / 14 ↕</div>		



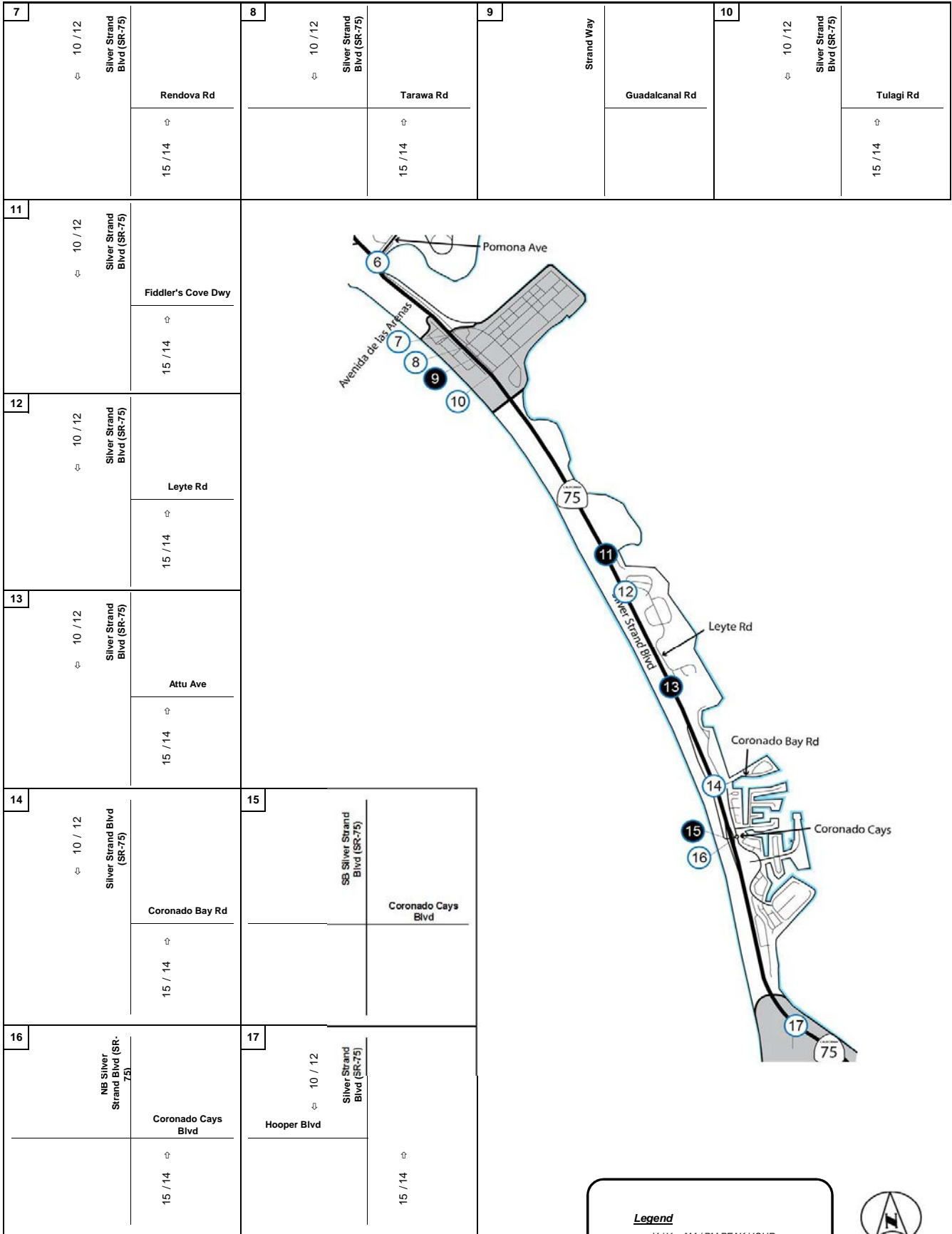
Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



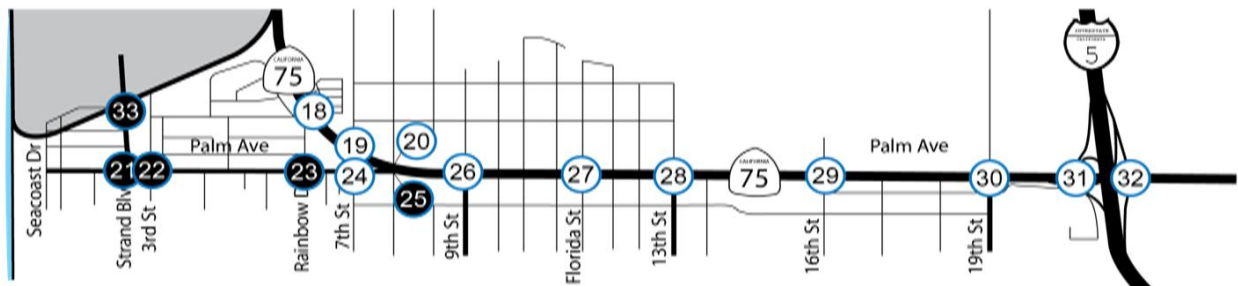
NOT TO SCALE

NBC Coastal Campus



NBC Coastal Campus

18	10 / 12 Silver Strand Blvd (SR-75)	Rainbow Dr	15 / 14 Silver Strand Blvd (SR-75)	Delaware St	15 / 14 Silver Strand Blvd (SR-75)	Silver Strand Blvd	Palm Ave
	15 / 14		10 / 12	10 / 12		Dwy	
22	3rd St	Palm Ave	### Rainbow Dr	7th St	Palm Ave	Delaware St	Palm Ave
			Palm Ave				
26	15 / 14 Palm Ave (SR-75)	9th St	Florida St	13th St	15 / 14 Palm Ave (SR-75)	16th St	15 / 14 Palm Ave (SR-75)
10 / 12		10 / 12	10 / 12	10 / 12		10 / 12	
30	19th St	15 / 14 Palm Ave (SR-75)	I-5 SB Exit Ramp	I-5 NB Ramps	15 / 14 Palm Ave (SR-75)	Silver Strand Blvd	YMCA Dwy
10 / 12	Saturn Blvd		15 / 14 Palm Ave (SR-75)		15 / 14		



Legend

X / Y = AM / PM PEAK HOUR
TURNING VOLUMES



NOT TO SCALE

APPENDIX J

- Traffic Signal Warrant Analysis

 Scenario Report
 Scenario: NT 1 CVN WP AM
 Command: Default Command
 Volume: NT 1 CVN WP AM
 Geometry: Existing
 Impact Fee: Default Impact Fee
 Trip Generation: Default Trip Generation
 Trip Distribution: Default Trip Distribution
 Paths: Default Path
 Routes: Default Route
 Configuration: Default Configuration

 Signal Warrant Summary Report
 Intersection Base Met Future Met
 [Del / Vol] [Del / Vol]
 # 1 3rd Street and Palm Avenue No ???

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 3rd Street and Palm Avenue

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Lanes:	0 0 1! 0 0	0 0 1! 0 0	1 0 0 1 0	1 0 0 1 0
Initial Vol:	12 15 127	12 11 15	8 345 5	27 858 25
Major Street Volume:	1268			
Minor Approach Volume:	154			
Minor Approach Volume Threshold:	203			

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Scenario Report
Scenario: NT 1 CVN WP PM
Command: Default Command
Volume: NT 1 CVN WP PM
Geometry: Existing
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

Signal Warrant Summary Report
Intersection Base Met Future Met
[Del / Vol] [Del / Vol]
1 3rd Street and Palm Avenue Yes ???

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 3rd Street and Palm Avenue

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Lanes:	0 0 1 0 0	0 0 1 0 0	1 0 0 1 0	1 0 0 1 0
Initial Vol:	15 39 69	29 34 14	86 937 13	86 482 25
Major Street Volume:	1629			
Minor Approach Volume:	123			
Minor Approach Volume Threshold:	117			

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Scenario Report

Scenario:	NT 1 CVN WP3 AM
Command:	Default Command
Volume:	NT 1 CVN WP3 AM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Signal Warrant Summary Report

Intersection	Base Met [Del / Vol]	Future Met [Del / Vol]
# 1 3rd Street and Palm Avenue	No	???

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 3rd Street and Palm Avenue

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Lanes:	0 0 1 0 0	0 0 1 0 0	1 0 0 1 0	1 0 0 1 0
Initial Vol:	12 15 127	12 11 15	8 333 5	27 751 25
Major Street Volume:	1149			
Minor Approach Volume:	154			
Minor Approach Volume Threshold:	237			

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Scenario Report
Scenario: NT 1 CVN WP3 PM
Command: Default Command
Volume: NT 1 CVN WP3 PM
Geometry: Existing
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

Signal Warrant Summary Report
Intersection Base Met Future Met
[Del / Vol] [Del / Vol]
1 3rd Street and Palm Avenue Yes ???

```
-----
                        Peak Hour Volume Signal Warrant Report [Urban]
*****
Intersection #1 3rd Street and Palm Avenue
*****
Base Volume Alternative: Peak Hour Warrant Met
-----|-----|-----|-----|
Approach:   North Bound   South Bound   East Bound   West Bound
Movement:   L - T - R     L - T - R     L - T - R     L - T - R
-----|-----|-----|-----|
Control:     Stop Sign     Stop Sign     Stop Sign     Stop Sign
Lanes:       0 0 1! 0 0     0 0 1! 0 0     1 0 0 1 0     1 0 0 1 0
Initial Vol: 155 39 69      29 34 14      8 831 13      86 456 25
-----|-----|-----|-----|
Major Street Volume:          1419
Minor Approach Volume:         263
Minor Approach Volume Threshold: 164
-----
```

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Scenario Report
Scenario: NT 2 CVN WP AM
Command: Default Command
Volume: NT 2 CVN WP AM
Geometry: Existing
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

Signal Warrant Summary Report
Intersection Base Met Future Met
[Del / Vol] [Del / Vol]
1 3rd Street and Palm Avenue No ???

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 3rd Street and Palm Avenue

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Lanes:	0 0 1 0 0	0 0 1 0 0	1 0 0 1 0	1 0 0 1 0
Initial Vol:	12 15 127	12 11 15	8 345 5	27 858 25
Major Street Volume:	1268			
Minor Approach Volume:	154			
Minor Approach Volume Threshold:	203			

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Scenario Report
Scenario: NT 2 CVN WP PM
Command: Default Command
Volume: NT 2 CVN WP PM
Geometry: Existing
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

Signal Warrant Summary Report
Intersection Base Met Future Met
[Del / Vol] [Del / Vol]
1 3rd Street and Palm Avenue No ???

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 3rd Street and Palm Avenue

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Lanes:	0 0 1 0 0	0 0 1 0 0	1 0 0 1 0	1 0 0 1 0
Initial Vol:	15 39 69	29 34 14	8 937 13	86 482 25
Major Street Volume:	1551			
Minor Approach Volume:	123			
Minor Approach Volume Threshold:	134			

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Scenario Report
Scenario: NT 2 CVN WP3 AM
Command: Default Command
Volume: NT 2 CVN WP3 AM
Geometry: Existing
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

Signal Warrant Summary Report
Intersection Base Met Future Met
[Del / Vol] [Del / Vol]
1 3rd Street and Palm Avenue No ???


```
-----
                        Peak Hour Volume Signal Warrant Report [Urban]
*****
Intersection #1 3rd Street and Palm Avenue
*****
Base Volume Alternative: Peak Hour Warrant NOT Met
-----|-----|-----|-----|
Approach:   North Bound   South Bound   East Bound   West Bound
Movement:   L - T - R     L - T - R     L - T - R     L - T - R
-----|-----|-----|-----|
Control:     Stop Sign     Stop Sign     Stop Sign     Stop Sign
Lanes:       0 0 1! 0 0     0 0 1! 0 0     1 0 0 1 0     1 0 0 1 0
Initial Vol: 12 15 127      12 11 15        8 333 5        27 751 25
-----|-----|-----|-----|
Major Street Volume:          1149
Minor Approach Volume:         154
Minor Approach Volume Threshold: 237
-----
```

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Scenario Report
Scenario: NT 2 CVN WP3 PM
Command: Default Command
Volume: NT 2 CVN WP3 PM
Geometry: Existing
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

Signal Warrant Summary Report
Intersection Base Met Future Met
[Del / Vol] [Del / Vol]
1 3rd Street and Palm Avenue No ???

```
-----
                        Peak Hour Volume Signal Warrant Report [Urban]
*****
Intersection #1 3rd Street and Palm Avenue
*****
Base Volume Alternative: Peak Hour Warrant NOT Met
-----|-----|-----|-----|
Approach:   North Bound   South Bound   East Bound   West Bound
Movement:   L - T - R     L - T - R     L - T - R     L - T - R
-----|-----|-----|-----|
Control:     Stop Sign     Stop Sign     Stop Sign     Stop Sign
Lanes:       0  0  1!  0  0   0  0  1!  0  0   1  0  0  1  0   1  0  0  1  0
Initial Vol:  15   39   69   29   34   14   8  831   13   86  456   25
-----|-----|-----|-----|
Major Street Volume:           1419
Minor Approach Volume:           123
Minor Approach Volume Threshold: 164
-----
```

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Scenario Report
Scenario: HY 1 CVN WP AM
Command: Default Command
Volume: HY 1 CVN WP AM
Geometry: Existing
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

Signal Warrant Summary Report
Intersection Base Met Future Met
[Del / Vol] [Del / Vol]
1 3rd Street and Palm Avenue No ???

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 3rd Street and Palm Avenue

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Lanes:	0 0 1! 0 0	0 0 1! 0 0	1 0 0 1 0	1 0 0 1 0
Initial Vol:	12 15 129	12 11 15	8 350 5	27 862 25
Major Street Volume:	1277			
Minor Approach Volume:	156			
Minor Approach Volume Threshold:	201			

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Scenario Report

Scenario:	HY 1 CVN WP PM
Command:	Default Command
Volume:	HY 1 CVN WP PM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Signal Warrant Summary Report

Intersection	Base Met [Del / Vol]	Future Met [Del / Vol]
# 1 3rd Street and Palm Avenue	No	???

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 3rd Street and Palm Avenue

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Lanes:	0 0 1 0 0	0 0 1 0 0	1 0 0 1 0	1 0 0 1 0
Initial Vol:	15 40 70	29 34 14	8 942 13	87 487 25
Major Street Volume:	1562			
Minor Approach Volume:	125			
Minor Approach Volume Threshold:	131			

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Scenario Report
Scenario: HY 1 CVN WP3 AM
Command: Default Command
Volume: HY 1 CVN WP3 AM
Geometry: Existing
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

Signal Warrant Summary Report
Intersection Base Met Future Met
[Del / Vol] [Del / Vol]
1 3rd Street and Palm Avenue No ???


```
-----
                        Peak Hour Volume Signal Warrant Report [Urban]
*****
Intersection #1 3rd Street and Palm Avenue
*****
Base Volume Alternative: Peak Hour Warrant NOT Met
-----|-----|-----|-----|
Approach:   North Bound   South Bound   East Bound   West Bound
Movement:   L - T - R     L - T - R     L - T - R     L - T - R
-----|-----|-----|-----|
Control:     Stop Sign     Stop Sign     Stop Sign     Stop Sign
Lanes:       0 0 1! 0 0     0 0 1! 0 0     1 0 0 1 0     1 0 0 1 0
Initial Vol: 12 15 129      12 11 15         8 338 5         27 755 25
-----|-----|-----|-----|
Major Street Volume:          1158
Minor Approach Volume:         156
Minor Approach Volume Threshold: 234
-----
```

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Scenario Report
Scenario: HY 1 CVN WP3 PM
Command: Default Command
Volume: HY 1 CVN WP3 PM
Geometry: Existing
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

Signal Warrant Summary Report
Intersection Base Met Future Met
[Del / Vol] [Del / Vol]
1 3rd Street and Palm Avenue No ???

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 3rd Street and Palm Avenue

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Lanes:	0 0 1 0 0	0 0 1 0 0	1 0 0 1 0	1 0 0 1 0
Initial Vol:	15 40 70	29 34 14	8 836 13	87 461 25
Major Street Volume:	1430			
Minor Approach Volume:	125			
Minor Approach Volume Threshold:	162			

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Scenario Report
Scenario: HY 2 CVN WP AM
Command: Default Command
Volume: HY 2 CVN WP AM
Geometry: Existing
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

Signal Warrant Summary Report
Intersection Base Met Future Met
[Del / Vol] [Del / Vol]
1 3rd Street and Palm Avenue No ???

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 3rd Street and Palm Avenue

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Lanes:	0 0 1! 0 0	0 0 1! 0 0	1 0 0 1 0	1 0 0 1 0
Initial Vol:	12 15 129	12 11 15	8 350 5	27 862 25
Major Street Volume:	1277			
Minor Approach Volume:	156			
Minor Approach Volume Threshold:	201			

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Scenario Report
Scenario: HY 2 CVN WP PM
Command: Default Command
Volume: HY 2 CVN WP PM
Geometry: Existing
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

Signal Warrant Summary Report
Intersection Base Met Future Met
[Del / Vol] [Del / Vol]
1 3rd Street and Palm Avenue No ???

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 3rd Street and Palm Avenue

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Lanes:	0 0 1 0 0	0 0 1 0 0	1 0 0 1 0	1 0 0 1 0
Initial Vol:	15 40 70	29 34 14	8 942 13	87 487 25
Major Street Volume:	1562			
Minor Approach Volume:	125			
Minor Approach Volume Threshold:	131			

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Scenario Report
Scenario: HY 2 CVN WP3 AM
Command: Default Command
Volume: HY 2 CVN WP3 AM
Geometry: Existing
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

Signal Warrant Summary Report
Intersection Base Met Future Met
[Del / Vol] [Del / Vol]
1 3rd Street and Palm Avenue No ???

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 3rd Street and Palm Avenue

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Lanes:	0 0 1! 0 0	0 0 1! 0 0	1 0 0 1 0	1 0 0 1 0
Initial Vol:	12 15 129	12 11 15	8 338 5	27 755 25
Major Street Volume:	1158			
Minor Approach Volume:	156			
Minor Approach Volume Threshold:	234			

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Scenario:	HY 2 CVN WP3 PM
Command:	Default Command
Volume:	HY 2 CVN WP3 PM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Intersection	Base Met [Del / Vol]	Future Met [Del / Vol]
# 1 3rd Street and Palm Avenue	No	???

```
-----
                        Peak Hour Volume Signal Warrant Report [Urban]
*****
Intersection #1 3rd Street and Palm Avenue
*****
Base Volume Alternative: Peak Hour Warrant NOT Met
-----|-----|-----|-----|
Approach:   North Bound   South Bound   East Bound   West Bound
Movement:   L - T - R     L - T - R     L - T - R     L - T - R
-----|-----|-----|-----|
Control:     Stop Sign     Stop Sign     Stop Sign     Stop Sign
Lanes:       0  0  1!  0  0   0  0  1!  0  0   1  0  0  1  0   1  0  0  1  0
Initial Vol:  15   40   70   29  34   14   8  836   13   87  461  25
-----|-----|-----|-----|
Major Street Volume:           1430
Minor Approach Volume:           125
Minor Approach Volume Threshold: 162
-----
```

SIGNAL WARRANT DISCLAIMER

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```

*****
2014.txt
*****
Base Volume Alternative: Peak Hour Warrant NOT Met
-----|-----|-----|-----|
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Lanes: 1 0 2 0 0 1 0 2 0 1 1 0 0 0 1 0 0 0 0 0
Initial Vol: 0 434 0 0 1438 0 0 0 0 56 0 0 0 0 0
ApproachDel: xxxxxx xxxxxx 17.8 xxxxxx
-----|-----|-----|-----|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=56]
FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1928]
SUCCEED - Total volume greater than or equal to 650 for intersection
with less than four approaches.
-----|-----|-----|-----|
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction. Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.

```

```

2014.txt
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Lanes: 1 0 2 0 0 1 0 2 0 1 1 0 0 0 1 0 0 0 0 0
Initial Vol: 0 434 0 0 1438 0 0 0 0 56 0 0 0 0 0
-----|-----|-----|-----|
Major Street Volume: 1872
Minor Approach Volume: 56
Minor Approach Volume Threshold: 104 [less than minimum of 150]
-----|-----|-----|-----|
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction. Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.

```

```

-----|-----|-----|-----|
Peak Hour Volume Signal Warrant Report [Urban]
*****
Intersection #1 Hooper Blvd at Silver Strand Blvd
*****
Base Volume Alternative: Peak Hour Warrant NOT Met
-----|-----|-----|-----|

```



```

*****
2015.txt
*****
Base Volume Alternative: Peak Hour Warrant NOT Met
-----|-----|-----|-----|
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Lanes: 1 0 2 0 0 1 0 2 0 1 1 0 0 0 1 0 0 0 0 0
Initial Vol: 0 437 0 0 1449 0 0 0 155 0 0 0 0
ApproachDel: xxxxxx xxxxxx 25.7 xxxxxx
-----|-----|-----|-----|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=1.1]
FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=155]
SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=2041]
SUCCEED - Total volume greater than or equal to 650 for intersection
with less than four approaches.
-----|-----|-----|-----|
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction. Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.

```

```

-----|-----|-----|-----|
Peak Hour Volume Signal Warrant Report [Urban]
*****
Intersection #1 Hooper Blvd at Silver Strand Blvd
*****
Base Volume Alternative: Peak Hour Warrant Met
-----|-----|-----|-----|

```

```

2015.txt
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Lanes: 1 0 2 0 0 1 0 2 0 1 1 0 0 0 1 0 0 0 0 0
Initial Vol: 0 437 0 0 1449 0 0 0 155 0 0 0 0
-----|-----|-----|-----|
Major Street Volume: 1886
Minor Approach Volume: 155
Minor Approach Volume Threshold: 101 [less than minimum of 150]
-----|-----|-----|-----|

```

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction. Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.


```

*****
2016.txt
*****
Base Volume Alternative: Peak Hour Warrant NOT Met
-----|-----|-----|-----|
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Lanes: 1 0 2 0 0 1 0 2 0 1 1 0 0 0 1 0 0 0 0 0
Initial Vol: 0 441 0 0 1460 0 0 0 243 0 0 0 0 0
ApproachDel: xxxxxx xxxxxx 45.9 xxxxxx
-----|-----|-----|-----|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=3.1]
FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=243]
SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=2144]
SUCCEED - Total volume greater than or equal to 650 for intersection
with less than four approaches.
-----|-----|-----|-----|
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction. Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.

```

```

-----|-----|-----|-----|
Peak Hour Volume Signal Warrant Report [Urban]
*****
Intersection #1 Hooper Blvd at Silver Strand Blvd
*****
Base Volume Alternative: Peak Hour Warrant Met
-----|-----|-----|-----|

```

```

2016.txt
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Lanes: 1 0 2 0 0 1 0 2 0 1 1 0 0 0 1 0 0 0 0 0
Initial Vol: 0 441 0 0 1460 0 0 0 243 0 0 0 0 0
-----|-----|-----|-----|
Major Street Volume: 1901
Minor Approach Volume: 243
Minor Approach Volume Threshold: 98 [less than minimum of 150]
-----|-----|-----|-----|

```

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction. Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.


```

*****
2017.txt
*****
Base Volume Alternative: Peak Hour Warrant NOT Met
-----|-----|-----|-----|
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Lanes: 1 0 2 0 0 1 0 2 0 1 1 0 0 0 1 0 0 0 0 0
Initial Vol: 0 475 0 0 1479 0 0 0 262 0 0 0 0
ApproachDel: xxxxxx xxxxxx 56.9 xxxxxx
-----|-----|-----|-----|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=4.1]
FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=262]
SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=2216]
SUCCEED - Total volume greater than or equal to 650 for intersection
with less than four approaches.
-----|-----|-----|-----|
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction. Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.

```

```

-----|-----|-----|-----|
Peak Hour Volume Signal Warrant Report [Urban]
*****
Intersection #1 Hooper Blvd at Silver Strand Blvd
*****
Base Volume Alternative: Peak Hour Warrant Met
-----|-----|-----|-----|

```

```

2017.txt
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Lanes: 1 0 2 0 0 1 0 2 0 1 1 0 0 0 1 0 0 0 0 0
Initial Vol: 0 475 0 0 1479 0 0 0 262 0 0 0 0
-----|-----|-----|-----|
Major Street Volume: 1954
Minor Approach Volume: 262
Minor Approach Volume Threshold: 86 [less than minimum of 150]
-----|-----|-----|-----|

```

SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction. Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.

2018.txt

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	1 0 2 0 0	1 0 2 0 1	1 0 0 0 1	0 0 0 0 0
Initial Vol:	0 490 0	0 1494 0	0 0 264	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	60.4	xxxxxx

Approach[eastbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=4.4]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=264]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2248]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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2018.txt

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	1 0 2 0 0	1 0 2 0 1	1 0 0 0 1	0 0 0 0 0
Initial Vol:	0 490 0	0 1494 0	0 0 264	0 0 0 0
Major Street Volume:	1984			
Minor Approach Volume:	264			
Minor Approach Volume Threshold:	79 [less than minimum of 150]			

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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2018 Fri Sep 20, 2013 08:21:32 Page 3-2

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 Hooper Blvd at Silver Strand Blvd

Base Volume Alternative: Peak Hour Warrant Met

```

*****
2019.txt
*****
Base Volume Alternative: Peak Hour Warrant Met
-----|-----|-----|-----|
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Lanes: 1 0 2 0 0 1 0 2 0 1 1 0 0 0 1 0 0 0 0 0
Initial Vol: 0 510 0 0 1509 0 0 0 394 0 0 0 0
ApproachDel: xxxxxx xxxxxx 200.5 xxxxxx
-----|-----|-----|-----|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=21.9]
SUCCEED - Vehicle-hours >= 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=394]
SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=2413]
SUCCEED - Total volume greater than or equal to 650 for intersection
with less than four approaches.
-----|-----|-----|-----|
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction. Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.

```

```

2019.txt
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Lanes: 1 0 2 0 0 1 0 2 0 1 1 0 0 0 1 0 0 0 0 0
Initial Vol: 0 510 0 0 1509 0 0 0 394 0 0 0 0
-----|-----|-----|-----|
Major Street Volume: 2019
Minor Approach Volume: 394
Minor Approach Volume Threshold: 72 [less than minimum of 150]
-----|-----|-----|-----|
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction. Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.

```

```

-----|-----|-----|-----|
Peak Hour Volume Signal Warrant Report [Urban]
*****
Intersection #1 Hooper Blvd at Silver Strand Blvd
*****
Base Volume Alternative: Peak Hour Warrant Met
-----|-----|-----|-----|

```



```

*****
2020.txt
*****
Base Volume Alternative: Peak Hour Warrant Met
-----|-----|-----|-----|
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Lanes: 1 0 2 0 0 1 0 2 0 1 1 0 0 0 1 0 0 0 0 0
Initial Vol: 0 533 0 0 1526 0 0 0 564 0 0 0 0 0
ApproachDel: xxxxxx xxxxxx 456.8 xxxxxx
-----|-----|-----|-----|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=71.6]
SUCCEED - Vehicle-hours >= 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=564]
SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=2623]
SUCCEED - Total volume greater than or equal to 650 for intersection
with less than four approaches.
-----|-----|-----|-----|
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction. Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.

```

```

2020.txt
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Lanes: 1 0 2 0 0 1 0 2 0 1 1 0 0 0 1 0 0 0 0 0
Initial Vol: 0 533 0 0 1526 0 0 0 564 0 0 0 0 0
-----|-----|-----|-----|
Major Street Volume: 2059
Minor Approach Volume: 564
Minor Approach Volume Threshold: 64 [less than minimum of 150]
-----|-----|-----|-----|
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction. Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.

```

```

-----|-----|-----|-----|
Peak Hour Volume Signal Warrant Report [Urban]
*****
Intersection #1 Hooper Blvd at Silver Strand Blvd
*****
Base Volume Alternative: Peak Hour Warrant Met
-----|-----|-----|-----|

```



```

*****
2021.txt
*****
Base Volume Alternative: Peak Hour Warrant Met
-----|-----|-----|-----|
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Lanes: 1 0 2 0 0 1 0 2 0 1 1 0 0 0 1 0 0 0 0 0
Initial Vol: 0 566 0 0 1544 0 0 0 450 0 0 0 0 0
ApproachDel: xxxxxx xxxxxx 298.2 xxxxxx
-----|-----|-----|-----|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=37.3]
SUCCEED - Vehicle-hours >= 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=450]
SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=2560]
SUCCEED - Total volume greater than or equal to 650 for intersection
with less than four approaches.
-----|-----|-----|-----|
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction. Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.

```

```

-----|-----|-----|-----|
Peak Hour Volume Signal Warrant Report [Urban]
*****
Intersection #1 Hooper Blvd at Silver Strand Blvd
*****
Base Volume Alternative: Peak Hour Warrant Met
-----|-----|-----|-----|

```

```

2021.txt
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Lanes: 1 0 2 0 0 1 0 2 0 1 1 0 0 0 1 0 0 0 0 0
Initial Vol: 0 566 0 0 1544 0 0 0 450 0 0 0 0 0
-----|-----|-----|-----|
Major Street Volume: 2110
Minor Approach Volume: 450
Minor Approach Volume Threshold: 53 [less than minimum of 150]
-----|-----|-----|-----|

```

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future. Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction. Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.

Memorandum

■
Suite 600
401 B Street
San Diego, California
92101

To: Caltrans

From: Mychal Loomis, P.E.

Date: September 17, 2013

Subject: Hooper Boulevard and Silver Strand Boulevard (SR-75) Signal
Warrant Analysis for Built Year (2024) Conditions

Per your request, a comprehensive signal warrant analysis was conducted for the intersection of Hooper Boulevard and Silver Strand Boulevard (SR-75). This intersection is currently a stop-controlled intersection, with Hooper Boulevard forced to stop and Silver Strand Boulevard running freely. Hooper Boulevard is currently closed to all traffic, however, curb cuts and turn lanes are provided on the Silver Strand Boulevard approaches. For the analysis year of 2024, the proposed design reopens Hooper Boulevard with two lanes in each direction. Additionally, modifications were made to the major street approaches. The Silver Strand Boulevard northbound approach has a total of three lanes; one left-turn only and two through lanes. The Silver Strand Boulevard southbound approach has a total of four lanes; one left-turn only, one right-turn only, and two through lanes. This signal warrant analysis was prepared using projected 2024 conditions near term with one Carrier Vessel Nuclear in port for two alternatives and methodology from the 2012 Manual on Uniform Traffic Control Devices California Edition (CA-MUTCD).

Signal Warrant Analysis

Chapter 4C of the CA-MUTCD, *Traffic Control Signal Needs Studies*, lists ten warrants for the installation of a traffic signal at an intersection. Generally, when an intersection meets one or more of the above signal warrants, it should be considered for signalization. A brief summary of each of the ten warrants is provided with the corresponding calculations for the intersection of Hooper Boulevard and Silver Strand Boulevard warrant analysis, when applicable.

Warrant 1, Eight-Hour Vehicular Volumes. Analyzes whether the minimum traffic volumes are met for each of any eight hour period during an average day. Eight hours of vehicle data was not available; therefore, **this warrant could not be conducted.**

Warrant 2, Four-Hour Vehicular Volumes. Analyzes whether the minimum traffic volumes are met for each of any four hour period during an average day. Four hours of vehicle data was not available; therefore, **this warrant could not be conducted.**

Warrant 3, Peak-Hour. Analyzes whether the minor street approach experiences undue delay in crossing or entering the major approach of any one hour period on an average day. This warrant was conducted for the 2024 conditions scenario for Alternative 1 and Alternative 3.

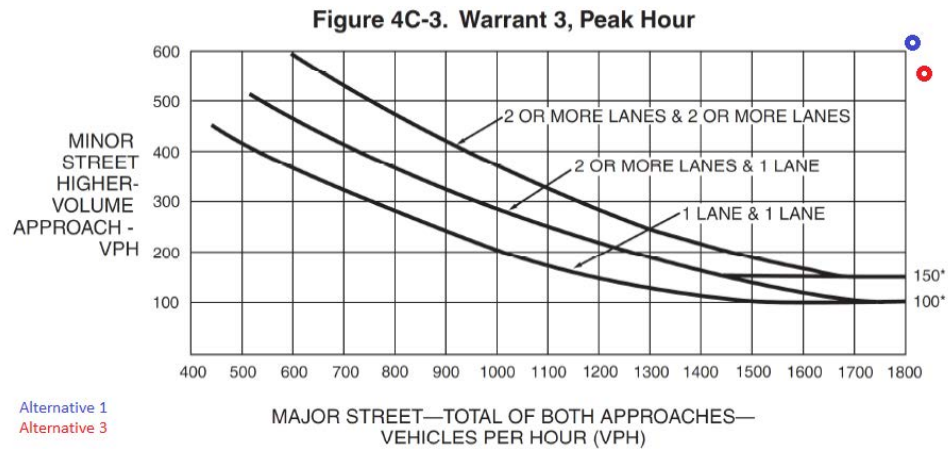
This warrant has two parts, and if either one of the parts is met then the warrant is met. The highest peak hour volume occurred in the afternoon. During this time, the collective approach volume (NB and SB) on Silver Strand Boulevard (major street) was 2094 vehicles for Alternative 1 and 2101 vehicles for Alternative 2. Additionally, the approach volume on Hooper Boulevard (minor street) was 647 vehicles for Alternative 1 and 540 vehicles for Alternative 2.

For Part A, all three conditions below must exist for the same one hour period of an average day. For both alternatives; the total delay, minor street volume, and total entering volume exceeds the given minimums for a two-lane minor street approach and an intersection with three approaches. Thus, **Part A of this warrant was met for both alternatives and therefor the warrant is met as a whole.**

Conditions:	1.The total delay experienced by traffic on the minor street approach exceeds 5 vehicle-hours (v-h)	2.The volume on the same minor street approach equals or exceeds 150 vehicles per hour (vph)	3.The total entering volume serviced during the hour equals or exceeds 650 vph
Alternative 1	229 v-h	647 vph	2741 vph
Alternative 3	189 v-h	540 vph	2641 vph

The total delay on the Hooper Boulevard approach was calculated by taking the eastbound approach delay and multiplying it by the total number of eastbound left-turning vehicles. For Alternative 1, the eastbound approach delay was 3654.3 seconds and the total delay was 229.41 v-h (226 vehicles x 3654.3 seconds x 1/3600 seconds per hour). For Alternative 3, the eastbound approach delay was 3606.7 seconds and the total delay was 189.35 v-h (189 vehicles x 3606.7 seconds x 1/3600 seconds per hour).

For Part B, the plotted point must fall above the applicable curve in Figure 4C-3 for the combination of approach lanes. For both alternatives, the plotted point representing the volume of both approaches on Silver Strand Boulevard and the volume on Hooper Boulevard for 1 hour for an average day falls above the “2 or more lanes & 2 or more lanes” curve. Thus, **Part B of this warrant was met for both alternatives and therefore the warrant is met as a whole.**



	X	Y
Alternative 1	2094	647
Alternative 3	2101	540

Warrant 4, Pedestrian Volumes. Analyzes whether pedestrians experience excessive delay in crossing the major street due to heavy traffic volumes. Pedestrian volume data was not available; therefore, **this warrant could not be conducted.**

Warrant 5, School Crossing. Determines whether school children crossing of the major roadway would warrant signal installation. Special California criterion is provided for this warrant in the CA-MUTCD. This warrant did not apply to this intersection since there is not a school located at or near this intersection. Therefore, **this warrant was not conducted.**

Warrant 6, Coordinated Signal System. Under special conditions, a traffic signal may be considered when the major street is operated with a coordinated signal system. This warrant should not be applied where the resultant spacing of traffic control signals would be less than 1,000 feet. This warrant did not apply to this intersection therefore, **this warrant was not conducted.**

Warrant 7, Crash Experience. Frequency and severity of accidents may justify the installation of a traffic signal. Crash data was not available; therefore, **this warrant could not be conducted.**

Warrant 8, Roadway Network. Under special conditions, a traffic signal may be considered at the intersection of two major through routes or regionally significant roadways. The intersection does not consist of two major through routes; therefore, **this warrant could not be conducted.**

Warrant 9, Intersection Near a Grade Crossing. A traffic signal may be considered if the proximity to the intersection of a grade crossing is the principal reason to consider installing a traffic signal and none of the conditions described in the other eight traffic signal warrants are met. There is not a grade crossing in proximity to the intersection which would justify a reason to consider a traffic signal. Therefore, **this warrant was not conducted.**

California Special Warrant, Bicycle Signal Warrant. Analyzes whether bicycle volumes or collisions are considerable or special geometrics apply. The geometric warrant did not apply to this intersection and bicycle data was not available; therefore, **this warrant could not be conducted.**

Summary and Recommendations

The intersection of Hooper Boulevard and Silver Strand Boulevard (SR-75) was evaluated for a traffic signal control using CA-MUTCD Warrants 3 because the data required for analysis of the other warrants was not readily available or the warrant did not apply to this intersection. All criteria for Warrant 3 were met. A traffic signal should be considered at this intersection based on the projected volumes and the warrants performed in this analysis.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

WARRANT 2 - Four Hour Vehicular Volume

SATISFIED* YES ☐ NO ☐

Record hourly vehicular volumes for any four hours of an average day.

APPROACH LANES	One	2 or More					Hour
Both Approaches - Major Street							
Higher Approach - Minor Street							

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
OR, All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>

WARRANT 3 - Peak Hour
(Part A or Part B must be satisfied)

SATISFIED YES ☒ NO ☐

PART A

SATISFIED YES ☒ NO ☐

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; AND	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes ; AND	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches .	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

PART B

SATISFIED YES ☒ NO ☐

APPROACH LANES	One	2 or More	ALT 1 2 or More PM	ALT 3 Hour PM
Both Approaches - Major Street		2409	2094	2330
Higher Approach - Minor Street		73	647	61

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
OR, The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

APPROACH DELAY **ALT 1**
ALT 1: 3654.3sec
ALT 2: 3606.7sec

Diagram showing traffic flow and volumes for ALT 1:
 Left side: 26/226 (up), 47/421 (down)
 Right side: 426/105 (up), 158/545 (down)
 ENTERING VOL:
 AM - 2482
 PM - 2741

Diagram showing traffic flow and volumes for ALT 3:
 Left side: 21/189 (up), 40/351 (down)
 Right side: 355/88 (up), 1612/458 (down)
 ENTERING VOL:
 AM - 2391
 PM - 2641

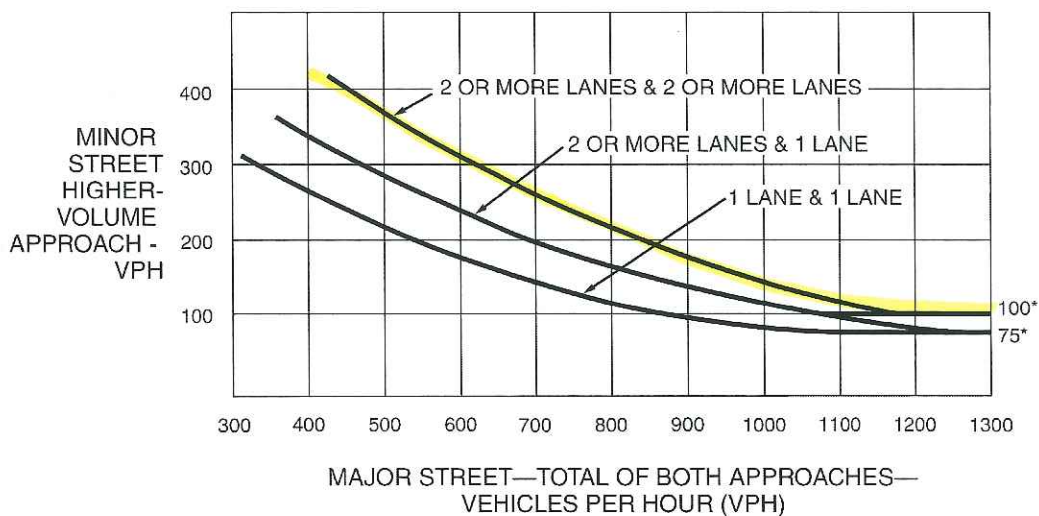
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

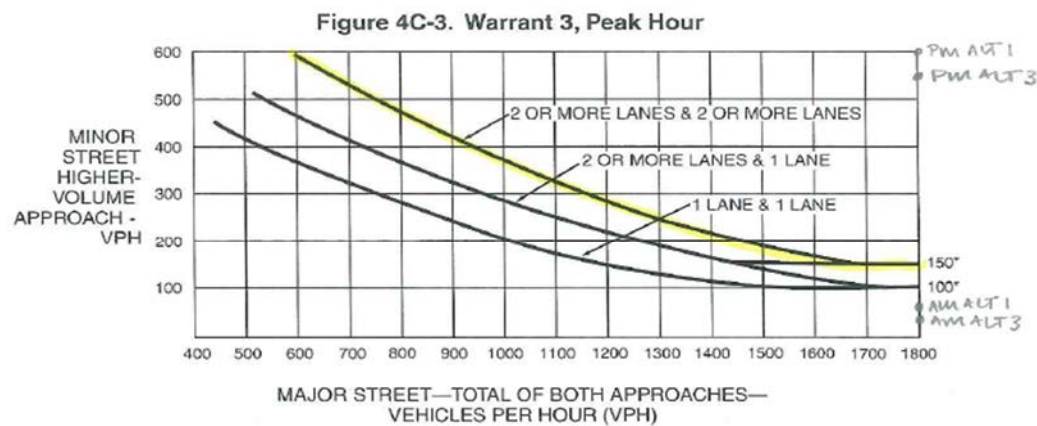
Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

		2014	2015	2016	2017	2018	2019	2020	2021
NB	L	0	0	0	0	0	0	0	0
	T	434	437	441	475	490	510	533	566
SB	L	0	0	0	0	0	0	0	0
	T	1438	1449	1460	1479	1494	1509	1526	1544
	R	0	0	0	0	0	0	0	0
Major Total		1872	1886	1901	1954	1984	2019	2059	2110
EB	L	0	0	0	0	0	0	0	0
	R	56	155	243	262	264	394	564	450
Minor Total		56	155	243	262	264	394	564	450
Meet Warrant?		N	Y	Y	Y	Y	Y	Y	Y
			B	B	B	B	AB	AB	AB



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

APPENDIX K

- Construction Traffic Analysis

SSTC-SOUTH TRAFFIC ESTIMATES BY YEAR

Year	Project Number	Project Status	Year	Personnel	Total SF	10,000 SF	Trucks/day	Worker s/day	Daily Trips	Morning Peak-Hour Trips IN	Morning Peak-Hour Trips OUT	Afternoon Peak-Hour Trips IN	Afternoon Peak-Hour Trips OUT
2013	Existing	Operational	1	117		-	-	-	293	65	13	3	36
						TOTAL			293	65	13	3	36
2014	Existing	Operational	2	117		-	-	-	293	65	13	3	36
	876	Construction	1	0	80,000	8.00	8	54	202	56	0	0	56
						Operational Total			293	65	13	3	36
						Construction Total			202	56	0	0	56
						TOTAL			495	121	13	3	92
2015	Existing	Operational	3	117		-	-	-	293	65	13	3	36
	797	Construction	1	0	104,000	10.40	11	70	265	73	0	0	73
	876	Construction	2	0	80,000	8.00	8	54	202	56	0	0	56
	915	Construction	1	0	25,000	2.50	3	25	90	26	0	0	26
						Operational Total			293	65	13	3	36
						Construction Total			557	155	0	0	155
						TOTAL			850	220	13	3	191
2016	Existing	Operational	4	117		-	-	-	293	65	13	3	36
	797	Construction	2	0	104,000	10.40	11	70	265	73	0	0	73
	876	Operational	3	20	80,000	8.00	0	0	50	4	0	1	4
	915	Construction	2	0	25,000	2.50	3	25	90	26	0	0	26
	776	Construction	1	0	70,000	7.00	7	70	245	72	0	0	72
	893	Construction	1	0	104,000	10.40	11	70	265	73	0	0	73
						Operational Total			343	69	13	4	40
						Construction Total			865	243	0	0	243
						TOTAL			1,208	312	13	4	283
2017	Existing	Operational	5	117		-	-	-	293	65	13	3	36
	797	Operational	3	415	104,000	10.40	0	0	1,038	84	9	21	83
	876	Operational	4	20	80,000	8.00	0	0	50	4	0	1	4
	915	Operational	3	192	25,000	2.50	0	0	480	39	4	10	38
	776	Construction	2	0	70,000	7.00	7	70	245	72	0	0	72
	893	Construction	2	0	104,000	10.40	11	70	265	73	0	0	73
	919	Construction	1	0	40,000	4.00	4	40	140	41	0	0	41
	920	Construction	1	0	110,000	11.00	11	74	277	77	0	0	77
						Operational Total			1,860	192	27	34	161
						Construction Total			927	262	0	0	262
						TOTAL			2,787	454	27	34	424
2018	Existing	Operational	6	117		-	-	-	293	65	13	3	36
	797	Operational	4	415	104,000	10.40	0	0	1,038	84	9	21	83
	876	Operational	5	20	80,000	8.00	0	0	50	4	0	1	4
	915	Operational	4	192	25,000	2.50	0	0	480	39	4	10	38
	776	Operational	3	83	70,000	7.00	0	0	208	17	2	4	17
	893	Operational	3	153	104,000	10.40	0	0	383	31	3	8	31
	919	Construction	2	0	40,000	4.00	4	40	140	41	0	0	41
	920	Construction	2	0	110,000	11.00	11	74	277	77	0	0	77
	889	Construction	1	0	110,000	11.00	11	74	277	77	0	0	77
	890	Construction	1	0	100,000	10.00	10	67	251	70	0	0	70
						Operational Total			2,450	240	32	46	209
					Construction Total			945	264	0	0	264	
						TOTAL			3,395	504	32	46	473

Notes:

There are 25 MILCON projects, existing traffic, and xxxxxx CATEx projects

It is assumed that construction of MILCONs would start the year after gaining funding. For example, FY2012 projects begin in 2013.

It is assumed that construction of each MILCON would last two years.

Existing peak-hour trip data was collected in October 2012.

Trucks: Average of 1 truck per day per 10,000 square feet and 2 trips per truck (one inbound, one outbound)

Workers: 1 worker per 750 sq. ft (SF < 25,000), 1 worker per 1000 sq. ft (25,000 ≤ SF < 75,000), 1 worker per 1,500 sq. ft (75,000 ≤ SF < 150,000)

Construction Daily Trips = [# of Trucks * passenger car equivalent factor (2.5) * # of trips per truck (2)] + [# of Workers * # of trips per worker (3)]

Construction Peak-Hour Trips = [# of workers + 0.25 * # of trucks] . All construction peak-hour trips are inbound in the morning and outbound in the afternoon.

Operational Daily Trips = [# of personnel * SANDAG Daily Trip Rate (2.5)]

Operational Peak-Hour Trips = [# of daily trips * SANDAG Trip Rate (9% in the morning with a 90% in/10% out split; 10% in the afternoon with a 20% in/80% out split)]

SSTC-SOUTH TRAFFIC ESTIMATES BY YEAR

Year	Project Number	Project Status	Year	Personnel	Total SF	10,000 SF	Trucks/day	Worker s/day	Daily Trips	Morning Peak-Hour Trips IN	Morning Peak-Hour Trips OUT	Afternoon Peak-Hour Trips IN	Afternoon Peak-Hour Trips OUT
2019	Existing	Operational	7	117		-	-	-	293	65	13	3	36
	797	Operational	5	415	104,000	10.40	0	0	1,038	84	9	21	83
	876	Operational	6	20	80,000	8.00	0	0	50	4	0	1	4
	915	Operational	5	192	25,000	2.50	0	0	480	39	4	10	38
	776	Operational	4	83	70,000	7.00	0	0	208	17	2	4	17
	893	Operational	4	153	104,000	10.40	0	0	383	31	3	8	31
	919	Operational	3	65	40,000	4.00	0	0	163	13	1	3	13
	920	Operational	3	244	110,000	11.00	0	0	610	49	5	12	49
	889	Construction	2	0	110,000	11.00	11	74	277	77	0	0	77
	890	Construction	2	0	100,000	10.00	10	67	251	70	0	0	70
	918	Construction	1	0	23,000	2.30	3	31	108	32	0	0	32
	921	Construction	1	0	100,000	10.00	10	67	251	70	0	0	70
	964	Construction	1	0	100,000	10.00	10	67	251	70	0	0	70
	892	Construction	1	0	110,000	11.00	11	74	277	77	0	0	77
						Operational Total			3,223	302	39	62	270
						Construction Total			1,415	394	0	0	394
						TOTAL			4,638	696	39	62	664
2020	Existing	Operational	8	117		-	-	-	293	65	13	3	36
	797	Operational	6	415	104,000	10.40	0	0	1,038	84	9	21	83
	876	Operational	7	20	80,000	8.00	0	0	50	4	0	1	4
	915	Operational	6	192	25,000	2.50	0	0	480	39	4	10	38
	776	Operational	5	83	70,000	7.00	0	0	208	17	2	4	17
	893	Operational	5	153	104,000	10.40	0	0	383	31	3	8	31
	919	Operational	4	65	40,000	4.00	0	0	163	13	1	3	13
	920	Operational	4	244	110,000	11.00	0	0	610	49	5	12	49
	889	Operational	3	207	110,000	11.00	0	0	518	42	5	10	41
	890	Operational	3	207	100,000	10.00	0	0	518	42	5	10	41
	918	Construction	2	0	23,000	2.30	3	31	108	32	0	0	32
	921	Construction	2	0	100,000	10.00	10	67	251	70	0	0	70
	964	Construction	2	0	100,000	10.00	10	67	251	70	0	0	70
	892	Construction	2	0	110,000	11.00	11	74	277	77	0	0	77
	952	Construction	1	0	40,000	4.00	4	40	140	41	0	0	41
	200	Construction	1	0	44,000	4.40	5	44	157	45	0	0	45
	966	Construction	1	0	90,000	9.00	9	60	225	62	0	0	62
	949	Construction	1	0	38,000	3.80	4	38	134	39	0	0	39
	950	Construction	1	0	47,000	4.70	5	47	166	48	0	0	48
	911	Construction	1	0	43,000	4.30	5	43	154	44	0	0	44
	951	Construction	1	0	35,000	3.50	4	35	125	36	0	0	36
						Operational Total			4,258	386	49	82	353
						Construction Total			1,988	564	0	0	564
						TOTAL			6,246	950	49	82	917
2021	Existing	Operational	9	117		-	-	-	293	65	13	3	36
	797	Operational	7	415	104,000	10.40	0	0	1,038	84	9	21	83
	876	Operational	8	20	80,000	8.00	0	0	50	4	0	1	4
	915	Operational	7	192	25,000	2.50	0	0	480	39	4	10	38
	776	Operational	6	83	70,000	7.00	0	0	208	17	2	4	17
	893	Operational	6	153	104,000	10.40	0	0	383	31	3	8	31
	919	Operational	5	65	40,000	4.00	0	0	163	13	1	3	13
	920	Operational	5	244	110,000	11.00	0	0	610	49	5	12	49
	889	Operational	4	207	110,000	11.00	0	0	518	42	5	10	41
	890	Operational	4	207	100,000	10.00	0	0	518	42	5	10	41
	918	Operational	3	50	23,000	2.30	0	0	125	10	1	3	10
	921	Operational	3	114	100,000	10.00	0	0	285	23	3	6	23
	964	Operational	3	207	100,000	10.00	0	0	518	42	5	10	41
	892	Operational	3	207	110,000	11.00	0	0	518	42	5	10	41
	952	Construction	2	0	40,000	4.00	4	40	140	41	0	0	41
	200	Construction	2	0	44,000	4.40	5	44	157	45	0	0	45
	966	Construction	2	0	90,000	9.00	9	60	225	62	0	0	62
	949	Construction	2	0	38,000	3.80	4	38	134	39	0	0	39
	950	Construction	2	0	47,000	4.70	5	47	166	48	0	0	48
	911	Construction	2	0	43,000	4.30	5	43	154	44	0	0	44
	951	Construction	2	0	35,000	3.50	4	35	125	36	0	0	36
	904+912	Construction	1	0	54,700	5.47	6	55	195	57	0	0	57
	870	Construction	1	0	25,000	2.50	3	25	90	26	0	0	26
	967	Construction	1	0	10,900	1.09	2	15	55	16	0	0	16
	965	Construction	1	0	35,000	3.50	4	35	125	36	0	0	36
						Operational Total			5,703	503	62	111	469
						Construction Total			1,566	450	0	0	450
						TOTAL			7,269	953	62	111	919

Notes:

There are 25 MILCON projects, existing traffic, and xxxxxx CATEX projects

It is assumed that construction of MILCONs would start the year after gaining funding. For example, FY2012 projects begin in 2013.

It is assumed that construction of each MILCON would last two years.

Existing peak-hour trip data was collected in October 2012.

Trucks: Average of 1 truck per day per 10,000 square feet and 2 trips per truck (one inbound, one outbound)

Workers: 1 worker per 750 sq. ft (SF < 25,000), 1 worker per 1000 sq. ft (25,000 ≤ SF < 75,000), 1 worker per 1,500 sq. ft (75,000 ≤ SF < 150,000)

Construction Daily Trips = [# of Trucks * passenger car equivalent factor (2.5) * # of trips per truck (2)] + [# of Workers * # of trips per worker (3)]

Construction Peak-Hour Trips = [# of workers + 0.25 * # of trucks] . All construction peak-hour trips are inbound in the morning and outbound in the afternoon.

Operational Daily Trips = [# of personnel * SANDAG Daily Trip Rate (2.5)]

Operational Peak-Hour Trips = [# of daily trips * SANDAG Trip Rate (9% in the morning with a 90% in/10% out split; 10% in the afternoon with a 20% in/80%out split)]

SSTC-SOUTH TRAFFIC ESTIMATES BY YEAR

Year	Project Number	Project Status	Year	Personnel	Total SF	10,000 SF	Trucks/day	Worker s/day	Daily Trips	Morning Peak-Hour Trips IN	Morning Peak-Hour Trips OUT	Afternoon Peak-Hour Trips IN	Afternoon Peak-Hour Trips OUT
2022	Existing	Operational	10	117		-	-	-	293	65	13	3	36
	797	Operational	8	415	104,000	10.40	0	0	1,038	84	9	21	83
	876	Operational	9	20	80,000	8.00	0	0	50	4	0	1	4
	915	Operational	8	192	25,000	2.50	0	0	480	39	4	10	38
	776	Operational	7	83	70,000	7.00	0	0	208	17	2	4	17
	893	Operational	7	153	104,000	10.40	0	0	383	31	3	8	31
	919	Operational	6	65	40,000	4.00	0	0	163	13	1	3	13
	920	Operational	6	244	110,000	11.00	0	0	610	49	5	12	49
	889	Operational	5	207	110,000	11.00	0	0	518	42	5	10	41
	890	Operational	5	207	100,000	10.00	0	0	518	42	5	10	41
	918	Operational	4	50	23,000	2.30	0	0	125	10	1	3	10
	921	Operational	4	114	100,000	10.00	0	0	285	23	3	6	23
	964	Operational	4	207	100,000	10.00	0	0	518	42	5	10	41
	892	Operational	4	207	110,000	11.00	0	0	518	42	5	10	41
	952	Operational	3	50	40,000	4.00	0	0	125	10	1	3	10
	200	Operational	3	151	44,000	4.40	0	0	378	31	3	8	30
	966	Operational	3	109	90,000	9.00	0	0	273	22	2	5	22
	949	Operational	3	115	38,000	3.80	0	0	288	23	3	6	23
	950	Operational	3	115	47,000	4.70	0	0	288	23	3	6	23
	911	Operational	3	127	43,000	4.30	0	0	318	26	3	6	25
	951	Operational	3	125	35,000	3.50	0	0	313	25	3	6	25
	904+912	Construction	2	0	54,700	5.47	6	55	195	57	0	0	57
	870	Construction	2	0	25,000	2.50	3	25	90	26	0	0	26
	967	Construction	2	0	10,900	1.09	2	15	55	16	0	0	16
	965	Construction	2	0	35,000	3.50	4	35	125	36	0	0	36
						Operational Total			7,683	664	80	151	627
						Construction Total			465	134	0	0	134
						TOTAL			8,148	797	80	151	761
2023	Existing	Operational	11	117		-	-	-	293	65	13	3	36
	797	Operational	9	415	104,000	10.40	0	0	1,038	84	9	21	83
	876	Operational	10	20	80,000	8.00	0	0	50	4	0	1	4
	915	Operational	9	192	25,000	2.50	0	0	480	39	4	10	38
	776	Operational	8	83	70,000	7.00	0	0	208	17	2	4	17
	893	Operational	8	153	104,000	10.40	0	0	383	31	3	8	31
	919	Operational	7	65	40,000	4.00	0	0	163	13	1	3	13
	920	Operational	7	244	110,000	11.00	0	0	610	49	5	12	49
	889	Operational	6	207	110,000	11.00	0	0	518	42	5	10	41
	890	Operational	6	207	100,000	10.00	0	0	518	42	5	10	41
	918	Operational	5	50	23,000	2.30	0	0	125	10	1	3	10
	921	Operational	5	114	100,000	10.00	0	0	285	23	3	6	23
	964	Operational	5	207	100,000	10.00	0	0	518	42	5	10	41
	892	Operational	5	207	110,000	11.00	0	0	518	42	5	10	41
	952	Operational	4	50	40,000	4.00	0	0	125	10	1	3	10
	200	Operational	4	151	44,000	4.40	0	0	378	31	3	8	30
	966	Operational	4	109	90,000	9.00	0	0	273	22	2	5	22
	949	Operational	4	115	38,000	3.80	0	0	288	23	3	6	23
	950	Operational	4	115	47,000	4.70	0	0	288	23	3	6	23
	911	Operational	4	127	43,000	4.30	0	0	318	26	3	6	25
	951	Operational	4	125	35,000	3.50	0	0	313	25	3	6	25
	904+912	Operational	3	288	54,700	5.47	0	0	720	58	6	14	58
	870	Operational	3	55	25,000	2.50	0	0	138	11	1	3	11
	967	Operational	3	20	10,900	1.09	0	0	50	4	0	1	4
	965	Operational	3	50	35,000	3.50	0	0	125	10	1	3	10
						Operational Total			8,715	747	89	171	710
						Construction Total			0	0	0	0	0
						TOTAL			8,715	747	89	171	710

Notes:

There are 25 MILCON projects, existing traffic, and xxxxxx CATEX projects

It is assumed that construction of MILCONs would start the year after gaining funding. For example, FY2012 projects begin in 2013.

It is assumed that construction of each MILCON would last two years.

Existing peak-hour trip data was collected in October 2012.

Trucks: Average of 1 truck per day per 10,000 square feet and 2 trips per truck (one inbound, one outbound)

Workers: 1 worker per 750 sq. ft (SF < 25,000), 1 worker per 1000 sq. ft (25,000 ≤ SF < 75,000), 1 worker per 1,500 sq. ft (75,000 ≤ SF < 150,000)

Construction Daily Trips = [# of Trucks * passenger car equivalent factor (2.5) * # of trips per truck (2)] + [# of Workers * # of trips per worker (3)]

Construction Peak-Hour Trips = [# of workers + 0.25 * # of trucks]. All construction peak-hour trips are inbound in the morning and outbound in the afternoon.

Operational Daily Trips = [# of personnel * SANDAG Daily Trip Rate (2.5)]

Operational Peak-Hour Trips = [# of daily trips * SANDAG Trip Rate (9% in the morning with a 90% in/10% out split; 10% in the afternoon with a 20% in/80%out split)]

NBC Coastal Campus
1: Glorietta Blvd & Fourth St










MILCON Year 2013 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1396	34	0	3790	551	0	0	475	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1682	41	0	4120	599	0	0	594	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4738			1743			3128	6461	621	5020	6182	1713
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4738			1743			3128	6461	621	5020	6182	1713
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	84
cM capacity (veh/h)	21			351			4	0	1354	0	0	77
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	673	673	377	1648	1648	1423	594	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	599	594	12				
cSH	1700	1700	1700	1700	1700	1700	1354	77				
Volume to Capacity	0.40	0.40	0.22	0.97	0.97	0.84	0.44	0.16				
Queue Length 95th (ft)	0	0	0	0	0	0	57	13				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	60.4				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	60.4				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				100.6%			ICU Level of Service		G			
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2013 Alt 1/2/3
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1257	201	0	3690	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1428	228	0	4100	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1677	2949		630	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1677	2949		630	
tC, single (s)			4.1	6.8		6.9	
tC, 2 stage (s)							
tF (s)			2.2	3.5		3.3	
p0 queue free %			100	100		39	
cM capacity (veh/h)			372	11		410	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	571	571	514	1367	1367	1367	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	228	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	410
Volume to Capacity	0.34	0.34	0.30	0.80	0.80	0.80	0.61
Queue Length 95th (ft)	0	0	0	0	0	0	99
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	26.7
Lane LOS							D
Approach Delay (s)	0.0			0.0			26.7
Approach LOS							D
Intersection Summary							
Average Delay	1.1						
Intersection Capacity Utilization	86.2%			ICU Level of Service		E	
Analysis Period (min)	15						

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2013 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1557	1942	342	105	102	0	0	277	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4640		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4640		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1674	2088	368	142	138	0	0	318	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1021	3101	0	142	138	0	0	330	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.6			21.4	
Effective Green, g (s)				131.2	131.2		20.0	46.6			21.4	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1054	3214		186	870			396	
v/s Ratio Prot				c0.67	0.67		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.97	0.96		0.76	0.16			0.83	
Uniform Delay, d1				27.2	27.0		82.4	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				20.3	9.1		16.8	0.1			14.0	
Delay (s)				47.5	36.1		99.2	56.1			96.3	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			38.9			78.0			96.3	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		45.2		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		189.4		Sum of lost time (s)						16.8		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2013 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	582	64	0	0	0	0	197	198	450	1440	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3262	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3262	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	633	70	0	0	0	0	229	215	489	1500	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	18	49	0	0	0
Lane Group Flow (vph)	0	634	41	0	0	0	0	288	89	489	1500	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1178	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.42	
v/s Ratio Perm		0.12	0.03						0.06			
v/c Ratio		0.36	0.07					0.24	0.17	0.69	0.73	
Uniform Delay, d1		41.5	37.2					38.4	37.3	63.2	25.9	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.3	
Delay (s)		41.6	37.3					38.5	37.5	66.2	27.2	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.2			36.8	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.0		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)						14.4		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2013 Alt 1/2/3

Timing Plan: AM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	206	6	1087	571	0	1052
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3315			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3315			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	240	7	1169	614	0	1107
RTOR Reduction (vph)	2	0	54	0	0	0
Lane Group Flow (vph)	245	0	1729	0	0	1107
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	16.5		42.2			42.2
Effective Green, g (s)	16.5		42.2			42.2
Actuated g/C Ratio	0.24		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	387		2063			2092
v/s Ratio Prot	c0.15		c0.52			0.33
v/s Ratio Perm						
v/c Ratio	0.63		0.84			0.53
Uniform Delay, d1	23.0		10.1			7.2
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	3.4		3.2			0.2
Delay (s)	26.3		13.3			7.4
Level of Service	C		B			A
Approach Delay (s)	26.3		13.3			7.4
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			12.2		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.82			
Actuated Cycle Length (s)			67.8		Sum of lost time (s)	12.1
Intersection Capacity Utilization			74.4%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON Year 2013 Alt 1/2/3

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	44	2	9	7	0	5	18	1291	24	37	1186	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1692	1583		1708		1770	3529		1770	3524	
Frt Permitted	0.74	0.79	1.00		0.87		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1312	1390	1583		1526		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	51	2	10	14	0	10	21	1537	29	40	1289	37
RTOR Reduction (vph)	0	0	8	0	20	0	0	1	0	0	1	0
Lane Group Flow (vph)	27	26	2	0	4	0	21	1565	0	40	1325	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases			4		4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	14.5	14.5	14.5		14.5		2.4	58.2		2.7	58.5	
Effective Green, g (s)	14.5	14.5	14.5		14.5		2.4	58.2		2.7	58.5	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.65		0.03	0.65	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	212	225	256		247		47	2294		53	2303	
v/s Ratio Prot							0.01	c0.44		c0.02	0.38	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.13	0.12	0.01		0.02		0.45	0.68		0.75	0.58	
Uniform Delay, d1	32.1	32.0	31.5		31.5		42.9	9.8		43.1	8.6	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.2	0.0		0.0		6.6	0.9		45.2	0.4	
Delay (s)	32.4	32.3	31.5		31.5		49.5	10.7		88.3	9.0	
Level of Service	C	C	C		C		D	B		F	A	
Approach Delay (s)		32.2			31.5			11.2			11.3	
Approach LOS		C			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			11.8		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.58									
Actuated Cycle Length (s)			89.5		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			54.3%		ICU Level of Service			A				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2013 Alt 1/2/3

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	21	0	1238	7	405	773	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	32	0	1360	8	413	789	0
RTOR Reduction (vph)	0	0	0	0	29	0	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1360	4	413	789	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.38		c0.23	0.22	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.82	0.01	0.68	0.26	
Uniform Delay, d1					60.6			33.1	20.4	40.6	2.3	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			3.2	0.0	3.0	0.2	
Delay (s)					60.6			15.4	20.4	43.6	2.5	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			15.4			16.6	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		16.5			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		75.5%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2013 Alt 1/2/3

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	47	13	1	61	122	130	1084	5	276	239	295
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.98	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3192	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3192	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	45	72	20	1	69	139	144	1204	6	317	275	339
RTOR Reduction (vph)	0	0	19	0	0	117	0	0	3	0	153	0
Lane Group Flow (vph)	45	72	1	0	70	22	144	1204	3	317	461	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4		2				
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1047	
v/s Ratio Prot	0.03	c0.04			c0.04		0.08	c0.34		c0.18	0.14	
v/s Ratio Perm			0.00			0.01			0.00			
v/c Ratio	0.37	0.56	0.01		0.24	0.09	0.26	0.76	0.00	0.93	0.44	
Uniform Delay, d1	64.5	65.4	62.9		53.3	52.1	37.5	33.8	22.3	57.5	38.2	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.92	
Incremental Delay, d2	1.9	5.6	0.1		0.4	0.2	0.3	3.6	0.0	30.5	1.3	
Delay (s)	66.4	70.9	63.0		53.7	52.3	37.8	37.4	22.3	85.8	36.5	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		68.3			52.8			37.3			53.3	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay		45.8			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		80.9%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON Year 2013 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (veh/h)	21	188	4	83	309	8
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	25	221	5	104	336	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	737	57			109	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	737	57			109	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	78			77	
cM capacity (veh/h)	298	1009			1482	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	246	109	345			
Volume Left	25	0	336			
Volume Right	221	104	0			
cSH	1122	1700	1482			
Volume to Capacity	0.22	0.06	0.23			
Queue Length 95th (ft)	21	0	22			
Control Delay (s)	10.4	0.0	8.0			
Lane LOS	B		A			
Approach Delay (s)	10.4	0.0	8.0			
Approach LOS	B					
Intersection Summary						
Average Delay		7.6				
Intersection Capacity Utilization		34.2%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2013 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (vph)	24	3	1230	388	0	216
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.98		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.98		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1728		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1728		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	32	4	1295	408	0	338
RTOR Reduction (vph)	4	0	0	111	0	0
Lane Group Flow (vph)	32	0	1295	297	0	338
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	1.9		31.5	31.5		31.5
Effective Green, g (s)	1.9		31.5	31.5		31.5
Actuated g/C Ratio	0.04		0.73	0.73		0.73
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	75		2574	1105		2574
v/s Ratio Prot	c0.02		c0.37			0.10
v/s Ratio Perm				0.20		
v/c Ratio	0.43		0.50	0.27		0.13
Uniform Delay, d1	20.2		2.5	2.0		1.8
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	3.9		0.2	0.1		0.0
Delay (s)	24.1		2.7	2.1		1.8
Level of Service	C		A	A		A
Approach Delay (s)	24.1		2.6			1.8
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		2.8		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.50				
Actuated Cycle Length (s)		43.3		Sum of lost time (s)		9.9
Intersection Capacity Utilization		46.4%		ICU Level of Service		A
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2013 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↙
Volume (veh/h)	0	14	2010	5	5	242
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	24	2161	5	7	356
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2357	1083			2167	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2357	1083			2167	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	89			97	
cM capacity (veh/h)	29	212			243	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	24	1441	726	7	178	178
Volume Left	0	0	0	7	0	0
Volume Right	24	0	5	0	0	0
cSH	212	1700	1700	243	1700	1700
Volume to Capacity	0.11	0.85	0.43	0.03	0.10	0.10
Queue Length 95th (ft)	9	0	0	2	0	0
Control Delay (s)	24.1	0.0	0.0	20.3	0.0	0.0
Lane LOS	C			C		
Approach Delay (s)	24.1	0.0		0.4		
Approach LOS	C					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		65.7%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2013 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↙
Volume (vph)	16	82	1928	11	35	206
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	20	101	2073	12	51	299
RTOR Reduction (vph)	0	6	0	1	0	0
Lane Group Flow (vph)	20	95	2073	11	51	299
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.5	25.6	68.3	68.3	5.0	82.1
Effective Green, g (s)	15.5	20.5	68.3	68.3	5.0	82.1
Actuated g/C Ratio	0.14	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	256	303	2261	1011	82	2717
v/s Ratio Prot	0.01	c0.06	c0.59		c0.03	0.08
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.31	0.92	0.01	0.62	0.11
Uniform Delay, d1	39.5	37.2	16.8	7.0	50.0	3.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	6.4	0.0	13.8	0.0
Delay (s)	39.7	37.8	23.2	7.0	63.8	3.2
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.1		23.1			12.0
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay		22.3		HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio		0.79				
Actuated Cycle Length (s)		106.9		Sum of lost time (s)	18.1	
Intersection Capacity Utilization		69.2%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2013 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↑↑			↑↑
Volume (veh/h)	0	30	1907	24	0	221
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	48	2007	25	0	299
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2169	1016			2033	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2169	1016			2033	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	79			100	
cM capacity (veh/h)	40	236			275	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	48	1338	694	149	149	
Volume Left	0	0	0	0	0	
Volume Right	48	0	25	0	0	
cSH	236	1700	1700	1700	1700	
Volume to Capacity	0.21	0.79	0.41	0.09	0.09	
Queue Length 95th (ft)	19	0	0	0	0	
Control Delay (s)	24.2	0.0	0.0	0.0	0.0	
Lane LOS	C					
Approach Delay (s)	24.2	0.0		0.0		
Approach LOS	C					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			63.5%		ICU Level of Service	B
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2013 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑↑	↑	↑	↑↑
Volume (vph)	9	6	1932	30	14	198
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	15	10	2012	31	17	244
RTOR Reduction (vph)	0	6	0	7	0	0
Lane Group Flow (vph)	15	4	2012	24	17	244
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.9	59.9	2.0	69.4
Effective Green, g (s)	1.4	3.4	59.9	59.9	2.0	69.4
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2738	1225	45	3173
v/s Ratio Prot	c0.01	0.00	c0.57		c0.01	0.07
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.47	0.06	0.73	0.02	0.38	0.08
Uniform Delay, d1	37.6	35.5	4.6	2.0	37.1	0.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.5	0.4	1.1	0.0	5.2	0.0
Delay (s)	48.1	35.8	5.6	2.0	42.3	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	43.2		5.6			3.2
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay			5.7		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.72			
Actuated Cycle Length (s)			77.4		Sum of lost time (s)	14.1
Intersection Capacity Utilization			66.2%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2013 Alt 1/2/3

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	42	1	0	41	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	78	2	0	65	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	80	65	3					
Volume Left (vph)	0	0	78	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.09	0.07	0.00					
Capacity (veh/h)	837	1121	818	844	1121					
Control Delay (s)	7.2	6.2	7.7	7.5	6.2					
Approach Delay (s)	7.2		7.7	7.4						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.0%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2013 Alt 1/2/3

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	34	0	0	30	213	3	1747	47	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1359	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	45	0	0	42	296	3	1859	50	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	20	0	0	0	0
Lane Group Flow (vph)	3	45	0	0	42	240	3	1859	30	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	15.5	15.5			15.5	15.5	46.6	42.5	42.5			
Effective Green, g (s)	15.5	15.5			15.5	15.5	46.6	42.5	42.5			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.60	0.60			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	295	404			404	343	1155	2106	942			
v/s Ratio Prot		0.02			0.02		0.00	c0.53				
v/s Ratio Perm	0.00					c0.15			0.02			
v/c Ratio	0.01	0.11			0.10	0.70	0.00	0.88	0.03			
Uniform Delay, d1	21.9	22.4			22.4	25.8	4.3	12.3	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	6.1	0.0	4.8	0.0			
Delay (s)	21.9	22.5			22.5	31.9	4.3	17.1	6.0			
Level of Service	C	C			C	C	A	B	A			
Approach Delay (s)		22.5			30.7			16.8			0.0	
Approach LOS		C			C			B			A	
Intersection Summary												
HCM 2000 Control Delay		19.0						HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		71.4				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		81.1%				ICU Level of Service			D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON Year 2013 Alt 1/2/3

Timing Plan: AM PEAK

























							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	0	1559	0	169	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	0	1624	0	214	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1026	107	214		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1026	107	214		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	231	927	1353		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	812	812	143	71	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.48	0.48	0.08	0.04	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			46.4%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON Year 2013 Alt 1/2/3

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	370	0	36	2	1	2	24	1446	0	0	126	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3410	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3410	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	420	0	41	6	3	6	25	1522	0	0	183	59
RTOR Reduction (vph)	0	29	0	0	6	0	0	0	0	0	27	0
Lane Group Flow (vph)	420	12	0	6	3	0	25	1522	0	0	215	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	24.7	24.7		1.7	1.7		1.9	43.7			37.6	
Effective Green, g (s)	24.7	24.7		1.7	1.7		1.9	43.7			37.6	
Actuated g/C Ratio	0.29	0.29		0.02	0.02		0.02	0.52			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	515	461		35	33		39	1823			1511	
v/s Ratio Prot	c0.24	0.01		c0.00	0.00		0.01	c0.43			0.06	
v/s Ratio Perm												
v/c Ratio	0.82	0.03		0.17	0.09		0.64	0.83			0.14	
Uniform Delay, d1	27.9	21.5		40.9	40.8		41.1	17.5			14.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	9.6	0.0		2.3	1.2		30.7	3.5			0.0	
Delay (s)	37.6	21.5		43.2	42.0		71.9	21.0			14.1	
Level of Service	D	C		D	D		E	C			B	
Approach Delay (s)		36.1			42.5			21.8			14.1	
Approach LOS		D			D			C			B	
Intersection Summary												
HCM 2000 Control Delay		24.0						HCM 2000 Level of Service			C	
HCM 2000 Volume to Capacity ratio		0.86										
Actuated Cycle Length (s)		84.8					Sum of lost time (s)			18.9		
Intersection Capacity Utilization		75.6%					ICU Level of Service			D		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2013 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰↰↰	↰↰↰		↰	↰		↰	↰↰	
Volume (vph)	7	172	13	0	1312	16	35	21	1	18	38	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5030			5076		1770	1852			1732	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.20	
Satd. Flow (perm)	1770	5030			5076		1250	1852			357	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	
Adj. Flow (vph)	8	193	15	0	1442	18	42	25	1	23	49	62
RTOR Reduction (vph)	0	5	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	8	203	0	0	1459	0	42	25	0	0	117	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2061		243	360			59	
v/s Ratio Prot	c0.00	0.04			c0.29			0.01				
v/s Ratio Perm							c0.03				c0.33	
v/c Ratio	0.04	0.11			0.71		0.17	0.07			1.97	
Uniform Delay, d1	71.4	36.2			44.6		60.4	59.2			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			2.0		0.3	0.1			493.5	
Delay (s)	71.5	36.4			46.5		60.8	59.3			568.5	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		37.7			46.5			60.2			568.5	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		83.2			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		64.1%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON Year 2013 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	189	0	371	1320	8	0	0	0	0	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	230	0	395	1404	9	0	0	0	0	0	16
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	10
Lane Group Flow (vph)	0	230	0	395	1413	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.05		0.12	c0.40							
v/s Ratio Perm												0.00
v/c Ratio		0.12		0.23	0.44							0.01
Uniform Delay, d1		36.4		25.4	1.2							34.9
Progression Factor		0.43		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.1	0.1							0.0
Delay (s)		15.8		25.5	1.3							34.9
Level of Service		B		C	A							C
Approach Delay (s)		15.8			6.6			0.0				34.9
Approach LOS		B			A			A				C
Intersection Summary												
HCM 2000 Control Delay		7.9			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.45										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		58.4%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

MILCON Year 2013 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	9	231	0	0	127	103	0	0	0	47	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	11	275	0	0	137	111	0	0	0	52	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	247			275			493	544	275	488	488	192
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	247			275			493	544	275	488	488	192
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1319			1288			481	443	764	487	476	850
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	286	247	0	56								
Volume Left	11	0	0	52								
Volume Right	0	111	0	4								
cSH	1319	1288	1700	504								
Volume to Capacity	0.01	0.00	0.00	0.11								
Queue Length 95th (ft)	1	0	0	9								
Control Delay (s)	0.4	0.0	0.0	13.0								
Lane LOS	A			A	B							
Approach Delay (s)	0.4	0.0	0.0	13.0								
Approach LOS				A	B							
Intersection Summary												
Average Delay				1.4								
Intersection Capacity Utilization				29.4%								A
Analysis Period (min)				15								













NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2013 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	269	4	26	207	24	11	14	125	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	313	5	28	223	26	14	17	154	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	317	28	248	185	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	154	18						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.0	5.5	5.1	5.6						
Degree Utilization, x	0.01	0.48	0.05	0.38	0.26	0.07						
Capacity (veh/h)	579	636	567	632	638	551						
Control Delay (s)	7.9	12.3	8.1	10.5	9.8	9.0						
Approach Delay (s)	12.2		10.3		9.8	9.0						
Approach LOS	B		B		A	A						
Intersection Summary												
Delay				10.9								
Level of Service				B								
Intersection Capacity Utilization				37.2%								A
Analysis Period (min)				15								

























NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2013 Alt 1/2/3
Timing Plan: AM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	223	422	330	151	17	68
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	282	534	402	184	24	96
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	587				1593	293
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	587				1593	293
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	71				66	86
cM capacity (veh/h)	984				70	703
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	282	534	268	318	120	
Volume Left	282	0	0	0	24	
Volume Right	0	0	0	184	96	
cSH	984	1700	1700	1700	250	
Volume to Capacity	0.29	0.31	0.16	0.19	0.48	
Queue Length 95th (ft)	30	0	0	0	60	
Control Delay (s)	10.1	0.0	0.0	0.0	32.0	
Lane LOS	B				D	
Approach Delay (s)	3.5		0.0		32.0	
Approach LOS					D	
Intersection Summary						
Average Delay			4.4			
Intersection Capacity Utilization			41.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2013 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	415	15	26	331		65	35		1	21	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1720			1858	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.88			0.98	1.00
Satd. Flow (perm)	934	3521		825	3539			1534			1830	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	539	19	34	430	0	98	53	121	2	36	47
RTOR Reduction (vph)	0	4	0	0	0	0	0	33	0	0	0	30
Lane Group Flow (vph)	21	554	0	34	430	0	0	239	0	0	38	17
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.1	13.1		13.1	13.1			13.1			13.1	13.1
Effective Green, g (s)	13.1	13.1		13.1	13.1			13.1			13.1	13.1
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	345	1302		305	1309			567			677	585
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.16			0.02	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.42			0.06	0.03
Uniform Delay, d1	7.2	8.3		7.3	8.0			8.3			7.2	7.1
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.1			0.5			0.0	0.0
Delay (s)	7.3	8.6		7.5	8.1			8.8			7.2	7.1
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.5			8.1			8.8			7.2	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.4							A		
HCM 2000 Volume to Capacity ratio			0.42									
Actuated Cycle Length (s)			35.4						9.2			
Intersection Capacity Utilization			46.3%							A		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2013 Alt 1/2/3
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	500	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	543	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)			767			
pX, platoon unblocked						
vC, conflicting volume			548		543	543
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			548		543	543
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1022		500	539
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	543	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	528			
Volume to Capacity	0.32	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	11.9			
Lane LOS			B			
Approach Delay (s)	0.0		11.9			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.3%		ICU Level of Service	A
Analysis Period (min)			15			








NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2013 Alt 1/2/3
Timing Plan: AM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↙
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑	↘	↗	↑↑↑		↗	↑↑	↘	↗	↑↑	↘
Volume (vph)	20	621	33	22	1470	41	155	35	48	86	43	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5047		1770	5065			3324			3363	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5047		1770	5065			3324			3363	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	24	739	39	24	1615	45	187	42	58	105	52	28
RTOR Reduction (vph)	0	3	0	0	2	0	0	12	0	0	8	0
Lane Group Flow (vph)	24	775	0	24	1658	0	0	275	0	0	177	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2234		118	2158			646			653	
v/s Ratio Prot	0.01	c0.15		c0.01	c0.33			c0.08			c0.05	
v/s Ratio Perm												
v/c Ratio	0.16	0.35		0.20	0.77			0.43			0.27	
Uniform Delay, d1	76.7	33.0		79.5	44.1			63.7			61.7	
Progression Factor	1.00	1.00		1.33	0.69			1.00			1.00	
Incremental Delay, d2	0.5	0.4		0.8	2.4			0.5			0.2	
Delay (s)	77.2	33.4		106.8	32.9			64.1			61.9	
Level of Service	E	C		F	C			E			E	
Approach Delay (s)		34.8			34.0			64.1			61.9	
Approach LOS		C			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		38.9			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.53										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		66.4%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2013 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	841	33	19	1636	11	17	4	29	52	10	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5080			1686		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.67	1.00	
Satd. Flow (perm)	1770	5057		1770	5080			1550		1247	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	945	37	22	1859	12	23	5	40	74	14	20
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	17	0
Lane Group Flow (vph)	2	980	0	22	1871	0	0	40	0	74	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3716			258		207	283	
v/s Ratio Prot	0.00	0.19		c0.01	c0.37						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.28		0.19	0.50			0.15		0.36	0.06	
Uniform Delay, d1	86.1	10.9		79.4	10.3			64.1		66.5	63.1	
Progression Factor	1.70	0.28		1.39	0.31			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.6	0.4			0.3		1.1	0.1	
Delay (s)	146.8	3.3		111.2	3.5			64.4		67.5	63.2	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.6			4.8			64.4			66.2	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		7.9			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.47										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		65.3%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2013 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	909	60	92	1498	49	138	18	87	161	34	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5038		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5038		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1021	67	111	1805	59	155	20	98	215	45	19
RTOR Reduction (vph)	0	4	0	0	0	28	0	0	81	0	3	0
Lane Group Flow (vph)	3	1084	0	111	1805	31	0	175	17	0	276	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.22		c0.06	c0.35			c0.10			c0.08	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.49		0.57	0.67	0.04		0.57	0.06		0.48	
Uniform Delay, d1	86.2	35.6		75.9	30.6	20.1		68.4	62.3		67.2	
Progression Factor	1.22	0.64		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.7		3.7	1.3	0.1		2.5	0.1		0.6	
Delay (s)	105.8	23.4		79.6	31.9	20.2		70.9	62.4		67.8	
Level of Service	F	C		E	C	C		E	E		E	
Approach Delay (s)		23.6			34.3			67.9			67.8	
Approach LOS		C			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		36.2			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		82.9%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2013 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	↰
Volume (vph)	13	1164	24	41	1622	11	15	6	46	36	2	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5080			1671			1723	
Flt Permitted	0.95	1.00		0.95	1.00			0.93			0.78	
Satd. Flow (perm)	1770	5070		1770	5080			1566			1387	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	14	1265	26	48	1886	13	18	7	55	47	3	26
RTOR Reduction (vph)	0	1	0	0	0	0	0	43	0	0	20	0
Lane Group Flow (vph)	14	1290	0	48	1899	0	0	37	0	0	56	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.3		2.9	39.5			15.0			15.0	
Effective Green, g (s)	0.7	37.3		2.9	39.5			15.0			15.0	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2667		72	2830			331			293	
v/s Ratio Prot	0.01	0.25		c0.03	c0.37							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.82	0.48		0.67	0.67			0.11			0.19	
Uniform Delay, d1	35.0	10.7		33.5	11.1			22.6			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	132.1	0.1		20.9	0.6			0.1			0.3	
Delay (s)	167.1	10.8		54.4	11.7			22.7			23.3	
Level of Service	F	B		D	B			C			C	
Approach Delay (s)		12.5			12.8			22.7			23.3	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		13.1			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		70.9			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		50.6%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2013 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰↰↰	↰	↰
Volume (vph)	88	1177	28	235	1566	206	70	69	741	225	89	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	102	1369	33	250	1666	219	78	77	823	268	106	87
RTOR Reduction (vph)	0	2	0	0	0	67	0	154	183	0	3	55
Lane Group Flow (vph)	102	1400	0	250	1666	152	78	302	261	268	112	23
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.3		17.9	47.2	47.2	6.7	29.8	29.8	10.4	33.5	33.5
Effective Green, g (s)	6.0	35.3		17.9	47.2	47.2	6.7	29.8	29.8	10.4	33.5	33.5
Actuated g/C Ratio	0.05	0.31		0.16	0.41	0.41	0.06	0.26	0.26	0.09	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	178	1551		274	2081	648	102	400	388	309	508	436
v/s Ratio Prot	0.03	c0.28		c0.14	0.33		0.04	c0.19		c0.08	c0.06	
v/s Ratio Perm						0.10			0.17			0.02
v/c Ratio	0.57	0.90		0.91	0.80	0.23	0.76	0.75	0.67	0.87	0.22	0.05
Uniform Delay, d1	53.4	38.4		47.9	29.9	22.3	53.5	39.4	38.4	51.8	31.0	29.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.4	7.7		32.2	2.3	0.2	28.3	7.9	4.5	21.7	0.2	0.0
Delay (s)	57.8	46.0		80.2	32.2	22.4	81.8	47.3	42.9	73.4	31.2	29.5
Level of Service	E	D		F	C	C	F	D	D	E	C	C
Approach Delay (s)		46.8			36.8			48.0			55.5	
Approach LOS		D			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		43.6			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		115.3			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		79.9%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2013 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	273	1039	0	149	970
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	307	1117	0	166	1078
RTOR Reduction (vph)	0	0	0	0	0	8
Lane Group Flow (vph)	0	307	1117	0	166	1070
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.32		0.09	c0.38
v/s Ratio Perm						
v/c Ratio		0.11	0.96		0.80	0.70
Uniform Delay, d1		2.5	26.2		34.4	13.2
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	16.9		19.6	1.4
Delay (s)		2.5	43.1		54.0	14.6
Level of Service		A	D		D	B
Approach Delay (s)		2.5	43.1		19.8	
Approach LOS		A	D		B	
Intersection Summary						
HCM 2000 Control Delay			27.6		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.85			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			56.1%		ICU Level of Service	B
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2013 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	423	0	0	405	503	732	1	138	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3245		1681	1628				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3245		1681	1628				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	486	0	0	440	547	796	1	150	0	0	0
RTOR Reduction (vph)	0	0	0	0	343	0	0	32	0	0	0	0
Lane Group Flow (vph)	0	486	0	0	644	0	486	429	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.2			16.2		19.2	19.2				
Effective Green, g (s)		16.2			16.2		19.2	19.2				
Actuated g/C Ratio		0.37			0.37		0.44	0.44				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1321			1211		743	720				
v/s Ratio Prot		0.14			c0.20							
v/s Ratio Perm							c0.29	0.26				
v/c Ratio		0.37			0.53		0.65	0.60				
Uniform Delay, d1		9.9			10.6		9.5	9.2				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.5		2.1	1.3				
Delay (s)		10.1			11.1		11.6	10.5				
Level of Service		B			B		B	B				
Approach Delay (s)		10.1			11.1		11.0				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					10.9					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.60							
Actuated Cycle Length (s)					43.4					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					65.2%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2013 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰			↱	↰	↱
Volume (veh/h)	0	3	4	65	13	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	90	32	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	133	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	133	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	858	1042	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	96	32			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	1042	1581	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			16.7%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON Year 2013 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↱			↰↱				↰			↱
Volume (veh/h)	0	4041	17	0	1797	243	0	0	906	0	0	55
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4209	18	0	1853	251	0	0	1007	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2123			4247			4959	6361	1452	3421	6245	783
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2123			4247			4959	6361	1452	3421	6245	783
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	249			34			0	0	1827	1	0	326
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1684	1684	860	741	741	621	1007	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	251	1007	83				
cSH	1700	1700	1700	1700	1700	1700	1827	326				
Volume to Capacity	0.99	0.99	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	89	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.4	19.8				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.4	19.8				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				143.2%	ICU Level of Service		H					
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2013 Alt 1/2/3
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3807	130	0	1834	0	200	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3925	134	0	1910	0	244	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4079		4669	1415	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4079		4669	1415	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			40		1	123	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1570	1570	919	637	637	637	244
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	244
cSH	1700	1700	1700	1700	1700	1700	123
Volume to Capacity	0.92	0.92	0.54	0.37	0.37	0.37	1.99
Queue Length 95th (ft)	0	0	0	0	0	0	494
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	531.9
Lane LOS							F
Approach Delay (s)	0.0			0.0			531.9
Approach LOS							F
Intersection Summary							
Average Delay			20.9				
Intersection Capacity Utilization			97.5%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2013 Alt 1/2/3
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↖	↑↑↑			↑↑	↗
Volume (vph)	0	0	0	962	633	109	86	251		0	0	859
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4636		1770	3539				3528
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4636		1770	3539				3528
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1013	666	115	89	259	0	0	0	886
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	0	2
Lane Group Flow (vph)	0	0	0	506	1276	0	89	259	0	0	0	900
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA				NA
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1432		98	1989				1568
v/s Ratio Prot				c0.33	0.28		c0.05	0.07				c0.26
v/s Ratio Perm												
v/c Ratio				1.08	0.96dl		0.91	0.13				0.57
Uniform Delay, d1				31.1	29.7		42.3	9.3				18.6
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				63.6	7.4		61.4	0.0				0.5
Delay (s)				94.7	37.0		103.7	9.3				19.2
Level of Service				F	D		F	A				B
Approach Delay (s)		0.0			53.3			33.5				19.2
Approach LOS		A			D			C				B
Intersection Summary												
HCM 2000 Control Delay			40.9			HCM 2000 Level of Service		D				
HCM 2000 Volume to Capacity ratio			0.79									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)		17.2				
Intersection Capacity Utilization		135.4%				ICU Level of Service		H				
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2013 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔	
Volume (vph)	7	2107	106	0	0	0	0	337	433	759	1085	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.95	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3130	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3130	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2315	116	0	0	0	0	392	503	791	1130	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2323	87	0	0	0	0	612	248	791	1130	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.2	53.2	44.0	100.0	
Effective Green, g (s)		63.4	63.4					53.2	53.2	44.0	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					951	410	863	2022	
v/s Ratio Prot		c0.46						c0.20		c0.23	0.32	
v/s Ratio Perm			0.06						0.18			
v/c Ratio		1.26	0.15					0.64	0.60	0.92	0.56	
Uniform Delay, d1		55.8	37.7					52.7	51.9	63.7	23.6	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		122.4	0.1					1.5	2.5	14.2	0.3	
Delay (s)		178.2	37.8					54.2	54.4	77.9	23.9	
Level of Service		F	D					D	D	E	C	
Approach Delay (s)		171.5			0.0			54.3			46.2	
Approach LOS		F			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		105.7		HCM 2000 Level of Service						F		
HCM 2000 Volume to Capacity ratio		0.96										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)					14.4			
Intersection Capacity Utilization		135.4%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2013 Alt 1/2/3
Timing Plan: PM PEAK













Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔		↔↔			↔↔
Volume (vph)	164	11	827	653	0	1155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3257			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3257			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	210	14	929	734	0	1242
RTOR Reduction (vph)	2	0	68	0	0	0
Lane Group Flow (vph)	222	0	1595	0	0	1242
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	296		2461			2540
v/s Ratio Prot	c0.14		c0.49			0.37
v/s Ratio Perm						
v/c Ratio	0.75		0.65			0.49
Uniform Delay, d1	61.5		9.4			7.6
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	10.3		1.3			0.7
Delay (s)	71.7		10.7			8.3
Level of Service	E		B			A
Approach Delay (s)	71.7		10.7			8.3
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay		14.1		HCM 2000 Level of Service		
HCM 2000 Volume to Capacity ratio		0.68			B	
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		
Intersection Capacity Utilization		77.2%		ICU Level of Service		
Analysis Period (min)		15			D	
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON Year 2013 Alt 1/2/3

Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	136	9	27	24	9	23	21	1403	46	63	1367	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1723		1770	3523		1770	3488	
Flt Permitted	0.70	0.70	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1237	1235	1583		1467		1770	3523		1770	3488	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	174	12	35	38	14	36	23	1509	49	68	1486	157
RTOR Reduction (vph)	0	0	29	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	92	94	6	0	66	0	23	1557	0	68	1640	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4		4							
Actuated Green, G (s)	18.8	18.8	18.8		18.8		3.0	69.9		8.0	74.9	
Effective Green, g (s)	18.8	18.8	18.8		18.8		3.0	69.9		8.0	74.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.67	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	208	208	266		247		47	2208		126	2343	
v/s Ratio Prot							0.01	0.44		c0.04	c0.47	
v/s Ratio Perm	0.07	c0.08	0.00		0.04							
v/c Ratio	0.44	0.45	0.02		0.27		0.49	0.71		0.54	0.70	
Uniform Delay, d1	41.6	41.7	38.7		40.3		53.5	13.9		50.0	11.3	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.5	1.6	0.0		0.6		7.8	1.0		4.4	1.0	
Delay (s)	43.1	43.3	38.7		40.9		61.3	15.0		54.4	12.3	
Level of Service	D	D	D		D		E	B		D	B	
Approach Delay (s)		42.5			40.9			15.6			14.0	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.1			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		111.5			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		72.3%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON Year 2013 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	7	0	137	0	1218	0	30	1499	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1619			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1619			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	10	0	199	0	1296	0	32	1612	0
RTOR Reduction (vph)	0	0	0	0	162	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	47	0	0	1296	0	32	1612	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			45.7		1.7	51.6	
Effective Green, g (s)					14.1			45.7		1.7	51.6	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					301			2133		39	2409	
v/s Ratio Prot					c0.03			0.37		0.02	c0.46	
v/s Ratio Perm												
v/c Ratio					0.16			0.61		0.82	0.67	
Uniform Delay, d1					25.9			9.4		36.9	7.1	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.2			0.5		76.9	0.7	
Delay (s)					26.1			9.9		113.8	7.8	
Level of Service					C			A		F	A	
Approach Delay (s)		0.0			26.1			9.9			9.9	
Approach LOS		A			C			A			A	
Intersection Summary												
HCM 2000 Control Delay					11.0			HCM 2000 Level of Service			B	
HCM 2000 Volume to Capacity ratio					0.65							
Actuated Cycle Length (s)					75.8			Sum of lost time (s)			18.9	
Intersection Capacity Utilization					58.7%			ICU Level of Service			B	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON Year 2013 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	277	47	113	6	66	400	26	551	2	132	1331	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1517		1855	1512	1770	3539	1352	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1517		1855	1512	1770	3539	1352	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	364	62	149	7	72	435	29	605	2	140	1416	66
RTOR Reduction (vph)	0	0	120	0	0	232	0	0	1	0	2	0
Lane Group Flow (vph)	364	62	29	0	79	203	29	605	1	140	1480	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.8	27.8	27.8		21.7	21.7	2.9	56.6	56.6	16.3	70.0	
Effective Green, g (s)	27.8	27.8	27.8		21.7	21.7	2.9	56.6	56.6	16.3	70.0	
Actuated g/C Ratio	0.20	0.20	0.20		0.15	0.15	0.02	0.40	0.40	0.11	0.49	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	347	365	297		283	231	36	1412	539	203	1733	
v/s Ratio Prot	c0.21	0.03			0.04		0.02	0.17		c0.08	c0.42	
v/s Ratio Perm			0.02			c0.13		0.00				
v/c Ratio	1.05	0.17	0.10		0.28	0.88	0.81	0.43	0.00	0.69	0.85	
Uniform Delay, d1	57.0	47.4	46.7		53.1	58.8	69.2	30.9	25.6	60.3	31.4	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	61.7	0.2	0.1		0.5	29.1	75.6	1.0	0.0	9.4	5.6	
Delay (s)	118.7	47.6	46.9		53.7	87.9	144.7	31.8	25.6	69.7	37.0	
Level of Service	F	D	D		D	F	F	C	C	E	D	
Approach Delay (s)		92.4			82.6			37.0			39.8	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay		54.9								D		
HCM 2000 Volume to Capacity ratio		0.91										
Actuated Cycle Length (s)		141.8				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		77.4%				ICU Level of Service		D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON Year 2013 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	298	470	3	34	170	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	331	522	4	48	193	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	418	28			52	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	418	28			52	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	36	50			88	
cM capacity (veh/h)	518	1047			1554	
Direction, Lane #						
Volume Total	853	52	197			
Volume Left	331	0	193			
Volume Right	522	48	0			
cSH	1140	1700	1554			
Volume to Capacity	0.75	0.03	0.12			
Queue Length 95th (ft)	185	0	11			
Control Delay (s)	16.9	0.0	7.5			
Lane LOS	C		A			
Approach Delay (s)	16.9	0.0	7.5			
Approach LOS	C					
Intersection Summary						
Average Delay		14.4				
Intersection Capacity Utilization		39.4%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2013 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	301	6	585	37	0	1452
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	381	8	650	41	0	1631
RTOR Reduction (vph)	1	0	0	23	0	0
Lane Group Flow (vph)	388	0	650	18	0	1631
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.22		0.18			c0.46
v/s Ratio Perm				0.01		
v/c Ratio	0.46		0.43	0.03		1.07
Uniform Delay, d1	18.5		20.9	17.3		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.2	0.0		45.4
Delay (s)	18.9		21.1	17.3		75.4
Level of Service	B		C	B		E
Approach Delay (s)	18.9		20.9			75.4
Approach LOS	B		C			E

Intersection Summary

HCM 2000 Control Delay	53.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	9.9
Intersection Capacity Utilization	90.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2013 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Volume (veh/h)	4	6	444	3	14	1390
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	516	3	15	1527
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1313	260			520	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1313	260			520	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	95	98			99	
cM capacity (veh/h)	148	739			1043	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	20	344	176	15	764	764
Volume Left	8	0	0	15	0	0
Volume Right	12	0	3	0	0	0
cSH	284	1700	1700	1043	1700	1700
Volume to Capacity	0.07	0.20	0.10	0.01	0.45	0.45
Queue Length 95th (ft)	6	0	0	1	0	0
Control Delay (s)	18.6	0.0	0.0	8.5	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	18.6	0.0		0.1		
Approach LOS	C					

Intersection Summary

Average Delay	0.2		
Intersection Capacity Utilization	48.4%	ICU Level of Service	A
Analysis Period (min)	15		

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2013 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↕	↖	↗	↕
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	28	53	393	11	97	1298
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	30	58	447	12	107	1426
RTOR Reduction (vph)	0	45	0	6	0	0
Lane Group Flow (vph)	30	13	447	6	107	1426
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	6.3	18.3	27.3	27.3	6.9	43.0
Effective Green, g (s)	6.3	13.2	27.3	27.3	6.9	43.0
Actuated g/C Ratio	0.11	0.23	0.47	0.47	0.12	0.73
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	190	356	1648	737	208	2596
v/s Ratio Prot	c0.02	0.01	0.13		0.06	c0.40
v/s Ratio Perm				0.00		
v/c Ratio	0.16	0.04	0.27	0.01	0.51	0.55
Uniform Delay, d1	23.7	17.7	9.6	8.4	24.3	3.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	0.0	0.1	0.0	2.1	0.2
Delay (s)	24.1	17.8	9.7	8.4	26.4	3.7
Level of Service	C	B	A	A	C	A
Approach Delay (s)	19.9		9.6			5.3
Approach LOS	B		A			A
Intersection Summary						
HCM 2000 Control Delay			6.9		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.61			
Actuated Cycle Length (s)			58.6		Sum of lost time (s)	18.1
Intersection Capacity Utilization			47.8%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2013 Alt 1/2/3

Timing Plan: PM PEAK







	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↕	↖	↗	↕
Lane Configurations		↖	↕	↖		↕
Volume (veh/h)	0	21	384	17	0	1326
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	28	441	20	0	1441
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1172	230			461	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1172	230			461	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	185	772			1096	
Direction, Lane #						
Volume Total	28	294	167	721	721	
Volume Left	0	0	0	0	0	
Volume Right	28	0	20	0	0	
cSH	772	1700	1700	1700	1700	
Volume to Capacity	0.04	0.17	0.10	0.42	0.42	
Queue Length 95th (ft)	3	0	0	0	0	
Control Delay (s)	9.8	0.0	0.0	0.0	0.0	
Lane LOS	A					
Approach Delay (s)	9.8	0.0		0.0		
Approach LOS	A					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			40.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2013 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	28	24	378	17	21	1303
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	39	33	402	18	23	1432
RTOR Reduction (vph)	0	30	0	7	0	0
Lane Group Flow (vph)	39	3	402	11	23	1432
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.4	27.2	27.2	1.8	36.5
Effective Green, g (s)	2.6	4.4	27.2	27.2	1.8	36.5
Actuated g/C Ratio	0.06	0.10	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	152	2106	942	69	2826
v/s Ratio Prot	c0.02	0.00	0.11		0.01	c0.40
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.39	0.02	0.19	0.01	0.33	0.51
Uniform Delay, d1	20.8	18.7	4.2	3.8	21.4	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.5	0.1	0.0	0.0	2.8	0.1
Delay (s)	23.3	18.8	4.3	3.8	24.2	1.7
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.2		4.2			2.1
Approach LOS	C		A			A

Intersection Summary





HCM 2000 Control Delay	3.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	45.7	Sum of lost time (s)	14.1
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON Year 2013 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	10	13	80	7	0	168	12	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	10	14	104	9	0	189	13	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	10	14	113	202						
Volume Left (vph)	0	0	104	0						
Volume Right (vph)	0	14	0	13						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.13	0.18						
Capacity (veh/h)	873	1121	860	1121						
Control Delay (s)	7.1	6.2	7.7	6.9						
Approach Delay (s)	6.6		7.7	6.9						
Approach LOS	A		A	A						

Intersection Summary

Delay	7.2		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

NBC Coastal Campus

MILCON Year 2013 Alt 1/2/3

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑		↰	↑	↰	↰	↑	↰			
Volume (vph)	9	174	0	0	77	130	11	303	64	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1303	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	10	198	0	0	89	149	12	333	70	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	118	0	38	0	0	0	0
Lane Group Flow (vph)	10	198	0	0	89	31	12	333	32	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.5	8.5			8.5	8.5	18.9	18.9	18.9			
Effective Green, g (s)	8.5	8.5			8.5	8.5	18.9	18.9	18.9			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	271	388			388	329	819	1639	733			
v/s Ratio Prot		c0.11			0.05		0.01	c0.09				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.51			0.23	0.09	0.01	0.20	0.04			
Uniform Delay, d1	12.9	14.3			13.4	13.0	5.9	6.5	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.1			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.9	15.4			13.7	13.2	5.9	6.5	6.0			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.3			13.4		6.4			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.5			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.30										
Actuated Cycle Length (s)		40.8			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		40.1%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2013 Alt 1/2/3

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: PM PEAK











Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰		↰	↑	↰	↑	↰
Volume (veh/h)	0	0	0	439	0	1461	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	0	0	499	0	1623	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1873	812	1623		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1873	812	1623		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	64	322	397		0		
Direction, Lane #							
Volume Total	0	0	249	249	1082	541	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.15	0.15	0.64	0.32	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			43.7%		ICU Level of Service		
Analysis Period (min)			15				A

NBC Coastal Campus

MILCON Year 2013 Alt 1/2/3

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Timing Plan: PM PEAK











Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	82	0	63	1	1	0	69	303	11	1	1043	181
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3521		1770	3461	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3521		1770	3461	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	109	0	84	2	2	0	76	333	12	1	1159	201
RTOR Reduction (vph)	0	68	0	0	0	0	0	2	0	0	10	0
Lane Group Flow (vph)	109	16	0	2	2	0	76	343	0	1	1350	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	17.8	17.8		0.8	0.8		5.8	52.4		0.8	47.4	
Effective Green, g (s)	17.8	17.8		0.8	0.8		5.8	52.4		0.8	47.4	
Actuated g/C Ratio	0.20	0.20		0.01	0.01		0.06	0.58		0.01	0.52	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	347	310		15	16		113	2034		15	1808	
v/s Ratio Prot	c0.06	0.01		c0.00	0.00		c0.04	0.10		0.00	c0.39	
v/s Ratio Perm												
v/c Ratio	0.31	0.05		0.13	0.12		0.67	0.17		0.07	0.75	
Uniform Delay, d1	31.2	29.6		44.6	44.6		41.5	9.0		44.6	16.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.1		4.0	3.5		14.6	0.0		1.9	1.7	
Delay (s)	31.7	29.7		48.6	48.1		56.2	9.0		46.5	18.7	
Level of Service	C	C		D	D		E	A		D	B	
Approach Delay (s)		30.8			48.4			17.5			18.7	
Approach LOS		C			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		19.7										
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		90.7										
Intersection Capacity Utilization		61.9%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2013 Alt 1/2/3

19: 7th St & SR-75 (Silver Strand Blvd)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	53	1000	54	0	339	32	12	37	4	22	24	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5046			5020		1770	1834			1760	
Flt Permitted	0.95	1.00			1.00		0.71	1.00			0.18	
Satd. Flow (perm)	1770	5046			5020		1318	1834			315	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	60	1136	61	0	361	34	17	53	6	26	28	22
RTOR Reduction (vph)	0	3	0	0	6	0	0	2	0	0	8	0
Lane Group Flow (vph)	60	1194	0	0	389	0	17	57	0	0	68	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1909			2038		256	356			52	
v/s Ratio Prot	c0.03	c0.24			c0.08			c0.03				
v/s Ratio Perm							0.01				c0.21	
v/c Ratio	0.31	0.63			0.19		0.07	0.16			1.30	
Uniform Delay, d1	73.6	45.6			34.4		59.2	60.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.9	1.6			0.2		0.1	0.2			225.5	
Delay (s)	74.5	47.1			34.6		59.3	60.5			300.5	
Level of Service	E	D			C		E	E			F	
Approach Delay (s)		48.4			34.6			60.2			300.5	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		56.5										
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2013 Alt 1/2/3

20: SR-75 (Silver Strand Blvd) & Delaware St

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑
Volume (vph)	0	1029	0	471	374	35	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3494							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3494							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1156	0	501	398	37	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1156	0	501	435	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3175							609
v/s Ratio Prot		c0.23		c0.15	c0.12							
v/s Ratio Perm												0.00
v/c Ratio		0.60		0.26	0.14							0.00
Uniform Delay, d1		45.0		20.4	0.9							34.8
Progression Factor		0.19		1.00	1.00							1.00
Incremental Delay, d2		1.1		0.1	0.0							0.0
Delay (s)		9.7		20.5	0.9							34.9
Level of Service		A		C	A							C
Approach Delay (s)		9.7			11.4		0.0				34.9	
Approach LOS		A			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		10.5										B
HCM 2000 Volume to Capacity ratio		0.43										
Actuated Cycle Length (s)		180.0							22.3			
Intersection Capacity Utilization		42.5%										A
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2013 Alt 1/2/3









21: Dwy/Silver Strand Blvd & Palm Ave

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	3	211	0	0	303	40	0	0	0	103	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	245	0	0	344	45	0	0	0	156	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	390			245			631	642	245	619	619	367
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	390			245			631	642	245	619	619	367
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	61	100	98
cM capacity (veh/h)	1169			1321			385	391	793	400	403	678
Direction, Lane #												
Volume Total	249	390	0	168								
Volume Left	3	0	0	156								
Volume Right	0	45	0	12								
cSH	1169	1321	1700	412								
Volume to Capacity	0.00	0.00	0.00	0.41								
Queue Length 95th (ft)	0	0	0	49								
Control Delay (s)	0.1	0.0	0.0	19.6								
Lane LOS	A			A								
Approach Delay (s)	0.1	0.0	0.0	19.6								
Approach LOS				A								
Intersection Summary												
Average Delay		4.1										
Intersection Capacity Utilization		31.2%										A
Analysis Period (min)		15										







NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2013 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	292	12	84	317	24	14	38	67	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	374	15	94	356	27	25	67	118	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	390	94	383	209	161						
Volume Left (vph)	9	0	94	0	25	61						
Volume Right (vph)	0	15	0	27	118	28						
Hadj (s)	0.53	0.01	0.53	-0.02	-0.28	0.00						
Departure Headway (s)	7.2	6.7	7.1	6.5	6.6	7.0						
Degree Utilization, x	0.02	0.72	0.19	0.70	0.38	0.31						
Capacity (veh/h)	472	520	485	529	480	438						
Control Delay (s)	9.1	23.7	10.5	21.9	13.6	13.2						
Approach Delay (s)	23.4		19.6		13.6	13.2						
Approach LOS	C		C		B	B						
Intersection Summary												
Delay			19.0									
Level of Service			C									
Intersection Capacity Utilization			41.2%		ICU Level of Service				A			
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2013 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	72	419	452	39	52	139
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	74	432	526	45	61	164
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	571				1129	285
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	571				1129	285
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	93				67	77
cM capacity (veh/h)	998				183	711
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	74	432	350	221	225	
Volume Left	74	0	0	0	61	
Volume Right	0	0	0	45	164	
cSH	998	1700	1700	1700	398	
Volume to Capacity	0.07	0.25	0.21	0.13	0.56	
Queue Length 95th (ft)	6	0	0	0	84	
Control Delay (s)	8.9	0.0	0.0	0.0	25.1	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		25.1	
Approach LOS					D	
Intersection Summary						
Average Delay			4.8			
Intersection Capacity Utilization			40.2%		ICU Level of Service	
Analysis Period (min)			15			A

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2013 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	428	29	31	454	3	54	19	22	12	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3536			1754			1841	1583
Flt Permitted	0.47	1.00		0.45	1.00			0.79			0.90	1.00
Satd. Flow (perm)	871	3505		836	3536			1417			1669	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	510	35	34	499	3	66	23	27	16	53	39
RTOR Reduction (vph)	0	7	0	0	1	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	538	0	34	501	0	0	95	0	0	69	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Effective Green, g (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	415	1671		398	1686			309			364	345
v/s Ratio Prot		c0.15			0.14							
v/s Ratio Perm	0.04			0.04			c0.07			0.04		0.01
v/c Ratio	0.08	0.32		0.09	0.30		0.31			0.19		0.02
Uniform Delay, d1	4.3	4.9		4.3	4.8		9.9			9.6		9.3
Progression Factor	1.00	1.00		1.00	1.00		1.00			1.00		1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1		0.6			0.3		0.0
Delay (s)	4.4	5.0		4.4	4.9		10.5			9.9		9.3
Level of Service	A	A		A	A		B			A		A
Approach Delay (s)		5.0			4.9		10.5			9.7		
Approach LOS		A			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		30.2			Sum of lost time (s)		9.2					
Intersection Capacity Utilization		44.6%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												








NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2013 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	476	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	580	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			590		580	580
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			590		580	580
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			985		476	514
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	580	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	485			
Volume to Capacity	0.34	0.01	0.02			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.6			
Lane LOS			B			
Approach Delay (s)	0.0		12.6			
Approach LOS			B			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			35.1%		ICU Level of Service	A
Analysis Period (min)			15			








NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2013 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	1320	118	55	744	125	93	86	59	165	75	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Flt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5022		1770	4976			3342			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5022		1770	4976			3342			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	41	1404	126	56	752	126	102	95	65	185	84	27
RTOR Reduction (vph)	0	6	0	0	12	0	0	18	0	0	4	0
Lane Group Flow (vph)	41	1524	0	56	866	0	0	244	0	0	292	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2112		157	1982			649			658	
v/s Ratio Prot	0.02	c0.30		c0.03	0.17			c0.07			c0.09	
v/s Ratio Perm												
v/c Ratio	0.21	0.72		0.36	0.44			0.38			0.44	
Uniform Delay, d1	72.8	43.4		77.2	39.4			63.0			63.9	
Progression Factor	1.00	1.00		1.28	0.67			1.00			1.00	
Incremental Delay, d2	0.5	1.2		1.3	0.7			0.4			0.5	
Delay (s)	73.3	44.6		99.8	27.3			63.4			64.4	
Level of Service	E	D		F	C			E			E	
Approach Delay (s)		45.4			31.6			63.4			64.4	
Approach LOS		D			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		44.6			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		115.8%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2013 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	19	1590	54	46	1131	52	20	10	33	60	12	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	0.99			0.93			1.00	0.92
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.95	1.00
Satd. Flow (prot)	1770	5060		1770	5052			1703			1770	1718
Flt Permitted	0.95	1.00		0.95	1.00			0.90			0.63	1.00
Satd. Flow (perm)	1770	5060		1770	5052			1555			1178	1718
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	19	1622	55	47	1166	54	24	12	40	71	14	15
RTOR Reduction (vph)	0	2	0	0	2	0	0	24	0	0	13	0
Lane Group Flow (vph)	19	1675	0	47	1218	0	0	52	0	71	16	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4					
Actuated Green, G (s)	12.0	126.8		16.0	130.8			22.0			22.0	
Effective Green, g (s)	12.0	126.8		16.0	130.8			22.0			22.0	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12			0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	118	3564		157	3671			190			143	209
v/s Ratio Prot	0.01	c0.33		c0.03	c0.24							0.01
v/s Ratio Perm								0.03			c0.06	
v/c Ratio	0.16	0.47		0.30	0.33			0.28			0.50	0.08
Uniform Delay, d1	79.3	11.8		76.8	8.9			71.8			73.8	70.0
Progression Factor	1.49	0.13		1.58	0.31			1.00			1.00	1.00
Incremental Delay, d2	0.5	0.3		0.9	0.2			0.8			2.7	0.2
Delay (s)	118.2	1.9		122.6	3.0			72.5			76.5	70.1
Level of Service	F	A		F	A			E			E	E
Approach Delay (s)		3.2			7.4			72.5				74.7
Approach LOS		A			A			E				E
Intersection Summary												
HCM 2000 Control Delay		8.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.46										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		57.7%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2013 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	1480	188	150	1203	78	123	38	122	147	42	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	4999		1770	5085	1583		1794	1583		3371	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	4999		1770	5085	1583		1794	1583		3371	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	27	1574	200	155	1240	80	134	41	133	199	57	26
RTOR Reduction (vph)	0	9	0	0	0	36	0	0	110	0	4	0
Lane Group Flow (vph)	27	1765	0	155	1240	44	0	175	23	0	278	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	12.0	79.7		19.6	87.7	87.7		30.7	30.7		30.7	
Effective Green, g (s)	12.0	79.7		19.6	87.7	87.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.07	0.44		0.11	0.49	0.49		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	118	2213		192	2477	771		305	269		574	
v/s Ratio Prot	0.02	c0.35		c0.09	0.24			c0.10			c0.08	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.23	0.80		0.81	0.50	0.06		0.57	0.08		0.48	
Uniform Delay, d1	79.6	43.2		78.4	31.3	24.3		68.6	62.8		67.5	
Progression Factor	1.07	0.80		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.9	2.8		21.4	0.7	0.1		7.6	0.6		2.9	
Delay (s)	85.8	37.4		99.8	32.0	24.5		76.3	63.4		70.4	
Level of Service	F	D		F	C	C		E	E		E	
Approach Delay (s)		38.1			38.7			70.7			70.4	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		43.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		96.7%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2013 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	1602	47	163	1489	15	37	8	78	22	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5064		1770	5078			1678			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.84	
Satd. Flow (perm)	1770	5064		1770	5078			1516			1510	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85		0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	10	1780	52	172	1567	16	44	9	92	27	12	12
RTOR Reduction (vph)	0	3	0	0	1	0	0	73	0	0	10	0
Lane Group Flow (vph)	10	1829	0	172	1582	0	0	72	0	0	41	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.4		11.1	50.7			17.2			17.2	
Effective Green, g (s)	0.8	40.4		11.1	50.7			17.2			17.2	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2424		232	3050			308			307	
v/s Ratio Prot	0.01	c0.36		c0.10	0.31							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.62	0.75		0.74	0.52			0.23			0.14	
Uniform Delay, d1	41.7	18.0		35.3	9.8			28.1			27.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	57.6	1.4		12.0	0.2			0.4			0.2	
Delay (s)	99.2	19.3		47.3	9.9			28.5			27.7	
Level of Service	F	B		D	A			C			C	
Approach Delay (s)		19.8			13.6			28.5			27.7	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		17.3			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		84.4			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		61.9%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2013 Alt 1/2/3

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↖	→	↗	↖	→	↗	↖	→	↗	↖	→	↗
Lane Configurations	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖
Volume (vph)	181	1547	23	315	1497	533	62	170	512	565	229	218
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	191	1628	24	339	1610	573	66	181	545	614	249	237
RTOR Reduction (vph)	0	1	0	0	0	88	0	26	265	0	2	134
Lane Group Flow (vph)	191	1651	0	339	1610	485	66	351	84	614	271	79
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.3	36.3		45.1	70.1	70.1	8.6	36.4	36.4	11.8	39.6	39.6
Effective Green, g (s)	11.3	36.3		45.1	70.1	70.1	8.6	36.4	36.4	11.8	39.6	39.6
Actuated g/C Ratio	0.07	0.24		0.30	0.46	0.46	0.06	0.24	0.24	0.08	0.26	0.26
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	256	1215		526	2352	732	100	392	361	267	456	393
v/s Ratio Prot	0.06	c0.33		c0.19	c0.32		0.04	c0.22		c0.18	c0.16	
v/s Ratio Perm					0.31			0.06				0.05
v/c Ratio	0.75	1.36		0.64	0.68	0.66	0.90	0.23	2.30	0.59	0.20	
Uniform Delay, d1	68.7	57.6		46.2	32.0	31.5	70.0	55.7	46.3	69.8	48.9	43.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.2	167.0		2.7	0.8	2.3	15.1	22.1	0.3	596.5	2.1	0.3
Delay (s)	79.9	224.6		48.9	32.8	33.8	85.2	77.8	46.6	666.4	51.0	43.9
Level of Service	E	F		D	C	C	F	E	D	F	D	D
Approach Delay (s)		209.6			35.2			64.7			393.1	
Approach LOS		F			D			E			F	

Intersection Summary

HCM 2000 Control Delay	153.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	151.5	Sum of lost time (s)	21.9
Intersection Capacity Utilization	113.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2013 Alt 1/2/3

Timing Plan: PM PEAK

	EBL	EBT	WBT	WBR	SBL	SBR
Movement	↖	→	↗	↖	↖	↖
Lane Configurations	↖	↖	↖	↖	↖	↖
Volume (vph)	0	482	814	0	423	1537
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	542	866	0	465	1689
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	542	866	0	465	1684
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.15	c0.24		0.26	c0.60
v/s Ratio Perm						
v/c Ratio		0.30	1.01		0.70	0.95
Uniform Delay, d1		11.6	30.3		21.2	13.3
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	33.0		3.4	11.3
Delay (s)		11.7	63.3		24.6	24.6
Level of Service		B	E		C	C
Approach Delay (s)		11.7	63.3		24.6	
Approach LOS		B	E		C	

Intersection Summary

HCM 2000 Control Delay	32.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	81.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2013 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑↑				
Volume (vph)	0	899	0	0	505	241	413	2	103	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1614				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1614				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	936	0	0	567	271	444	2	111	0	0	0
RTOR Reduction (vph)	0	0	0	0	99	0	0	41	0	0	0	0
Lane Group Flow (vph)	0	936	0	0	739	0	284	232	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases							2					
Actuated Green, G (s)		18.4			18.4		13.3	13.3				
Effective Green, g (s)		18.4			18.4		13.3	13.3				
Actuated g/C Ratio		0.46			0.46		0.34	0.34				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1640			1560		563	540				
v/s Ratio Prot		0.26			0.22							
v/s Ratio Perm							0.17	0.14				
v/c Ratio		0.57			0.47		0.50	0.43				
Uniform Delay, d1		7.8			7.3		10.6	10.3				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.5			0.2		0.7	0.6				
Delay (s)		8.3			7.5		11.3	10.8				
Level of Service		A			A		B	B				
Approach Delay (s)		8.3			7.5		11.0				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		8.7			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.54										
Actuated Cycle Length (s)		39.7			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		46.2%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												

















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2013 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	3	36	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	3	52	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	73	52	52			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	73	52	52			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	926	1015	1554			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	16	12	52			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	1015	1554	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.3	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.3	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.5				
Intersection Capacity Utilization		17.2%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St







MILCON Year 2014 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1397	34	0	3791	551	0	0	475	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1683	41	0	4121	599	0	0	594	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4740			1744			3129	6463	622	5021	6184	1713
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4740			1744			3129	6463	622	5021	6184	1713
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	84
cM capacity (veh/h)	21			350			4	0	1354	0	0	77
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	673	673	378	1648	1648	1423	594	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	599	594	12				
cSH	1700	1700	1700	1700	1700	1700	1354	77				
Volume to Capacity	0.40	0.40	0.22	0.97	0.97	0.84	0.44	0.16				
Queue Length 95th (ft)	0	0	0	0	0	0	57	13				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	60.4				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	60.4				
Approach LOS							A	F				
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			100.6%			ICU Level of Service		G				
Analysis Period (min)			15									

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2014 Alt 1/2/3
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑↓			↑↑↑↑		↑↑	
Volume (veh/h)	1258	201	0	3691	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1430	228	0	4101	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1678		2951	631	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1678		2951	631	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	39	
cM capacity (veh/h)			372		11	410	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	572	572	514	1367	1367	1367	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	228	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	410
Volume to Capacity	0.34	0.34	0.30	0.80	0.80	0.80	0.61
Queue Length 95th (ft)	0	0	0	0	0	0	99
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	26.7
Lane LOS							D
Approach Delay (s)	0.0			0.0			26.7
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			86.2%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2014 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1557	1942	342	105	102	0	0	277	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4640		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4640		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1674	2088	368	142	138	0	0	318	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1021	3101	0	142	138	0	0	330	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.6			21.4	
Effective Green, g (s)				131.2	131.2		20.0	46.6			21.4	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1054	3214		186	870			396	
v/s Ratio Prot				c0.67	0.67		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.97	0.96		0.76	0.16			0.83	
Uniform Delay, d1				27.2	27.0		82.4	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				20.3	9.1		16.8	0.1			14.0	
Delay (s)				47.5	36.1		99.2	56.1			96.3	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			38.9			78.0			96.3	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		45.2		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		189.4		Sum of lost time (s)						16.8		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2014 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	582	64	0	0	0	0	197	198	450	1440	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3262	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3262	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	633	70	0	0	0	0	229	215	489	1500	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	18	49	0	0	0
Lane Group Flow (vph)	0	634	41	0	0	0	0	288	89	489	1500	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1178	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.42	
v/s Ratio Perm		0.12	0.03						0.06			
v/c Ratio		0.36	0.07					0.24	0.17	0.69	0.73	
Uniform Delay, d1		41.5	37.2					38.4	37.3	63.2	25.9	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.3	
Delay (s)		41.6	37.3					38.5	37.5	66.2	27.2	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.2			36.8	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.0		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)						14.4		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2014 Alt 1/2/3

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Timing Plan: AM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	207	6	1095	576	0	1060
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3315			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3315			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	241	7	1177	619	0	1116
RTOR Reduction (vph)	2	0	54	0	0	0
Lane Group Flow (vph)	246	0	1742	0	0	1116
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	16.5		42.2			42.2
Effective Green, g (s)	16.5		42.2			42.2
Actuated g/C Ratio	0.24		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	387		2063			2092
v/s Ratio Prot	c0.15		c0.53			0.33
v/s Ratio Perm						
v/c Ratio	0.64		0.84			0.53
Uniform Delay, d1	23.0		10.2			7.2
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	3.4		3.4			0.3
Delay (s)	26.4		13.6			7.5
Level of Service	C		B			A
Approach Delay (s)	26.4		13.6			7.5
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			12.4		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.83			
Actuated Cycle Length (s)			67.8		Sum of lost time (s)	12.1
Intersection Capacity Utilization			74.8%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2014 Alt 1/2/3

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	45	2	9	7	0	5	18	1300	24	38	1195	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1708		1770	3529		1770	3524	
Frt Permitted	0.74	0.78	1.00		0.87		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1312	1384	1583		1525		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	52	2	10	14	0	10	21	1548	29	41	1299	38
RTOR Reduction (vph)	0	0	8	0	20	0	0	1	0	0	1	0
Lane Group Flow (vph)	27	27	2	0	4	0	21	1576	0	41	1336	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	14.7	14.7	14.7		14.7		2.5	59.4		3.9	60.8	
Effective Green, g (s)	14.7	14.7	14.7		14.7		2.5	59.4		3.9	60.8	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.64		0.04	0.66	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	209	220	252		243		48	2276		74	2326	
v/s Ratio Prot							0.01	c0.45		c0.02	0.38	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.13	0.12	0.01		0.02		0.44	0.69		0.55	0.57	
Uniform Delay, d1	33.2	33.2	32.6		32.6		44.1	10.5		43.2	8.6	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		6.3	0.9		8.7	0.3	
Delay (s)	33.5	33.4	32.6		32.6		50.4	11.4		51.9	8.9	
Level of Service	C	C	C		C		D	B		D	A	
Approach Delay (s)		33.3			32.6			11.9			10.2	
Approach LOS		C			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			11.8		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.58									
Actuated Cycle Length (s)			92.1		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			54.6%		ICU Level of Service			A				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2014 Alt 1/2/3

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	21	0	1247	7	408	779	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	32	0	1370	8	416	795	0
RTOR Reduction (vph)	0	0	0	0	29	0	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1370	4	416	795	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.39		c0.24	0.22	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.82	0.01	0.68	0.27	
Uniform Delay, d1					60.6			33.3	20.4	40.7	2.3	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			3.3	0.0	3.1	0.2	
Delay (s)					60.6			15.6	20.4	43.8	2.5	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			15.6			16.7	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		16.7			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		75.9%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2014 Alt 1/2/3







8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	48	13	1	62	123	131	1092	5	278	241	298
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.98	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3192	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3192	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	45	74	20	1	70	140	146	1213	6	320	277	343
RTOR Reduction (vph)	0	0	19	0	0	118	0	0	3	0	155	0
Lane Group Flow (vph)	45	74	1	0	71	22	146	1213	3	320	465	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1047	
v/s Ratio Prot	0.03	c0.04			c0.04		0.08	c0.34		c0.18	0.15	
v/s Ratio Perm			0.00			0.01			0.00			
v/c Ratio	0.37	0.58	0.01		0.24	0.09	0.27	0.77	0.00	0.94	0.44	
Uniform Delay, d1	64.5	65.5	62.9		53.4	52.1	37.6	33.9	22.3	57.7	38.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.92	
Incremental Delay, d2	1.9	6.2	0.1		0.4	0.2	0.3	3.7	0.0	32.5	1.3	
Delay (s)	66.4	71.7	63.0		53.8	52.3	37.8	37.6	22.3	87.8	36.5	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		68.7			52.8			37.6			53.9	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			46.2		HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio			0.69									
Actuated Cycle Length (s)			145.0		Sum of lost time (s)				19.4			
Intersection Capacity Utilization			81.3%		ICU Level of Service				D			
Analysis Period (min)			15									
c Critical Lane Group												







NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON Year 2014 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	21	190	4	83	312	8
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	25	224	5	104	339	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	744	57			109	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	744	57			109	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	78			77	
cM capacity (veh/h)	295	1009			1482	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	248	109	348			
Volume Left	25	0	339			
Volume Right	224	104	0			
cSH	1121	1700	1482			
Volume to Capacity	0.22	0.06	0.23			
Queue Length 95th (ft)	21	0	22			
Control Delay (s)	10.4	0.0	8.0			
Lane LOS	B		A			
Approach Delay (s)	10.4	0.0	8.0			
Approach LOS	B					
Intersection Summary						
Average Delay			7.6			
Intersection Capacity Utilization			34.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2014 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	24	3	1239	391	0	217
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.98		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.98		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1728		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1728		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	32	4	1304	412	0	339
RTOR Reduction (vph)	4	0	0	112	0	0
Lane Group Flow (vph)	32	0	1304	300	0	339
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	1.9		31.6	31.6		31.6
Effective Green, g (s)	1.9		31.6	31.6		31.6
Actuated g/C Ratio	0.04		0.73	0.73		0.73
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	75		2576	1106		2576
v/s Ratio Prot	c0.02		c0.37			0.10
v/s Ratio Perm				0.20		
v/c Ratio	0.43		0.51	0.27		0.13
Uniform Delay, d1	20.2		2.5	2.0		1.8
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	3.9		0.2	0.1		0.0
Delay (s)	24.1		2.7	2.1		1.8
Level of Service	C		A	A		A
Approach Delay (s)	24.1		2.6			1.8
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			2.8		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.50			
Actuated Cycle Length (s)			43.4		Sum of lost time (s)	9.9
Intersection Capacity Utilization			46.7%		ICU Level of Service	A
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2014 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↑↑
Volume (veh/h)	0	14	2025	5	5	244
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	24	2177	5	7	359
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2374	1091			2183	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2374	1091			2183	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	88			97	
cM capacity (veh/h)	28	210			240	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	24	1452	731	7	179	179
Volume Left	0	0	0	7	0	0
Volume Right	24	0	5	0	0	0
cSH	210	1700	1700	240	1700	1700
Volume to Capacity	0.12	0.85	0.43	0.03	0.11	0.11
Queue Length 95th (ft)	10	0	0	2	0	0
Control Delay (s)	24.4	0.0	0.0	20.5	0.0	0.0
Lane LOS	C			C		
Approach Delay (s)	24.4	0.0		0.4		
Approach LOS	C					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		66.1%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2014 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	16	82	1943	11	36	207
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	20	101	2089	12	52	300
RTOR Reduction (vph)	0	6	0	1	0	0
Lane Group Flow (vph)	20	95	2089	11	52	300
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.5	25.6	68.3	68.3	5.0	82.1
Effective Green, g (s)	15.5	20.5	68.3	68.3	5.0	82.1
Actuated g/C Ratio	0.14	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	256	303	2261	1011	82	2717
v/s Ratio Prot	0.01	c0.06	c0.59		c0.03	0.08
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.31	0.92	0.01	0.63	0.11
Uniform Delay, d1	39.5	37.2	17.0	7.0	50.1	3.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	7.0	0.0	14.9	0.0
Delay (s)	39.7	37.8	24.0	7.0	65.0	3.2
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.1		23.9			12.3
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay		23.0		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio		0.80				
Actuated Cycle Length (s)		106.9		Sum of lost time (s)		18.1
Intersection Capacity Utilization		69.6%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2014 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↑↑			↑↑
Volume (veh/h)	0	30	1922	24	0	222
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	48	2023	25	0	300
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2186	1024			2048	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2186	1024			2048	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	79			100	
cM capacity (veh/h)	39	233			271	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	48	1349	700	150	150	
Volume Left	0	0	0	0	0	
Volume Right	48	0	25	0	0	
cSH	233	1700	1700	1700	1700	
Volume to Capacity	0.21	0.79	0.41	0.09	0.09	
Queue Length 95th (ft)	19	0	0	0	0	
Control Delay (s)	24.5	0.0	0.0	0.0	0.0	
Lane LOS	C					
Approach Delay (s)	24.5	0.0		0.0		
Approach LOS	C					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		63.9%		ICU Level of Service	B	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2014 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	9	6	1946	30	14	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	15	10	2027	31	17	247
RTOR Reduction (vph)	0	6	0	7	0	0
Lane Group Flow (vph)	15	4	2027	24	17	247
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.9	59.9	2.0	69.4
Effective Green, g (s)	1.4	3.4	59.9	59.9	2.0	69.4
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2738	1225	45	3173
v/s Ratio Prot	c0.01	0.00	c0.57		c0.01	0.07
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.47	0.06	0.74	0.02	0.38	0.08
Uniform Delay, d1	37.6	35.5	4.6	2.0	37.1	0.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.5	0.4	1.1	0.0	5.2	0.0
Delay (s)	48.1	35.8	5.7	2.0	42.3	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	43.2		5.7			3.2
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		5.8		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.72				
Actuated Cycle Length (s)		77.4		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		66.6%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2014 Alt 1/2/3

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	43	1	0	42	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	80	2	0	67	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	81	67	3					
Volume Left (vph)	0	0	80	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	836	1121	817	843	1121					
Control Delay (s)	7.2	6.2	7.7	7.5	6.2					
Approach Delay (s)	7.2		7.7	7.4						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.1%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2014 Alt 1/2/3

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	35	0	0	30	214	3	1760	48	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1359	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	47	0	0	42	297	3	1872	51	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	21	0	0	0	0
Lane Group Flow (vph)	3	47	0	0	42	241	3	1872	30	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	15.6	15.6			15.6	15.6	46.8	42.7	42.7			
Effective Green, g (s)	15.6	15.6			15.6	15.6	46.8	42.7	42.7			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.60	0.60			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	295	405			405	344	1155	2107	942			
v/s Ratio Prot		0.03			0.02		0.00	c0.53				
v/s Ratio Perm	0.00					c0.15			0.02			
v/c Ratio	0.01	0.12			0.10	0.70	0.00	0.89	0.03			
Uniform Delay, d1	22.0	22.5			22.5	25.9	4.3	12.5	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	6.1	0.0	5.0	0.0			
Delay (s)	22.0	22.6			22.6	32.0	4.3	17.5	6.0			
Level of Service	C	C			C	C	A	B	A			
Approach Delay (s)		22.6			30.8			17.1			0.0	
Approach LOS		C			C			B			A	
Intersection Summary												
HCM 2000 Control Delay			19.3					HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio			0.84									
Actuated Cycle Length (s)			71.7				Sum of lost time (s)		13.4			
Intersection Capacity Utilization			81.5%				ICU Level of Service		D			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2014 Alt 1/2/3

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: AM PEAK






















							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	56	1570	0	170	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	58	1635	0	215	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None		None		
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1150	108	215		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1150	108	215		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	96		0		
cM capacity (veh/h)	183	926	1352		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	58	818	818	143	72	0
Volume Left	0	58	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1352	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.04	0.48	0.48	0.08	0.04	0.00
Queue Length 95th (ft)	0	3	0	0	0	0	0
Control Delay (s)	0.0	7.8	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	A					
Approach Delay (s)	0.0	0.3			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay		0.2					
Intersection Capacity Utilization		49.9%		ICU Level of Service		A	
Analysis Period (min)		15					

NBC Coastal Campus

MILCON Year 2014 Alt 1/2/3

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	373	0	37	2	1	2	24	1513	0	0	127	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3407	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3407	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	424	0	42	6	3	6	25	1593	0	0	184	61
RTOR Reduction (vph)	0	30	0	0	6	0	0	0	0	0	27	0
Lane Group Flow (vph)	424	12	0	6	3	0	25	1593	0	0	218	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	24.7	24.7		1.7	1.7		1.9	43.6			37.5	
Effective Green, g (s)	24.7	24.7		1.7	1.7		1.9	43.6			37.5	
Actuated g/C Ratio	0.29	0.29		0.02	0.02		0.02	0.51			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	516	461		35	33		39	1821			1508	
v/s Ratio Prot	c0.24	0.01		c0.00	0.00		0.01	c0.45			0.06	
v/s Ratio Perm												
v/c Ratio	0.82	0.03		0.17	0.09		0.64	0.87			0.14	
Uniform Delay, d1	27.9	21.4		40.8	40.7		41.1	18.1			14.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	10.2	0.0		2.3	1.2		30.7	5.0			0.0	
Delay (s)	38.1	21.4		43.1	42.0		71.8	23.2			14.1	
Level of Service	D	C		D	D		E	C			B	
Approach Delay (s)		36.6			42.4			23.9			14.1	
Approach LOS		D			D			C			B	
Intersection Summary												
HCM 2000 Control Delay		25.5		HCM 2000 Level of Service				C				
HCM 2000 Volume to Capacity ratio		0.89										
Actuated Cycle Length (s)		84.7		Sum of lost time (s)				18.9				
Intersection Capacity Utilization		77.6%		ICU Level of Service				D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2014 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰↰↰	↰↰↰		↰	↰		↰	↰↰	↰
Volume (vph)	7	174	13	0	1378	16	36	21	1	18	39	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5031			5076		1770	1852			1732	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.20	
Satd. Flow (perm)	1770	5031			5076		1246	1852			357	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	8	196	15	0	1514	18	43	25	1	23	51	64
RTOR Reduction (vph)	0	5	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	8	206	0	0	1531	0	43	25	0	0	121	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2061		242	360			59	
v/s Ratio Prot	c0.00	0.04			c0.30			0.01				
v/s Ratio Perm							c0.03				c0.34	
v/c Ratio	0.04	0.11			0.74		0.18	0.07			2.04	
Uniform Delay, d1	71.4	36.3			45.5		60.5	59.2			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			2.3		0.4	0.1			522.7	
Delay (s)	71.5	36.4			47.8		60.8	59.3			597.7	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		37.7			47.8			60.3			597.7	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		85.8			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		65.4%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON Year 2014 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	191	0	374	1386	8	0	0	0	0	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	233	0	398	1474	9	0	0	0	0	0	16
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	10
Lane Group Flow (vph)	0	233	0	398	1483	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.05		0.12	c0.42							
v/s Ratio Perm												0.00
v/c Ratio		0.12		0.23	0.46							0.01
Uniform Delay, d1		36.5		25.5	1.3							34.9
Progression Factor		0.43		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.1	0.1							0.0
Delay (s)		15.7		25.5	1.4							34.9
Level of Service		B		C	A							C
Approach Delay (s)		15.7			6.5			0.0				34.9
Approach LOS		B			A			A				C
Intersection Summary												
HCM 2000 Control Delay		7.7			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.48										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		60.2%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

MILCON Year 2014 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	9	231	0	0	127	103	0	0	0	47	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	11	275	0	0	137	111	0	0	0	52	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	247			275			493	544	275	488	488	192
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	247			275			493	544	275	488	488	192
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1319			1288			481	443	764	487	476	850
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	286	247	0	56								
Volume Left	11	0	0	52								
Volume Right	0	111	0	4								
cSH	1319	1288	1700	504								
Volume to Capacity	0.01	0.00	0.00	0.11								
Queue Length 95th (ft)	1	0	0	9								
Control Delay (s)	0.4	0.0	0.0	13.0								
Lane LOS	A			A	B							
Approach Delay (s)	0.4	0.0	0.0	13.0								
Approach LOS				A	B							
Intersection Summary												
Average Delay				1.4								
Intersection Capacity Utilization				29.4%								A
Analysis Period (min)				15								







NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2014 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	270	4	26	207	24	11	14	125	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	314	5	28	223	26	14	17	154	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	319	28	248	185	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	154	18						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.0	5.5	5.1	5.6						
Degree Utilization, x	0.01	0.48	0.05	0.38	0.26	0.07						
Capacity (veh/h)	579	636	567	632	638	551						
Control Delay (s)	7.9	12.3	8.1	10.5	9.8	9.1						
Approach Delay (s)	12.2		10.3		9.8	9.1						
Approach LOS	B		B		A	A						
Intersection Summary												
Delay				10.9								
Level of Service				B								
Intersection Capacity Utilization				37.2%								A
Analysis Period (min)				15								













NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2014 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	223	423	331	151	17	68
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	282	535	404	184	24	96
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	588				1596	294
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	588				1596	294
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	71				66	86
cM capacity (veh/h)	983				69	702
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	282	535	269	319	120	
Volume Left	282	0	0	0	24	
Volume Right	0	0	0	184	96	
cSH	983	1700	1700	1700	249	
Volume to Capacity	0.29	0.31	0.16	0.19	0.48	
Queue Length 95th (ft)	30	0	0	0	60	
Control Delay (s)	10.1	0.0	0.0	0.0	32.2	
Lane LOS	B				D	
Approach Delay (s)	3.5		0.0		32.2	
Approach LOS					D	
Intersection Summary						
Average Delay			4.4			
Intersection Capacity Utilization			41.5%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2014 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	416	15	26	332	1900	65	35	1900	1	21	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1720			1858	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.88			0.98	1.00
Satd. Flow (perm)	933	3521		824	3539			1534			1830	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	540	19	34	431	0	98	53	121	2	36	47
RTOR Reduction (vph)	0	4	0	0	0	0	0	33	0	0	0	30
Lane Group Flow (vph)	21	555	0	34	431	0	0	239	0	0	38	17
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.1	13.1		13.1	13.1			13.1			13.1	13.1
Effective Green, g (s)	13.1	13.1		13.1	13.1			13.1			13.1	13.1
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	345	1302		304	1309			567			677	585
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.16			0.02	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.42			0.06	0.03
Uniform Delay, d1	7.2	8.3		7.3	8.0			8.3			7.2	7.1
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.1			0.5			0.0	0.0
Delay (s)	7.3	8.6		7.5	8.1			8.8			7.2	7.1
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.5			8.1			8.8			7.2	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.4		HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio			0.42									
Actuated Cycle Length (s)			35.4		Sum of lost time (s)			9.2				
Intersection Capacity Utilization			46.3%		ICU Level of Service			A				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2014 Alt 1/2/3
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	500	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	543	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			548		543	543
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			548		543	543
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1022		500	539
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	543	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	528			
Volume to Capacity	0.32	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	11.9			
Lane LOS			B			
Approach Delay (s)	0.0		11.9			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.3%		ICU Level of Service	A
Analysis Period (min)			15			








NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2014 Alt 1/2/3
Timing Plan: AM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↙
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑	↘	↗	↑↑↑		↗	↑↑	↘	↗	↑↑	↘
Volume (vph)	20	625	33	22	1536	42	156	35	49	86	44	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5047		1770	5065			3323			3365	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5047		1770	5065			3323			3365	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	24	744	39	24	1688	46	188	42	59	105	54	28
RTOR Reduction (vph)	0	3	0	0	1	0	0	13	0	0	8	0
Lane Group Flow (vph)	24	780	0	24	1733	0	0	276	0	0	179	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2234		118	2158			646			654	
v/s Ratio Prot	0.01	c0.15		c0.01	c0.34			c0.08			c0.05	
v/s Ratio Perm												
v/c Ratio	0.16	0.35		0.20	0.80			0.43			0.27	
Uniform Delay, d1	76.7	33.1		79.5	45.1			63.7			61.7	
Progression Factor	1.00	1.00		1.32	0.69			1.00			1.00	
Incremental Delay, d2	0.5	0.4		0.7	2.9			0.5			0.2	
Delay (s)	77.2	33.5		105.3	34.1			64.2			61.9	
Level of Service	E	C		F	C			E			E	
Approach Delay (s)		34.8			35.1			64.2			61.9	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		39.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		67.7%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2014 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	847	33	19	1703	11	17	4	29	53	10	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5081			1686		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.67	1.00	
Satd. Flow (perm)	1770	5057		1770	5081			1550		1247	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	952	37	22	1935	12	23	5	40	76	14	20
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	17	0
Lane Group Flow (vph)	2	987	0	22	1947	0	0	40	0	76	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases						4				8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			258		207	283	
v/s Ratio Prot	0.00	0.20		c0.01	c0.38						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.28		0.19	0.52			0.15		0.37	0.06	
Uniform Delay, d1	86.1	10.9		79.4	10.5			64.1		66.6	63.1	
Progression Factor	1.69	0.28		1.40	0.29			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.6	0.4			0.3		1.1	0.1	
Delay (s)	146.0	3.3		111.4	3.4			64.4		67.7	63.2	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.6			4.7			64.4			66.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		7.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.49										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		66.6%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2014 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	915	61	92	1564	50	139	18	87	162	34	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.91	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5037		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5037		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1028	69	111	1884	60	156	20	98	216	45	19
RTOR Reduction (vph)	0	4	0	0	0	28	0	0	81	0	3	0
Lane Group Flow (vph)	3	1093	0	111	1884	32	0	176	17	0	277	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.22		c0.06	c0.37			c0.10			c0.08	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.49		0.57	0.70	0.04		0.57	0.06		0.48	
Uniform Delay, d1	86.2	35.7		75.9	31.4	20.1		68.4	62.3		67.2	
Progression Factor	1.21	0.63		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.8		3.7	1.5	0.1		2.6	0.1		0.6	
Delay (s)	105.2	23.4		79.6	32.9	20.2		71.0	62.4		67.8	
Level of Service	F	C		E	C	C		E	E		E	
Approach Delay (s)		23.6			35.0			67.9			67.8	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		36.5			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		84.1%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2014 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Volume (vph)	13	1171	24	42	1689	11	15	6	47	36	2	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5080			1670			1723	
Flt Permitted	0.95	1.00		0.95	1.00			0.93			0.78	
Satd. Flow (perm)	1770	5070		1770	5080			1567			1386	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	14	1273	26	49	1964	13	18	7	56	47	3	26
RTOR Reduction (vph)	0	1	0	0	0	0	0	44	0	0	20	0
Lane Group Flow (vph)	14	1298	0	49	1977	0	0	37	0	0	56	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.3		2.9	39.5			15.0			15.0	
Effective Green, g (s)	0.7	37.3		2.9	39.5			15.0			15.0	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2667		72	2830			331			293	
v/s Ratio Prot	0.01	0.26		c0.03	c0.39							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.82	0.49		0.68	0.70			0.11			0.19	
Uniform Delay, d1	35.0	10.7		33.5	11.4			22.6			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	132.1	0.1		23.3	0.8			0.1			0.3	
Delay (s)	167.1	10.8		56.8	12.1			22.7			23.3	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		12.5			13.2			22.7			23.3	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		13.4			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		70.9			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		51.5%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2014 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Volume (vph)	88	1184	28	236	1632	208	71	70	746	227	89	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	102	1377	33	251	1736	221	79	78	829	270	106	88
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	183	0	3	56
Lane Group Flow (vph)	102	1408	0	251	1736	154	79	306	265	270	112	23
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.1	30.1	10.4	33.8	33.8
Effective Green, g (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.1	30.1	10.4	33.8	33.8
Actuated g/C Ratio	0.05	0.31		0.15	0.41	0.41	0.06	0.26	0.26	0.09	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	178	1547		274	2076	646	102	403	391	308	511	439
v/s Ratio Prot	0.03	c0.28		c0.14	0.34		0.04	c0.20		c0.08	c0.06	
v/s Ratio Perm						0.10			0.18			0.02
v/c Ratio	0.57	0.91		0.92	0.84	0.24	0.77	0.76	0.68	0.88	0.22	0.05
Uniform Delay, d1	53.5	38.6		48.1	30.7	22.4	53.7	39.4	38.4	52.0	30.9	29.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.4	8.4		32.8	3.1	0.2	29.9	8.0	4.6	23.2	0.2	0.1
Delay (s)	58.0	47.0		80.9	33.8	22.6	83.6	47.4	43.0	75.2	31.1	29.4
Level of Service	E	D		F	C	C	F	D	D	E	C	C
Approach Delay (s)		47.7			38.1			48.3			56.5	
Approach LOS		D			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		44.5			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		115.6			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		80.3%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2014 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	275	1056	0	150	1022
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	309	1135	0	167	1136
RTOR Reduction (vph)	0	0	0	0	0	8
Lane Group Flow (vph)	0	309	1135	0	167	1128
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.32		0.09	c0.40
v/s Ratio Perm						
v/c Ratio		0.11	0.97		0.81	0.74
Uniform Delay, d1		2.5	26.4		34.4	13.6
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	19.9		20.1	1.9
Delay (s)		2.5	46.4		54.5	15.5
Level of Service		A	D		D	B
Approach Delay (s)		2.5	46.4		20.5	
Approach LOS		A	D		C	
Intersection Summary						
HCM 2000 Control Delay			29.2		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.88			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			58.0%		ICU Level of Service	B
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2014 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	426	0	0	407	507	747	1	139	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3245		1681	1630				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3245		1681	1630				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	490	0	0	442	551	812	1	151	0	0	0
RTOR Reduction (vph)	0	0	0	0	345	0	0	31	0	0	0	0
Lane Group Flow (vph)	0	490	0	0	648	0	487	446	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.3			16.3		19.2	19.2				
Effective Green, g (s)		16.3			16.3		19.2	19.2				
Actuated g/C Ratio		0.37			0.37		0.44	0.44				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1326			1215		741	719				
v/s Ratio Prot		0.14			c0.20							
v/s Ratio Perm							c0.29	0.27				
v/c Ratio		0.37			0.53		0.66	0.62				
Uniform Delay, d1		9.9			10.6		9.6	9.3				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.5		2.1	1.6				
Delay (s)		10.0			11.1		11.7	10.9				
Level of Service		B			B		B	B				
Approach Delay (s)		10.0			11.1		11.3				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					11.0					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.60							
Actuated Cycle Length (s)					43.5					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					65.8%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2014 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰			↱	↰	↱
Volume (veh/h)	0	3	4	65	13	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	90	32	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	133	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	133	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	858	1042	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	96	32			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	1042	1581	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			16.7%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON Year 2014 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↱			↰↱				↰			↱
Volume (veh/h)	0	4042	17	0	1797	243	0	0	907	0	0	55
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4210	18	0	1853	251	0	0	1008	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2123			4248			4960	6362	1452	3421	6246	783
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2123			4248			4960	6362	1452	3421	6246	783
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	249			34			0	0	1828	1	0	326
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1684	1684	860	741	741	621	1008	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	251	1008	83				
cSH	1700	1700	1700	1700	1700	1700	1828	326				
Volume to Capacity	0.99	0.99	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	89	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.4	19.8				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.4	19.8				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				143.2%	ICU Level of Service		H					
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2014 Alt 1/2/3
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3808	130	0	1834	0	200	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3926	134	0	1910	0	244	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4080		4670	1416	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4080		4670	1416	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			40		1	123	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1570	1570	919	637	637	637	244
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	244
cSH	1700	1700	1700	1700	1700	1700	123
Volume to Capacity	0.92	0.92	0.54	0.37	0.37	0.37	1.99
Queue Length 95th (ft)	0	0	0	0	0	0	495
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	532.4
Lane LOS							F
Approach Delay (s)	0.0			0.0			532.4
Approach LOS							F
Intersection Summary							
Average Delay			20.9				
Intersection Capacity Utilization			97.5%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2014 Alt 1/2/3
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↖	↑↑↑			↑↑	↗
Volume (vph)	0	0	0	963	633	109	86	251		0	0	860
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4636		1770	3539				3528
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4636		1770	3539				3528
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1014	666	115	89	259	0	0	0	887
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	0	2
Lane Group Flow (vph)	0	0	0	507	1276	0	89	259	0	0	0	901
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA				NA
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1432		98	1989				1568
v/s Ratio Prot				c0.33	0.28		c0.05	0.07				c0.26
v/s Ratio Perm												
v/c Ratio				1.08	0.96dl		0.91	0.13				0.57
Uniform Delay, d1				31.1	29.7		42.3	9.3				18.7
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				64.3	7.4		61.4	0.0				0.5
Delay (s)				95.4	37.0		103.7	9.3				19.2
Level of Service				F	D		F	A				B
Approach Delay (s)		0.0			53.5			33.5				19.2
Approach LOS		A			D			C				B
Intersection Summary												
HCM 2000 Control Delay			41.0			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			0.79									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			17.2			
Intersection Capacity Utilization		135.5%				ICU Level of Service			H			
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2014 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔	
Volume (vph)	7	2107	106	0	0	0	0	337	433	759	1086	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.95	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3130	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3130	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2315	116	0	0	0	0	392	503	791	1131	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2323	87	0	0	0	0	612	248	791	1131	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.2	53.2	44.0	100.0	
Effective Green, g (s)		63.4	63.4					53.2	53.2	44.0	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					951	410	863	2022	
v/s Ratio Prot		c0.46						c0.20		c0.23	0.32	
v/s Ratio Perm			0.06						0.18			
v/c Ratio		1.26	0.15					0.64	0.60	0.92	0.56	
Uniform Delay, d1		55.8	37.7					52.7	51.9	63.7	23.6	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		122.4	0.1					1.5	2.5	14.2	0.3	
Delay (s)		178.2	37.8					54.2	54.4	77.9	24.0	
Level of Service		F	D					D	D	E	C	
Approach Delay (s)		171.5			0.0			54.3			46.2	
Approach LOS		F			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		105.7									F	
HCM 2000 Volume to Capacity ratio		0.96										
Actuated Cycle Length (s)		175.0							14.4			
Intersection Capacity Utilization		135.5%							H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2014 Alt 1/2/3
Timing Plan: PM PEAK













Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔		↔↔			↔↔
Volume (vph)	166	11	834	658	0	1163
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1584		3257			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1584		3257			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	213	14	937	739	0	1251
RTOR Reduction (vph)	2	0	68	0	0	0
Lane Group Flow (vph)	225	0	1608	0	0	1251
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	297		2461			2540
v/s Ratio Prot	c0.14		c0.49			0.37
v/s Ratio Perm						
v/c Ratio	0.76		0.65			0.49
Uniform Delay, d1	61.6		9.4			7.6
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	10.6		1.4			0.7
Delay (s)	72.2		10.8			8.3
Level of Service	E		B			A
Approach Delay (s)	72.2		10.8			8.3
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay		14.2				B
HCM 2000 Volume to Capacity ratio		0.69				
Actuated Cycle Length (s)		160.0				12.1
Intersection Capacity Utilization		77.6%				D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON Year 2014 Alt 1/2/3

Timing Plan: PM PEAK










Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	137	9	27	24	9	23	21	1413	47	64	1377	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1723		1770	3522		1770	3489	
Flt Permitted	0.70	0.70	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1235	1232	1583		1466		1770	3522		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	176	12	35	38	14	36	23	1519	51	70	1497	158
RTOR Reduction (vph)	0	0	29	0	22	0	0	1	0	0	3	0
Lane Group Flow (vph)	93	95	6	0	66	0	23	1569	0	70	1652	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4		4							
Actuated Green, G (s)	18.8	18.8	18.8		18.8		3.0	70.8		8.0	75.8	
Effective Green, g (s)	18.8	18.8	18.8		18.8		3.0	70.8		8.0	75.8	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.67	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	206	206	264		245		47	2218		125	2352	
v/s Ratio Prot							0.01	0.45		c0.04	c0.47	
v/s Ratio Perm	0.08	c0.08	0.00		0.04							
v/c Ratio	0.45	0.46	0.02		0.27		0.49	0.71		0.56	0.70	
Uniform Delay, d1	42.2	42.2	39.1		40.8		53.9	13.9		50.5	11.3	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.6	1.6	0.0		0.6		7.8	1.1		5.6	1.0	
Delay (s)	43.7	43.9	39.2		41.4		61.8	14.9		56.1	12.3	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.1			41.4			15.6			14.1	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.2			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		112.4			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		72.6%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON Year 2014 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	7	0	138	0	1228	0	30	1511	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1619			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1619			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	10	0	200	0	1306	0	32	1625	0
RTOR Reduction (vph)	0	0	0	0	163	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	47	0	0	1306	0	32	1625	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			45.7		1.7	51.6	
Effective Green, g (s)					14.1			45.7		1.7	51.6	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					301			2133		39	2409	
v/s Ratio Prot					c0.03			0.37		0.02	c0.46	
v/s Ratio Perm												
v/c Ratio					0.16			0.61		0.82	0.67	
Uniform Delay, d1					25.9			9.5		36.9	7.1	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.2			0.5		76.9	0.8	
Delay (s)					26.1			10.0		113.8	7.9	
Level of Service					C			A		F	A	
Approach Delay (s)		0.0			26.1			10.0			9.9	
Approach LOS		A			C			A			A	
Intersection Summary												
HCM 2000 Control Delay					11.0			HCM 2000 Level of Service			B	
HCM 2000 Volume to Capacity ratio					0.65							
Actuated Cycle Length (s)					75.8			Sum of lost time (s)			18.9	
Intersection Capacity Utilization					59.1%			ICU Level of Service			B	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON Year 2014 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	279	48	114	6	66	403	26	555	2	133	1341	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1517		1855	1511	1770	3539	1351	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1517		1855	1511	1770	3539	1351	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	367	63	150	7	72	438	29	610	2	141	1427	67
RTOR Reduction (vph)	0	0	121	0	0	230	0	0	1	0	2	0
Lane Group Flow (vph)	367	63	29	0	79	208	29	610	1	141	1492	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.8	27.8	27.8		22.3	22.3	2.9	56.4	56.4	16.4	69.9	
Effective Green, g (s)	27.8	27.8	27.8		22.3	22.3	2.9	56.4	56.4	16.4	69.9	
Actuated g/C Ratio	0.20	0.20	0.20		0.16	0.16	0.02	0.40	0.40	0.12	0.49	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	345	363	296		290	236	36	1402	535	203	1725	
v/s Ratio Prot	c0.21	0.03			0.04		0.02	0.17		c0.08	c0.42	
v/s Ratio Perm			0.02			c0.14		0.00				
v/c Ratio	1.06	0.17	0.10		0.27	0.88	0.81	0.44	0.00	0.69	0.86	
Uniform Delay, d1	57.3	47.7	47.0		52.9	58.7	69.4	31.3	25.9	60.5	32.0	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	66.3	0.2	0.1		0.5	29.4	75.6	1.0	0.0	9.9	6.1	
Delay (s)	123.6	47.9	47.1		53.4	88.1	145.0	32.3	25.9	70.4	38.1	
Level of Service	F	D	D		D	F	F	C	C	E	D	
Approach Delay (s)		95.6			82.8			37.4			40.9	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay		56.0								E		
HCM 2000 Volume to Capacity ratio		0.92										
Actuated Cycle Length (s)		142.3				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		77.8%				ICU Level of Service		D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON Year 2014 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	301	473	3	35	172	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	334	526	4	49	195	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	423	29			54	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	423	29			54	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	35	50			87	
cM capacity (veh/h)	513	1046			1552	
Direction, Lane #						
Volume Total	860	54	199			
Volume Left	334	0	195			
Volume Right	526	49	0			
cSH	1129	1700	1552			
Volume to Capacity	0.76	0.03	0.13			
Queue Length 95th (ft)	195	0	11			
Control Delay (s)	17.6	0.0	7.5			
Lane LOS	C		A			
Approach Delay (s)	17.6	0.0	7.5			
Approach LOS	C					
Intersection Summary						
Average Delay		14.9				
Intersection Capacity Utilization		39.7%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2014 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	304	6	590	38	0	1463
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	385	8	656	42	0	1644
RTOR Reduction (vph)	1	0	0	24	0	0
Lane Group Flow (vph)	392	0	656	18	0	1644
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.22		0.19			c0.46
v/s Ratio Perm				0.01		
v/c Ratio	0.47		0.43	0.03		1.08
Uniform Delay, d1	18.5		21.0	17.3		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.2	0.0		48.6
Delay (s)	18.9		21.2	17.3		78.5
Level of Service	B		C	B		E
Approach Delay (s)	18.9		20.9			78.5
Approach LOS	B		C			E
Intersection Summary						
HCM 2000 Control Delay			55.3		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			0.76			
Actuated Cycle Length (s)			105.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			90.4%		ICU Level of Service	E
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2014 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (veh/h)	4	6	448	3	14	1401
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	521	3	15	1540
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1323	262			524	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1323	262			524	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	94	98			99	
cM capacity (veh/h)	145	736			1038	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	20	347	177	15	770	770
Volume Left	8	0	0	15	0	0
Volume Right	12	0	3	0	0	0
cSH	280	1700	1700	1038	1700	1700
Volume to Capacity	0.07	0.20	0.10	0.01	0.45	0.45
Queue Length 95th (ft)	6	0	0	1	0	0
Control Delay (s)	18.8	0.0	0.0	8.5	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	18.8	0.0		0.1		
Approach LOS	C					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			48.7%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2014 Alt 1/2/3
Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	28	54	396	11	97	1307
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	30	59	450	12	107	1436
RTOR Reduction (vph)	0	44	0	7	0	0
Lane Group Flow (vph)	30	15	450	5	107	1436
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	18	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.3	21.4	27.8	27.8	7.0	43.6
Effective Green, g (s)	9.3	16.3	27.8	27.8	7.0	43.6
Actuated g/C Ratio	0.15	0.26	0.45	0.45	0.11	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	264	414	1581	707	199	2480
v/s Ratio Prot	c0.02	0.01	0.13		0.06	c0.41
v/s Ratio Perm			0.00			
v/c Ratio	0.11	0.04	0.28	0.01	0.54	0.58
Uniform Delay, d1	22.9	17.1	10.9	9.5	26.1	4.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.0	2.8	0.3
Delay (s)	23.1	17.1	11.0	9.5	28.9	5.0
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.1		11.0			6.7
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay		8.1		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.60				
Actuated Cycle Length (s)		62.2		Sum of lost time (s)		18.1
Intersection Capacity Utilization		48.0%		ICU Level of Service		A
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2014 Alt 1/2/3
Timing Plan: PM PEAK







	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Volume (veh/h)	0	21	387	17	0	1336
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	28	445	20	0	1452
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1181	232			464	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1181	232			464	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	183	770			1093	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	28	297	168	726	726	
Volume Left	0	0	0	0	0	
Volume Right	28	0	20	0	0	
cSH	770	1700	1700	1700	1700	
Volume to Capacity	0.04	0.17	0.10	0.43	0.43	
Queue Length 95th (ft)	3	0	0	0	0	
Control Delay (s)	9.9	0.0	0.0	0.0	0.0	
Lane LOS	A					
Approach Delay (s)	9.9	0.0		0.0		
Approach LOS	A					
Intersection Summary						
Average Delay		0.1				
Intersection Capacity Utilization		40.3%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

MILCON Year 2014 Alt 1/2/3

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	28	24	381	17	21	1312
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	39	33	405	18	23	1442
RTOR Reduction (vph)	0	30	0	7	0	0
Lane Group Flow (vph)	39	3	405	11	23	1442
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.4	27.2	27.2	1.8	36.5
Effective Green, g (s)	2.6	4.4	27.2	27.2	1.8	36.5
Actuated g/C Ratio	0.06	0.10	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	152	2106	942	69	2826
v/s Ratio Prot	c0.02	0.00	0.11		0.01	c0.41
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.39	0.02	0.19	0.01	0.33	0.51
Uniform Delay, d1	20.8	18.7	4.2	3.8	21.4	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.5	0.1	0.0	0.0	2.8	0.2
Delay (s)	23.3	18.8	4.3	3.8	24.2	1.7
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.2		4.3			2.1
Approach LOS	C		A			A

Intersection Summary





HCM 2000 Control Delay	3.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	45.7	Sum of lost time (s)	14.1
Intersection Capacity Utilization	47.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

MILCON Year 2014 Alt 1/2/3

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	10	13	80	7	0	170	12	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	10	14	104	9	0	191	13	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	10	14	113	204						
Volume Left (vph)	0	0	104	0						
Volume Right (vph)	0	14	0	13						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.13	0.18						
Capacity (veh/h)	873	1121	860	1121						
Control Delay (s)	7.1	6.2	7.7	6.9						
Approach Delay (s)	6.6		7.7	6.9						
Approach LOS	A		A	A						

Intersection Summary


























Delay	7.2		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

NBC Coastal Campus

MILCON Year 2014 Alt 1/2/3

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK

															
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR			
Lane Configurations															
Volume (vph)	9	176	0	0	77	131	11	306	65	0	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3						
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00						
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85						
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00						
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583						
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00						
Satd. Flow (perm)	1303	1863			1863	1583	1770	3539	1583						
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25			
Adj. Flow (vph)	10	200	0	0	89	151	12	336	71	0	0	0			
RTOR Reduction (vph)	0	0	0	0	0	120	0	0	38	0	0	0			
Lane Group Flow (vph)	10	200	0	0	89	31	12	336	33	0	0	0			
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm						
Protected Phases		4			8		5	2							
Permitted Phases	4					8			2						
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.8	18.8	18.8						
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.8	18.8	18.8						
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46						
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3						
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0						
Lane Grp Cap (vph)	269	385			385	327	819	1638	733						
v/s Ratio Prot		c0.11			0.05		0.01	c0.09							
v/s Ratio Perm	0.01					0.02			0.02						
v/c Ratio	0.04	0.52			0.23	0.10	0.01	0.21	0.04						
Uniform Delay, d1	12.9	14.3			13.4	13.0	5.9	6.5	6.0						
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00						
Incremental Delay, d2	0.1	1.2			0.3	0.1	0.0	0.1	0.0						
Delay (s)	12.9	15.5			13.7	13.2	5.9	6.5	6.0						
Level of Service	B	B			B	B	A	A	A						
Approach Delay (s)		15.4			13.4		6.4				0.0				
Approach LOS		B			B		A				A				
Intersection Summary															
HCM 2000 Control Delay			10.5		HCM 2000 Level of Service				B						
HCM 2000 Volume to Capacity ratio			0.30												
Actuated Cycle Length (s)			40.6		Sum of lost time (s)				13.4						
Intersection Capacity Utilization			40.2%		ICU Level of Service				A						
Analysis Period (min)			15												
c Critical Lane Group															

NBC Coastal Campus

MILCON Year 2014 Alt 1/2/3

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: PM PEAK











Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰		↰	↑	↱	↑	↱
Volume (veh/h)	0	56	0	443	0	1472	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	224	0	503	0	1636	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1887	818	1636		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1887	818	1636		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	30	100		0		
cM capacity (veh/h)	62	319	393		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	224	0	252	252	1090	545	0
Volume Left	0	0	0	0	0	0	0
Volume Right	224	0	0	0	0	0	0
cSH	319	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.70	0.00	0.15	0.15	0.64	0.32	0.00
Queue Length 95th (ft)	124	0	0	0	0	0	0
Control Delay (s)	39.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	E						
Approach Delay (s)	39.0	0.0			0.0		
Approach LOS	E						
Intersection Summary							
Average Delay			3.7				
Intersection Capacity Utilization			50.8%		ICU Level of Service		
Analysis Period (min)			15		A		

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON Year 2014 Alt 1/2/3

Timing Plan: PM PEAK











Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	82	0	64	1	1	0	69	306	11	1	1106	183
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3521		1770	3464	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3521		1770	3464	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	109	0	85	2	2	0	76	336	12	1	1229	203
RTOR Reduction (vph)	0	68	0	0	0	0	0	2	0	0	10	0
Lane Group Flow (vph)	109	17	0	2	2	0	76	346	0	1	1422	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	17.8	17.8		0.8	0.8		5.8	52.4		0.8	47.4	
Effective Green, g (s)	17.8	17.8		0.8	0.8		5.8	52.4		0.8	47.4	
Actuated g/C Ratio	0.20	0.20		0.01	0.01		0.06	0.58		0.01	0.52	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	347	310		15	16		113	2034		15	1810	
v/s Ratio Prot	c0.06	0.01		c0.00	0.00		c0.04	0.10		0.00	c0.41	
v/s Ratio Perm												
v/c Ratio	0.31	0.05		0.13	0.12		0.67	0.17		0.07	0.79	
Uniform Delay, d1	31.2	29.6		44.6	44.6		41.5	9.0		44.6	17.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.1		4.0	3.5		14.6	0.0		1.9	2.3	
Delay (s)	31.7	29.7		48.6	48.1		56.2	9.0		46.5	19.9	
Level of Service	C	C		D	D		E	A		D	B	
Approach Delay (s)		30.8			48.4			17.5			19.9	
Approach LOS		C			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		20.5										
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		90.7										
Intersection Capacity Utilization		63.7%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2014 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	54	1064	55	0	341	32	12	38	4	22	24	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5048			5020		1770	1835			1760	
Flt Permitted	0.95	1.00			1.00		0.71	1.00			0.18	
Satd. Flow (perm)	1770	5048			5020		1318	1835			315	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	61	1209	62	0	363	34	17	54	6	26	28	22
RTOR Reduction (vph)	0	3	0	0	6	0	0	2	0	0	8	0
Lane Group Flow (vph)	61	1268	0	0	391	0	17	58	0	0	68	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1909			2038		256	356			52	
v/s Ratio Prot	c0.03	c0.25			c0.08			c0.03				
v/s Ratio Perm							0.01				c0.21	
v/c Ratio	0.31	0.66			0.19		0.07	0.16			1.30	
Uniform Delay, d1	73.7	46.5			34.4		59.2	60.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.9	1.8			0.2		0.1	0.2			225.5	
Delay (s)	74.6	48.3			34.6		59.3	60.5			300.5	
Level of Service	E	D			C		E	E			F	
Approach Delay (s)		49.5			34.6			60.2			300.5	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		56.9										
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2014 Alt 1/2/3

20: SR-75 (Silver Strand Blvd) & Delaware St

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑↑			↑↑	↑↑							↑
Volume (vph)	0	1092	0	474	377	36	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3493							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3493							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1227	0	504	401	38	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1227	0	504	439	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3174							609
v/s Ratio Prot		c0.24		c0.15	c0.13							
v/s Ratio Perm												0.00
v/c Ratio		0.64		0.26	0.14							0.00
Uniform Delay, d1		45.9		20.4	0.9							34.8
Progression Factor		0.19		1.00	1.00							1.00
Incremental Delay, d2		1.2		0.1	0.0							0.0
Delay (s)		9.7		20.5	0.9							34.9
Level of Service		A		C	A							C
Approach Delay (s)		9.7			11.4		0.0				34.9	
Approach LOS		A			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		10.5										B
HCM 2000 Volume to Capacity ratio		0.44										
Actuated Cycle Length (s)		180.0						22.3				
Intersection Capacity Utilization		43.8%							A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2014 Alt 1/2/3




















21: Dwy/Silver Strand Blvd & Palm Ave

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑				↑↑
Volume (veh/h)	3	211	0	0	304	40	0	0	0	103	0	8
Sign Control		Free			Free			Stop				Stop
Grade		0%			0%			0%				0%
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	245	0	0	345	45	0	0	0	156	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	391			245			633	643	245	621	621	368
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	391			245			633	643	245	621	621	368
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	61	100	98
cM capacity (veh/h)	1168			1321			385	391	793	399	402	677
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	249	391	0	168								
Volume Left	3	0	0	156								
Volume Right	0	45	0	12								
cSH	1168	1321	1700	411								
Volume to Capacity	0.00	0.00	0.00	0.41								
Queue Length 95th (ft)	0	0	0	49								
Control Delay (s)	0.1	0.0	0.0	19.7								
Lane LOS	A		A	C								
Approach Delay (s)	0.1	0.0	0.0	19.7								
Approach LOS			A	C								
Intersection Summary												
Average Delay		4.1										
Intersection Capacity Utilization		31.3%								A		
Analysis Period (min)		15										













NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2014 Alt 1/2/3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop			Stop			Stop			Stop		
Volume (vph)	7	293	12	84	318	24	14	38	67	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	376	15	94	357	27	25	67	118	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	391	94	384	209	161						
Volume Left (vph)	9	0	94	0	25	61						
Volume Right (vph)	0	15	0	27	118	28						
Hadj (s)	0.53	0.01	0.53	-0.02	-0.28	0.00						
Departure Headway (s)	7.2	6.7	7.1	6.5	6.6	7.0						
Degree Utilization, x	0.02	0.72	0.19	0.70	0.38	0.31						
Capacity (veh/h)	472	520	485	529	479	437						
Control Delay (s)	9.1	23.9	10.5	22.0	13.7	13.2						
Approach Delay (s)	23.6		19.8		13.7	13.2						
Approach LOS	C		C		B	B						
Intersection Summary												
Delay			19.1									
Level of Service			C									
Intersection Capacity Utilization			41.2%		ICU Level of Service		A					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2014 Alt 1/2/3
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			 		 	
Volume (veh/h)	72	420	453	39	52	139
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	74	433	527	45	61	164
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	572				1131	286
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	572				1131	286
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	93				66	77
cM capacity (veh/h)	997				182	711
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	74	433	351	221	225	
Volume Left	74	0	0	0	61	
Volume Right	0	0	0	45	164	
cSH	997	1700	1700	1700	397	
Volume to Capacity	0.07	0.25	0.21	0.13	0.57	
Queue Length 95th (ft)	6	0	0	0	84	
Control Delay (s)	8.9	0.0	0.0	0.0	25.2	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		25.2	
Approach LOS					D	
Intersection Summary						
Average Delay			4.8			
Intersection Capacity Utilization			40.2%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2014 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	28	429	29	31	455	3	54	19	22	12	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3536			1754			1841	1583
Flt Permitted	0.47	1.00		0.45	1.00			0.79			0.90	1.00
Satd. Flow (perm)	870	3505		835	3536			1417			1669	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	511	35	34	500	3	66	23	27	16	53	39
RTOR Reduction (vph)	0	7	0	0	1	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	539	0	34	502	0	0	95	0	0	69	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Effective Green, g (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	414	1671		398	1686			309			364	345
v/s Ratio Prot		c0.15			0.14							
v/s Ratio Perm	0.04			0.04				c0.07			0.04	0.01
v/c Ratio	0.08	0.32		0.09	0.30			0.31			0.19	0.02
Uniform Delay, d1	4.3	4.9		4.3	4.8			9.9			9.6	9.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.6			0.3	0.0
Delay (s)	4.4	5.0		4.4	4.9			10.5			9.9	9.3
Level of Service	A	A		A	A			B			A	A
Approach Delay (s)		5.0			4.9			10.5			9.7	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		30.2			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		44.6%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2014 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↰			↰	↰
Volume (veh/h)	532	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	649	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			659		649	649
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			659		649	649
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			929		434	470
Direction, Lane #						
Volume Total	649	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	443			
Volume to Capacity	0.38	0.01	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	13.4			
Lane LOS			B			
Approach Delay (s)	0.0		13.4			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			38.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2014 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	40	1385	119	56	749	126	93	86	60	166	76	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5025		1770	4976			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5025		1770	4976			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	43	1473	127	57	757	127	102	95	66	187	85	27
RTOR Reduction (vph)	0	5	0	0	12	0	0	19	0	0	4	0
Lane Group Flow (vph)	43	1595	0	57	872	0	0	244	0	0	295	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2113		157	1982			649			658	
v/s Ratio Prot	0.02	c0.32		c0.03	0.18			c0.07			c0.09	
v/s Ratio Perm												
v/c Ratio	0.22	0.75		0.36	0.44			0.38			0.45	
Uniform Delay, d1	72.9	44.3		77.2	39.5			63.0			64.0	
Progression Factor	1.00	1.00		1.28	0.68			1.00			1.00	
Incremental Delay, d2	0.6	1.6		1.4	0.7			0.4			0.5	
Delay (s)	73.5	45.8		99.9	27.6			63.4			64.5	
Level of Service	E	D		F	C			E			E	
Approach Delay (s)		46.6			32.0			63.4			64.5	
Approach LOS		D			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		45.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		116.6%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2014 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	19	1656	55	47	1139	53	20	10	33	61	12	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5061		1770	5051			1703		1770	1718	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.63	1.00	
Satd. Flow (perm)	1770	5061		1770	5051			1555		1179	1718	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	19	1690	56	48	1174	55	24	12	40	72	14	15
RTOR Reduction (vph)	0	1	0	0	2	0	0	24	0	0	13	0
Lane Group Flow (vph)	19	1745	0	48	1227	0	0	52	0	72	16	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Effective Green, g (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3562		157	3667			190		144	210	
v/s Ratio Prot	0.01	c0.34		c0.03	c0.24						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.16	0.49		0.31	0.33			0.28		0.50	0.08	
Uniform Delay, d1	79.3	12.0		76.8	8.9			71.7		73.8	69.9	
Progression Factor	1.47	0.12		1.59	0.31			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.3		1.0	0.2			0.8		2.7	0.2	
Delay (s)	117.3	1.9		122.9	3.0			72.5		76.5	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.1			7.5			72.5			74.7	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.7			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.47										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		58.5%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2014 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	1530	189	151	1211	78	124	38	123	148	43	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5001		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5001		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.92	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	27	1628	201	156	1248	80	135	41	134	200	58	26
RTOR Reduction (vph)	0	8	0	0	0	35	0	0	111	0	4	0
Lane Group Flow (vph)	27	1821	0	156	1248	45	0	176	23	0	280	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2			4				
Actuated Green, G (s)	12.0	79.7		19.6	87.7	87.7		30.7	30.7		30.7	
Effective Green, g (s)	12.0	79.7		19.6	87.7	87.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.07	0.44		0.11	0.49	0.49		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	118	2214		192	2477	771		305	269		575	
v/s Ratio Prot	0.02	c0.36		c0.09	0.25			c0.10			c0.08	
v/s Ratio Perm					0.03			0.01				
v/c Ratio	0.23	0.82		0.81	0.50	0.06		0.58	0.08		0.49	
Uniform Delay, d1	79.6	43.9		78.4	31.4	24.4		68.7	62.8		67.5	
Progression Factor	1.06	0.83		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.9	3.3		22.4	0.7	0.1		7.7	0.6		2.9	
Delay (s)	85.6	39.9		100.8	32.1	24.5		76.4	63.4		70.5	
Level of Service	F	D		F	C	C		E	E		E	
Approach Delay (s)		40.6			38.9			70.8			70.5	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		44.5			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		97.7%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2014 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	1668	48	164	1498	15	37	8	78	22	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5064		1770	5078			1678			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.84	
Satd. Flow (perm)	1770	5064		1770	5078			1516			1510	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	10	1853	53	173	1577	16	44	9	92	27	12	12
RTOR Reduction (vph)	0	3	0	0	1	0	0	73	0	0	10	0
Lane Group Flow (vph)	10	1903	0	173	1592	0	0	72	0	0	41	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.8	40.4		11.1	50.7			17.2			17.2	
Effective Green, g (s)	0.8	40.4		11.1	50.7			17.2			17.2	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2424		232	3050			308			307	
v/s Ratio Prot	0.01	c0.38		c0.10	0.31							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.62	0.79		0.75	0.52			0.23			0.14	
Uniform Delay, d1	41.7	18.4		35.3	9.8			28.1			27.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	57.6	1.7		12.2	0.2			0.4			0.2	
Delay (s)	99.2	20.1		47.5	10.0			28.5			27.7	
Level of Service	F	C		D	A			C			C	
Approach Delay (s)		20.5			13.6			28.5			27.7	
Approach LOS		C			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		17.8			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		84.4			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		63.3%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2014 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	182	1613	23	317	1506	537	63	171	516	568	231	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		1770	5085	1583	1770	1631	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		1770	5085	1583	1770	1631	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	192	1698	24	341	1619	577	67	182	549	617	251	239
RTOR Reduction (vph)	0	1	0	0	0	88	0	26	266	0	2	133
Lane Group Flow (vph)	192	1721	0	341	1619	489	67	354	85	617	273	82
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2			4				8
Actuated Green, G (s)	11.3	36.4		45.0	70.1	70.1	8.6	36.5	36.5	11.8	39.7	39.7
Effective Green, g (s)	11.3	36.4		45.0	70.1	70.1	8.6	36.5	36.5	11.8	39.7	39.7
Actuated g/C Ratio	0.07	0.24		0.30	0.46	0.46	0.06	0.24	0.24	0.08	0.26	0.26
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1218		525	2351	731	100	392	362	267	457	393
v/s Ratio Prot	0.06	c0.34		c0.19	c0.32		0.04	c0.22		c0.18	c0.16	
v/s Ratio Perm						0.31		0.06				0.05
v/c Ratio	0.75	1.41		0.65	0.69	0.67	0.90	0.23	2.31	0.60	0.21	
Uniform Delay, d1	68.8	57.6		46.4	32.1	31.7	70.1	55.8	46.3	69.9	48.9	43.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.9	190.9		2.8	0.9	2.3	16.2	23.5	0.3	601.5	2.1	0.3
Delay (s)	80.6	248.5		49.2	33.0	34.0	86.3	79.3	46.6	671.4	51.0	44.0
Level of Service	F	F		D	C	C	F	E	D	F	D	D
Approach Delay (s)		231.6			35.4			65.5			395.5	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		161.0			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.09										
Actuated Cycle Length (s)		151.6			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		115.3%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2014 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑	↑↑
Volume (vph)	0	485	819	0	426	1547
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	545	871	0	468	1700
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	545	871	0	468	1695
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.15	c0.25		0.26	c0.61
v/s Ratio Perm						
v/c Ratio		0.30	1.02		0.71	0.95
Uniform Delay, d1		11.6	30.3		21.2	13.4
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	34.6		3.4	12.2
Delay (s)		11.7	64.9		24.7	25.7
Level of Service		B	E		C	C
Approach Delay (s)		11.7	64.9		25.5	
Approach LOS		B	E		C	
Intersection Summary						
HCM 2000 Control Delay			32.9		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			1.04			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			82.2%		ICU Level of Service	E
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2014 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	905	0	0	509	242	415	2	103	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	943	0	0	572	272	446	2	111	0	0	0
RTOR Reduction (vph)	0	0	0	0	99	0	0	40	0	0	0	0
Lane Group Flow (vph)	0	943	0	0	745	0	285	234	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases							2					
Actuated Green, G (s)		18.4			18.4		13.4	13.4				
Effective Green, g (s)		18.4			18.4		13.4	13.4				
Actuated g/C Ratio		0.46			0.46		0.34	0.34				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1636			1557		565	543				
v/s Ratio Prot		0.27			0.22							
v/s Ratio Perm							0.17	0.14				
v/c Ratio		0.58			0.48		0.50	0.43				
Uniform Delay, d1		7.8			7.4		10.5	10.2				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.5			0.2		0.7	0.5				
Delay (s)		8.3			7.6		11.3	10.8				
Level of Service		A			A		B	B				
Approach Delay (s)		8.3			7.6		11.0				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		8.7			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		39.8			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		46.4%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2014 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	3	36	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	3	52	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	73	52	52			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	73	52	52			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	926	1015	1554			
Direction, Lane #						
Volume Total	16	12	52			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	1015	1554	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.3	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.3	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.5				
Intersection Capacity Utilization		17.2%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St






MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1397	34	0	3792	552	0	0	476	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1683	41	0	4122	600	0	0	595	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4742			1744			3130	6465	622	5023	6186	1714
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4742			1744			3130	6465	622	5023	6186	1714
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	84
cM capacity (veh/h)	21			350			4	0	1354	0	0	77
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	673	673	378	1649	1649	1424	595	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	600	595	12				
cSH	1700	1700	1700	1700	1700	1700	1354	77				
Volume to Capacity	0.40	0.40	0.22	0.97	0.97	0.84	0.44	0.16				
Queue Length 95th (ft)	0	0	0	0	0	0	57	13				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	60.5				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	60.5				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				100.7%			ICU Level of Service		G			
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑↑			↑↑↑↑		↑↑	
Volume (veh/h)	1258	201	0	3692	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1430	228	0	4102	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1678	2951		631	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1678	2951		631	
tC, single (s)			4.1	6.8		6.9	
tC, 2 stage (s)							
tF (s)			2.2	3.5		3.3	
p0 queue free %			100	100		39	
cM capacity (veh/h)			372	11		410	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	572	572	514	1367	1367	1367	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	228	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	410
Volume to Capacity	0.34	0.34	0.30	0.80	0.80	0.80	0.61
Queue Length 95th (ft)	0	0	0	0	0	0	99
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	26.7
Lane LOS							D
Approach Delay (s)	0.0			0.0			26.7
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			86.2%	ICU Level of Service			E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1558	1943	342	105	102	0	0	277	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4640		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4640		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1675	2089	368	142	138	0	0	318	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1022	3102	0	142	138	0	0	330	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.6			21.4	
Effective Green, g (s)				131.2	131.2		20.0	46.6			21.4	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1054	3214		186	870			396	
v/s Ratio Prot				c0.67	0.67		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.97	0.97		0.76	0.16			0.83	
Uniform Delay, d1				27.2	27.0		82.4	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				20.4	9.2		16.8	0.1			14.0	
Delay (s)				47.7	36.1		99.2	56.1			96.3	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			39.0			78.0			96.3	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		45.3		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		189.4		Sum of lost time (s)						16.8		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	583	64	0	0	0	0	197	198	450	1441	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3262	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3262	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	634	70	0	0	0	0	229	215	489	1501	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	18	49	0	0	0
Lane Group Flow (vph)	0	635	41	0	0	0	0	288	89	489	1501	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1178	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.42	
v/s Ratio Perm		0.12	0.03						0.06			
v/c Ratio		0.36	0.07					0.24	0.17	0.69	0.73	
Uniform Delay, d1		41.5	37.2					38.4	37.3	63.2	25.9	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.3	
Delay (s)		41.6	37.3					38.5	37.5	66.2	27.3	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.2			36.8	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.0		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)						14.4		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2015 Alt 1/2/3

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	209	6	1103	580	0	1068
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3315			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3315			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	243	7	1186	624	0	1124
RTOR Reduction (vph)	2	0	54	0	0	0
Lane Group Flow (vph)	248	0	1756	0	0	1124
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	16.6		42.2			42.2
Effective Green, g (s)	16.6		42.2			42.2
Actuated g/C Ratio	0.24		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	389		2060			2089
v/s Ratio Prot	c0.16		c0.53			0.33
v/s Ratio Perm						
v/c Ratio	0.64		0.85			0.54
Uniform Delay, d1	23.0		10.3			7.3
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	3.4		3.6			0.3
Delay (s)	26.4		14.0			7.6
Level of Service	C		B			A
Approach Delay (s)	26.4		14.0			7.6
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			12.7		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.83			
Actuated Cycle Length (s)			67.9		Sum of lost time (s)	12.1
Intersection Capacity Utilization			75.2%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2015 Alt 1/2/3

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↕	↕	↕	↔	↔	↔
Volume (vph)	45	2	9	7	0	5	18	1310	25	38	1204	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1708		1770	3529		1770	3524	
Frt Permitted	0.74	0.78	1.00		0.87		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1312	1384	1583		1525		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	52	2	10	14	0	10	21	1560	30	41	1309	38
RTOR Reduction (vph)	0	0	8	0	20	0	0	1	0	0	1	0
Lane Group Flow (vph)	27	27	2	0	4	0	21	1589	0	41	1346	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	14.8	14.8	14.8		14.8		2.5	59.9		4.0	61.4	
Effective Green, g (s)	14.8	14.8	14.8		14.8		2.5	59.9		4.0	61.4	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.65		0.04	0.66	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	209	220	252		243		47	2277		76	2331	
v/s Ratio Prot							0.01	c0.45		c0.02	0.38	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.13	0.12	0.01		0.02		0.45	0.70		0.54	0.58	
Uniform Delay, d1	33.5	33.4	32.8		32.9		44.5	10.6		43.5	8.6	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		6.6	1.0		7.2	0.3	
Delay (s)	33.8	33.7	32.8		32.9		51.1	11.6		50.7	8.9	
Level of Service	C	C	C		C		D	B		D	A	
Approach Delay (s)		33.6			32.9			12.1			10.2	
Approach LOS		C			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			11.8		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.58									
Actuated Cycle Length (s)			92.8		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			54.8%		ICU Level of Service			A				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2015 Alt 1/2/3

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	21	0	1257	7	411	785	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Frt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	32	0	1381	8	419	801	0
RTOR Reduction (vph)	0	0	0	0	29	0	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1381	4	419	801	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.39		c0.24	0.23	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.83	0.01	0.69	0.27	
Uniform Delay, d1					60.6			33.4	20.4	40.8	2.3	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			3.4	0.0	3.2	0.2	
Delay (s)					60.6			15.8	20.4	44.0	2.5	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			15.9			16.8	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		16.8			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		76.4%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2015 Alt 1/2/3











8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	48	13	1	62	124	132	1100	5	280	242	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frbp, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.98	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3191	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3191	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	46	74	20	1	70	141	147	1222	6	322	278	345
RTOR Reduction (vph)	0	0	19	0	0	119	0	0	3	0	156	0
Lane Group Flow (vph)	46	74	1	0	71	22	147	1222	3	322	467	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1047	
v/s Ratio Prot	0.03	c0.04			c0.04		0.08	c0.35		c0.18	0.15	
v/s Ratio Perm			0.00			0.01		0.00				
v/c Ratio	0.38	0.58	0.01		0.24	0.09	0.27	0.78	0.00	0.94	0.45	
Uniform Delay, d1	64.5	65.5	62.9		53.4	52.1	37.6	34.1	22.3	57.7	38.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.91	
Incremental Delay, d2	2.0	6.2	0.1		0.4	0.2	0.3	3.8	0.0	33.9	1.4	
Delay (s)	66.5	71.7	63.0		53.8	52.3	37.9	37.9	22.3	89.4	36.4	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		68.7			52.8			37.8			54.5	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay		46.5			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		81.6%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												











NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	21	191	4	84	314	8
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	25	225	5	105	341	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	749	58			110	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	749	58			110	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	78			77	
cM capacity (veh/h)	292	1009			1480	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	249	110	350			
Volume Left	25	0	341			
Volume Right	225	105	0			
cSH	1120	1700	1480			
Volume to Capacity	0.22	0.06	0.23			
Queue Length 95th (ft)	21	0	22			
Control Delay (s)	10.5	0.0	8.0			
Lane LOS	B		A			
Approach Delay (s)	10.5	0.0	8.0			
Approach LOS	B					
Intersection Summary						
Average Delay		7.6				
Intersection Capacity Utilization		34.5%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	25	3	1249	394	0	219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.98		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1729		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1729		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	33	4	1315	415	0	342
RTOR Reduction (vph)	4	0	0	113	0	0
Lane Group Flow (vph)	33	0	1315	302	0	342
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	1.9		31.5	31.5		31.5
Effective Green, g (s)	1.9		31.5	31.5		31.5
Actuated g/C Ratio	0.04		0.73	0.73		0.73
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	75		2574	1105		2574
v/s Ratio Prot	c0.02		c0.37			0.10
v/s Ratio Perm				0.20		
v/c Ratio	0.44		0.51	0.27		0.13
Uniform Delay, d1	20.2		2.6	2.0		1.8
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.1		0.2	0.1		0.0
Delay (s)	24.3		2.7	2.1		1.8
Level of Service	C		A	A		A
Approach Delay (s)	24.3		2.6			1.8
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		2.8		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.51				
Actuated Cycle Length (s)		43.3		Sum of lost time (s)		9.9
Intersection Capacity Utilization		46.9%		ICU Level of Service		A
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2015 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↑↑
Volume (veh/h)	0	14	2041	5	5	245
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	24	2195	5	7	360
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2392	1100			2200	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2392	1100			2200	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	88			97	
cM capacity (veh/h)	27	207			236	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	24	1463	737	7	180	180
Volume Left	0	0	0	7	0	0
Volume Right	24	0	5	0	0	0
cSH	207	1700	1700	236	1700	1700
Volume to Capacity	0.12	0.86	0.43	0.03	0.11	0.11
Queue Length 95th (ft)	10	0	0	2	0	0
Control Delay (s)	24.7	0.0	0.0	20.7	0.0	0.0
Lane LOS	C			C		
Approach Delay (s)	24.7	0.0		0.4		
Approach LOS	C					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		66.6%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2015 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	16	83	1958	11	36	209
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	20	102	2105	12	52	303
RTOR Reduction (vph)	0	5	0	1	0	0
Lane Group Flow (vph)	20	97	2105	11	52	303
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.6	25.7	68.3	68.3	5.0	82.1
Effective Green, g (s)	15.6	20.6	68.3	68.3	5.0	82.1
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	258	304	2259	1010	82	2715
v/s Ratio Prot	0.01	c0.06	c0.59		c0.03	0.09
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.32	0.93	0.01	0.63	0.11
Uniform Delay, d1	39.5	37.2	17.3	7.0	50.1	3.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	7.7	0.0	14.9	0.0
Delay (s)	39.6	37.8	25.0	7.0	65.0	3.2
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.1		24.9			12.2
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay		23.8		HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio		0.81				
Actuated Cycle Length (s)		107.0		Sum of lost time (s)	18.1	
Intersection Capacity Utilization		70.1%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↑↑		↘	↑↑
Volume (veh/h)	0	31	1936	25	0	224
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	50	2038	26	0	303
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2202	1032			2064	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2202	1032			2064	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	78			100	
cM capacity (veh/h)	38	230			267	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	50	1359	706	151	151	
Volume Left	0	0	0	0	0	
Volume Right	50	0	26	0	0	
cSH	230	1700	1700	1700	1700	
Volume to Capacity	0.22	0.80	0.42	0.09	0.09	
Queue Length 95th (ft)	20	0	0	0	0	
Control Delay (s)	25.0	0.0	0.0	0.0	0.0	
Lane LOS	C					
Approach Delay (s)	25.0	0.0		0.0		
Approach LOS	C					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		64.3%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↑↑	↖	↖	↑↑
Volume (vph)	9	6	1961	31	14	201
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	15	10	2043	32	17	248
RTOR Reduction (vph)	0	6	0	7	0	0
Lane Group Flow (vph)	15	4	2043	25	17	248
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.9	59.9	2.0	69.4
Effective Green, g (s)	1.4	3.4	59.9	59.9	2.0	69.4
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2738	1225	45	3173
v/s Ratio Prot	c0.01	0.00	c0.58		c0.01	0.07
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.47	0.06	0.75	0.02	0.38	0.08
Uniform Delay, d1	37.6	35.5	4.7	2.0	37.1	0.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.5	0.4	1.1	0.0	5.2	0.0
Delay (s)	48.1	35.8	5.8	2.0	42.3	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	43.2		5.8			3.1
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		5.9		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.73				
Actuated Cycle Length (s)		77.4		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		67.0%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2015 Alt 1/2/3

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	43	1	0	42	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	80	2	0	67	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	81	67	3					
Volume Left (vph)	0	0	80	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	836	1121	817	843	1121					
Control Delay (s)	7.2	6.2	7.7	7.5	6.2					
Approach Delay (s)	7.2		7.7	7.4						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.1%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2015 Alt 1/2/3

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	35	0	0	31	216	3	1774	48	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1358	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	47	0	0	43	300	3	1887	51	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	21	0	0	0	0
Lane Group Flow (vph)	3	47	0	0	43	244	3	1887	30	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	15.7	15.7			15.7	15.7	47.3	43.2	43.2			
Effective Green, g (s)	15.7	15.7			15.7	15.7	47.3	43.2	43.2			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.60	0.60			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	294	404			404	343	1157	2114	945			
v/s Ratio Prot		0.03			0.02		0.00	c0.53				
v/s Ratio Perm	0.00					c0.15			0.02			
v/c Ratio	0.01	0.12			0.11	0.71	0.00	0.89	0.03			
Uniform Delay, d1	22.2	22.7			22.7	26.2	4.3	12.5	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	6.8	0.0	5.3	0.0			
Delay (s)	22.2	22.9			22.8	33.0	4.3	17.8	6.0			
Level of Service	C	C			C	C	A	B	A			
Approach Delay (s)		22.8			31.7			17.5			0.0	
Approach LOS		C			C			B			A	
Intersection Summary												
HCM 2000 Control Delay			19.7				HCM 2000 Level of Service		B			
HCM 2000 Volume to Capacity ratio			0.84									
Actuated Cycle Length (s)			72.3			Sum of lost time (s)			13.4			
Intersection Capacity Utilization			82.0%			ICU Level of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON Year 2015 Alt 1/2/3

Timing Plan: AM PEAK






















							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	155	1582	0	172	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	161	1648	0	218	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None		None		
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1365	109	218		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1365	109	218		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	88		0		
cM capacity (veh/h)	122	924	1349		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	161	824	824	145	73	0
Volume Left	0	161	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1349	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.12	0.48	0.48	0.09	0.04	0.00
Queue Length 95th (ft)	0	10	0	0	0	0	0
Control Delay (s)	0.0	8.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	A					
Approach Delay (s)	0.0	0.7			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay		0.6					
Intersection Capacity Utilization		53.7%		ICU Level of Service		A	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON Year 2015 Alt 1/2/3

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	376	0	37	2	1	2	25	1623	0	0	128	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3408	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3408	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	427	0	42	6	3	6	26	1708	0	0	186	61
RTOR Reduction (vph)	0	30	0	0	6	0	0	0	0	0	27	0
Lane Group Flow (vph)	427	12	0	6	3	0	26	1708	0	0	220	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	25.0	25.0		1.7	1.7		1.9	43.6			37.5	
Effective Green, g (s)	25.0	25.0		1.7	1.7		1.9	43.6			37.5	
Actuated g/C Ratio	0.29	0.29		0.02	0.02		0.02	0.51			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	520	465		35	33		39	1815			1503	
v/s Ratio Prot	c0.24	0.01		c0.00	0.00		0.01	c0.48			0.06	
v/s Ratio Perm												
v/c Ratio	0.82	0.03		0.17	0.09		0.67	0.94			0.15	
Uniform Delay, d1	27.9	21.3		41.0	40.9		41.2	19.5			14.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	10.1	0.0		2.3	1.2		35.5	10.3			0.0	
Delay (s)	38.0	21.4		43.3	42.1		76.8	29.8			14.2	
Level of Service	D	C		D	D		E	C			B	
Approach Delay (s)		36.5			42.6			30.5			14.2	
Approach LOS		D			D			C			B	
Intersection Summary												
HCM 2000 Control Delay		30.1						HCM 2000 Level of Service			C	
HCM 2000 Volume to Capacity ratio		0.94										
Actuated Cycle Length (s)		85.0					Sum of lost time (s)			18.9		
Intersection Capacity Utilization		80.8%					ICU Level of Service			D		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	7	175	13	0	1487	16	36	21	1	18	39	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5031			5077		1770	1852			1732	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.20	
Satd. Flow (perm)	1770	5031			5077		1246	1852			357	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	8	197	15	0	1634	18	43	25	1	23	51	64
RTOR Reduction (vph)	0	5	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	8	207	0	0	1651	0	43	25	0	0	121	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2061		242	360			59	
v/s Ratio Prot	c0.00	0.04			c0.33			0.01				
v/s Ratio Perm							c0.03				c0.34	
v/c Ratio	0.04	0.11			0.80		0.18	0.07			2.04	
Uniform Delay, d1	71.4	36.3			47.1		60.5	59.2			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			3.1		0.4	0.1			522.7	
Delay (s)	71.5	36.4			50.2		60.8	59.3			597.7	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		37.7			50.2			60.3			597.7	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		85.5			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.80										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		67.5%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	192	0	377	1495	8	0	0	0	0	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	234	0	401	1590	9	0	0	0	0	0	16
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	10
Lane Group Flow (vph)	0	234	0	401	1599	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.05		0.12	c0.45							
v/s Ratio Perm												0.00
v/c Ratio		0.12		0.23	0.50							0.01
Uniform Delay, d1		36.5		25.5	1.4							34.9
Progression Factor		0.43		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.1	0.1							0.0
Delay (s)		15.7		25.5	1.5							34.9
Level of Service		B		C	A							C
Approach Delay (s)		15.7			6.3			0.0				34.9
Approach LOS		B			A			A				C
Intersection Summary												
HCM 2000 Control Delay		7.5			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.51										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		63.2%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	9	232	0	0	127	103	0	0	0	47	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	11	276	0	0	137	111	0	0	0	52	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	247			276			494	545	276	490	490	192
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	247			276			494	545	276	490	490	192
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1319			1287			480	442	763	486	475	850
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	287	247	0	56								
Volume Left	11	0	0	52								
Volume Right	0	111	0	4								
cSH	1319	1287	1700	503								
Volume to Capacity	0.01	0.00	0.00	0.11								
Queue Length 95th (ft)	1	0	0	9								
Control Delay (s)	0.4	0.0	0.0	13.1								
Lane LOS	A			B								
Approach Delay (s)	0.4	0.0	0.0	13.1								
Approach LOS				B								
Intersection Summary												
Average Delay				1.4								
Intersection Capacity Utilization				29.5%								A
Analysis Period (min)				15								

NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	270	4	26	208	24	11	14	125	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	314	5	28	224	26	14	17	154	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	319	28	249	185	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	154	18						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.0	5.5	5.1	5.6						
Degree Utilization, x	0.01	0.48	0.05	0.38	0.26	0.07						
Capacity (veh/h)	579	635	567	632	637	550						
Control Delay (s)	7.9	12.3	8.1	10.6	9.8	9.1						
Approach Delay (s)	12.2		10.3		9.8	9.1						
Approach LOS	B		B		A	A						
Intersection Summary												
Delay				10.9								
Level of Service				B								
Intersection Capacity Utilization				37.2%								A
Analysis Period (min)				15								



















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱	↰↱		↰	↱
Volume (veh/h)	224	423	331	151	17	68
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	284	535	404	184	24	96
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	588				1598	294
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	588				1598	294
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	71				65	86
cM capacity (veh/h)	983				69	702
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	284	535	269	319	120	
Volume Left	284	0	0	0	24	
Volume Right	0	0	0	184	96	
cSH	983	1700	1700	1700	248	
Volume to Capacity	0.29	0.31	0.16	0.19	0.48	
Queue Length 95th (ft)	30	0	0	0	61	
Control Delay (s)	10.1	0.0	0.0	0.0	32.4	
Lane LOS	B				D	
Approach Delay (s)	3.5		0.0		32.4	
Approach LOS					D	
Intersection Summary						
Average Delay			4.4			
Intersection Capacity Utilization			41.5%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	416	15	26	332	0	65	35	80	1	21	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1720			1858	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.88			0.98	1.00
Satd. Flow (perm)	933	3521		824	3539			1534			1830	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	540	19	34	431	0	98	53	121	2	36	47
RTOR Reduction (vph)	0	4	0	0	0	0	0	33	0	0	0	30
Lane Group Flow (vph)	21	555	0	34	431	0	0	239	0	0	38	17
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.1	13.1		13.1	13.1			13.1			13.1	13.1
Effective Green, g (s)	13.1	13.1		13.1	13.1			13.1			13.1	13.1
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	345	1302		304	1309			567			677	585
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.16			0.02	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.42			0.06	0.03
Uniform Delay, d1	7.2	8.3		7.3	8.0			8.3			7.2	7.1
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.1			0.5			0.0	0.0
Delay (s)	7.3	8.6		7.5	8.1			8.8			7.2	7.1
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.5			8.1			8.8			7.2	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.4			HCM 2000 Level of Service				A		
HCM 2000 Volume to Capacity ratio			0.42									
Actuated Cycle Length (s)			35.4			Sum of lost time (s)				9.2		
Intersection Capacity Utilization			46.3%			ICU Level of Service				A		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	501	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	545	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)			767			
pX, platoon unblocked						
vC, conflicting volume			549		545	545
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			549		545	545
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1021		500	539
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	545	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	527			
Volume to Capacity	0.32	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	11.9			
Lane LOS			B			
Approach Delay (s)	0.0		11.9			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.4%		ICU Level of Service	A
Analysis Period (min)			15			








NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑↑↑	↑	↑	↑	↑	↑	↑	↑
Volume (vph)	20	629	34	22	1644	42	157	36	49	87	44	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5047		1770	5066			3324			3365	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5047		1770	5066			3324			3365	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	24	749	40	24	1807	46	189	43	59	106	54	28
RTOR Reduction (vph)	0	3	0	0	1	0	0	13	0	0	8	0
Lane Group Flow (vph)	24	786	0	24	1852	0	0	278	0	0	180	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2234		118	2158			646			654	
v/s Ratio Prot	0.01	c0.16		c0.01	c0.37			c0.08			c0.05	
v/s Ratio Perm												
v/c Ratio	0.16	0.35		0.20	0.86			0.43			0.28	
Uniform Delay, d1	76.7	33.1		79.5	46.7			63.7			61.7	
Progression Factor	1.00	1.00		1.30	0.69			1.00			1.00	
Incremental Delay, d2	0.5	0.4		0.7	4.1			0.5			0.2	
Delay (s)	77.2	33.5		103.8	36.2			64.2			61.9	
Level of Service	E	C		F	D			E			E	
Approach Delay (s)		34.8			37.1			64.2			61.9	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		40.5			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		69.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	852	34	19	1812	11	17	4	30	53	10	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5056		1770	5081			1685		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.91		0.67	1.00	
Satd. Flow (perm)	1770	5056		1770	5081			1551		1242	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	957	38	22	2059	12	23	5	41	76	14	20
RTOR Reduction (vph)	0	2	0	0	0	0	0	29	0	0	17	0
Lane Group Flow (vph)	2	993	0	22	2071	0	0	40	0	76	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3474		118	3717			258		207	283	
v/s Ratio Prot	0.00	0.20		c0.01	c0.41						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.29		0.19	0.56			0.15		0.37	0.06	
Uniform Delay, d1	86.1	11.0		79.4	10.9			64.2		66.6	63.1	
Progression Factor	1.69	0.28		1.40	0.27			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.5	0.4			0.3		1.1	0.1	
Delay (s)	146.3	3.3		112.1	3.3			64.4		67.7	63.2	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.5			4.5			64.4			66.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		7.5			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.52										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		68.7%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	921	61	93	1673	50	140	18	88	163	35	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5038		1770	5085	1583		1784	1583		3374	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5038		1770	5085	1583		1784	1583		3374	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1035	69	112	2016	60	157	20	99	217	47	19
RTOR Reduction (vph)	0	4	0	0	0	28	0	0	82	0	3	0
Lane Group Flow (vph)	3	1100	0	112	2016	32	0	177	17	0	280	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		581	
v/s Ratio Prot	0.00	0.22		c0.06	c0.40			c0.10			c0.08	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.49		0.57	0.75	0.04		0.58	0.06		0.48	
Uniform Delay, d1	86.2	35.8		75.9	32.7	20.1		68.5	62.3		67.2	
Progression Factor	1.21	0.63		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.8		4.0	1.9	0.1		2.6	0.1		0.6	
Delay (s)	104.8	23.4		79.9	34.6	20.2		71.1	62.4		67.9	
Level of Service	F	C		E	C	C		E	E		E	
Approach Delay (s)		23.7			36.6			68.0			67.9	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		37.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		86.2%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	↰
Volume (vph)	13	1179	24	42	1798	11	15	6	47	37	2	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1670			1725	
Flt Permitted	0.95	1.00		0.95	1.00			0.93			0.78	
Satd. Flow (perm)	1770	5070		1770	5081			1566			1380	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	14	1282	26	49	2091	13	18	7	56	49	3	26
RTOR Reduction (vph)	0	1	0	0	0	0	0	44	0	0	20	0
Lane Group Flow (vph)	14	1307	0	49	2104	0	0	37	0	0	58	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Effective Green, g (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2666		72	2829			332			293	
v/s Ratio Prot	0.01	0.26		c0.03	c0.41							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.82	0.49		0.68	0.74			0.11			0.20	
Uniform Delay, d1	35.1	10.8		33.6	11.9			22.6			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	132.1	0.1		23.3	1.1			0.1			0.3	
Delay (s)	167.2	10.9		56.9	13.0			22.7			23.3	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		12.6			14.0			22.7			23.3	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		13.9			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		71.1			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		51.8%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰	↰	↰
Volume (vph)	89	1192	29	238	1741	209	71	70	751	228	90	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	103	1386	34	253	1852	222	79	78	834	271	107	88
RTOR Reduction (vph)	0	2	0	0	0	67	0	155	183	0	3	56
Lane Group Flow (vph)	103	1418	0	253	1852	155	79	307	267	271	113	23
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.1	30.1	10.4	33.8	33.8
Effective Green, g (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.1	30.1	10.4	33.8	33.8
Actuated g/C Ratio	0.05	0.31		0.15	0.41	0.41	0.06	0.26	0.26	0.09	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	178	1547		274	2076	646	102	403	391	308	511	439
v/s Ratio Prot	0.03	0.28		c0.14	c0.36		0.04	c0.20		c0.08	c0.06	
v/s Ratio Perm						0.10			0.18			0.02
v/c Ratio	0.58	0.92		0.92	0.89	0.24	0.77	0.76	0.68	0.88	0.22	0.05
Uniform Delay, d1	53.6	38.7		48.2	31.8	22.4	53.7	39.5	38.5	52.0	30.9	29.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.5	8.9		34.5	5.3	0.2	29.9	8.3	4.9	23.6	0.2	0.1
Delay (s)	58.1	47.6		82.7	37.2	22.6	83.6	47.8	43.4	75.6	31.2	29.4
Level of Service	E	D		F	D	C	F	D	D	E	C	C
Approach Delay (s)		48.3			40.7			48.6			56.7	
Approach LOS		D			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		45.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		115.6			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		81.7%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	276	1081	0	151	1109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	310	1162	0	168	1232
RTOR Reduction (vph)	0	0	0	0	0	7
Lane Group Flow (vph)	0	310	1162	0	168	1225
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.33		0.09	c0.44
v/s Ratio Perm						
v/c Ratio		0.11	1.00		0.81	0.80
Uniform Delay, d1		2.5	26.7		34.4	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	25.1		20.9	3.0
Delay (s)		2.5	51.9		55.3	17.5
Level of Service		A	D		E	B
Approach Delay (s)		2.5	51.9		22.0	
Approach LOS		A	D		C	
Intersection Summary						
HCM 2000 Control Delay			32.0		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.93			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			61.1%		ICU Level of Service	B
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	428	0	0	410	510	770	1	140	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3245		1681	1631				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3245		1681	1631				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	492	0	0	446	554	837	1	152	0	0	0
RTOR Reduction (vph)	0	0	0	0	348	0	0	30	0	0	0	0
Lane Group Flow (vph)	0	492	0	0	652	0	502	458	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.3			16.3		19.5	19.5				
Effective Green, g (s)		16.3			16.3		19.5	19.5				
Actuated g/C Ratio		0.37			0.37		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1317			1207		748	726				
v/s Ratio Prot		0.14			c0.20							
v/s Ratio Perm							c0.30	0.28				
v/c Ratio		0.37			0.54		0.67	0.63				
Uniform Delay, d1		10.0			10.8		9.6	9.4				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.5		2.4	1.8				
Delay (s)		10.2			11.3		12.0	11.2				
Level of Service		B			B		B	B				
Approach Delay (s)		10.2			11.3		11.6				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					11.2					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.61							
Actuated Cycle Length (s)					43.8					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					66.7%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰			↱	↰	↱
Volume (veh/h)	0	3	4	65	13	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	90	32	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	133	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	133	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	858	1042	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	96	32			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	1042	1581	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			16.7%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↱			↰↱				↰			↱
Volume (veh/h)	0	4044	17	0	1798	243	0	0	907	0	0	55
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4212	18	0	1854	251	0	0	1008	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2124			4250			4963	6365	1453	3423	6249	783
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2124			4250			4963	6365	1453	3423	6249	783
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	249			34			0	0	1828	1	0	325
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1685	1685	860	741	741	621	1008	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	251	1008	83				
cSH	1700	1700	1700	1700	1700	1700	1828	325				
Volume to Capacity	0.99	0.99	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	89	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.4	19.8				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.4	19.8				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				143.3%	ICU Level of Service		H					
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3810	130	0	1835	0	200	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3928	134	0	1911	0	244	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4082		4672	1416	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4082		4672	1416	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			40		1	122	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1571	1571	920	637	637	637	244
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	244
cSH	1700	1700	1700	1700	1700	1700	122
Volume to Capacity	0.92	0.92	0.54	0.37	0.37	0.37	1.99
Queue Length 95th (ft)	0	0	0	0	0	0	495
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	533.4
Lane LOS							F
Approach Delay (s)	0.0			0.0			533.4
Approach LOS							F
Intersection Summary							
Average Delay			20.9				
Intersection Capacity Utilization			97.5%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑↑			↑↑	↗
Volume (vph)	0	0	0	963	634	109	86	251		0	0	860
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4636		1770	3539				3528
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4636		1770	3539				3528
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1014	667	115	89	259	0	0	0	887
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	0	2
Lane Group Flow (vph)	0	0	0	507	1277	0	89	259	0	0	0	901
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA				NA
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1432		98	1989				1568
v/s Ratio Prot				c0.33	0.28		c0.05	0.07				c0.26
v/s Ratio Perm												
v/c Ratio				1.08	0.96d1		0.91	0.13				0.57
Uniform Delay, d1				31.1	29.7		42.3	9.3				18.7
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				64.3	7.4		61.4	0.0				0.5
Delay (s)				95.4	37.1		103.7	9.3				19.2
Level of Service				F	D		F	A				B
Approach Delay (s)		0.0			53.6			33.5				19.2
Approach LOS		A			D			C				B
Intersection Summary												
HCM 2000 Control Delay			41.1			HCM 2000 Level of Service		D				
HCM 2000 Volume to Capacity ratio			0.79									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)		17.2				
Intersection Capacity Utilization		135.5%				ICU Level of Service		H				
Analysis Period (min)			15									
d1 Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔	
Volume (vph)	7	2108	106	0	0	0	0	337	433	760	1086	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.95	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3130	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3130	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2316	116	0	0	0	0	392	503	792	1131	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2324	87	0	0	0	0	612	248	792	1131	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					949	409	865	2022	
v/s Ratio Prot		c0.46						c0.20		c0.23	0.32	
v/s Ratio Perm			0.06						0.18			
v/c Ratio		1.26	0.15					0.65	0.61	0.92	0.56	
Uniform Delay, d1		55.8	37.7					52.8	52.0	63.6	23.6	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		122.6	0.1					1.5	2.5	14.1	0.3	
Delay (s)		178.4	37.8					54.3	54.5	77.7	24.0	
Level of Service		F	D					D	D	E	C	
Approach Delay (s)		171.7			0.0			54.4			46.1	
Approach LOS		F			A			D			D	
Intersection Summary												
HCM 2000 Control Delay			105.8									
HCM 2000 Volume to Capacity ratio			0.96									
Actuated Cycle Length (s)			175.0							14.4		
Intersection Capacity Utilization			135.5%									
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2015 Alt 1/2/3
Timing Plan: PM PEAK













Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔		↔↔			↔↔
Volume (vph)	167	11	840	663	0	1172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1584		3257			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1584		3257			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	214	14	944	745	0	1260
RTOR Reduction (vph)	2	0	68	0	0	0
Lane Group Flow (vph)	226	0	1621	0	0	1260
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	297		2461			2540
v/s Ratio Prot	c0.14		c0.50			0.37
v/s Ratio Perm						
v/c Ratio	0.76		0.66			0.50
Uniform Delay, d1	61.6		9.5			7.6
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	11.0		1.4			0.7
Delay (s)	72.6		10.9			8.3
Level of Service	E		B			A
Approach Delay (s)	72.6		10.9			8.3
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay			14.3			
HCM 2000 Volume to Capacity ratio			0.69			
Actuated Cycle Length (s)			160.0			12.1
Intersection Capacity Utilization			77.9%			
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON Year 2015 Alt 1/2/3

Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	138	9	28	25	9	24	21	1424	47	64	1388	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1721		1770	3522		1770	3489	
Flt Permitted	0.69	0.69	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1221	1220	1583		1464		1770	3522		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	177	12	36	39	14	38	23	1531	51	70	1509	159
RTOR Reduction (vph)	0	0	30	0	23	0	0	1	0	0	3	0
Lane Group Flow (vph)	94	95	6	0	68	0	23	1581	0	70	1665	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4		4							
Actuated Green, G (s)	18.9	18.9	18.9		18.9		3.0	71.4		8.0	76.4	
Effective Green, g (s)	18.9	18.9	18.9		18.9		3.0	71.4		8.0	76.4	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	204	203	264		244		46	2223		125	2356	
v/s Ratio Prot							0.01	0.45		c0.04	c0.48	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.46	0.47	0.02		0.28		0.50	0.71		0.56	0.71	
Uniform Delay, d1	42.5	42.6	39.4		41.1		54.3	14.0		50.8	11.4	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.6	1.7	0.0		0.6		8.3	1.1		5.6	1.0	
Delay (s)	44.1	44.3	39.4		41.8		62.6	15.0		56.5	12.4	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.4			41.8			15.7			14.2	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.3										
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		113.1						14.8				
Intersection Capacity Utilization		72.9%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON Year 2015 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	7	0	139	0	1237	0	31	1522	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1619			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1619			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	10	0	201	0	1316	0	33	1637	0
RTOR Reduction (vph)	0	0	0	0	164	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	47	0	0	1316	0	33	1637	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			45.6		1.7	51.5	
Effective Green, g (s)					14.1			45.6		1.7	51.5	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					301			2131		39	2407	
v/s Ratio Prot					c0.03			0.37		0.02	c0.46	
v/s Ratio Perm												
v/c Ratio					0.16			0.62		0.85	0.68	
Uniform Delay, d1					25.8			9.5		36.9	7.2	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.2			0.5		84.9	0.8	
Delay (s)					26.1			10.1		121.7	8.0	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			26.1			10.1			10.2	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					11.2							
HCM 2000 Volume to Capacity ratio					0.66							
Actuated Cycle Length (s)					75.7					18.9		
Intersection Capacity Utilization					59.5%							
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON Year 2015 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	281	48	115	6	67	406	27	560	2	134	1351	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1517		1855	1511	1770	3539	1350	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1517		1855	1511	1770	3539	1350	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	370	63	151	7	73	441	30	615	2	143	1437	67
RTOR Reduction (vph)	0	0	122	0	0	228	0	0	1	0	2	0
Lane Group Flow (vph)	370	63	29	0	80	213	30	615	1	143	1502	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.8	27.8	27.8		22.7	22.7	2.9	56.2	56.2	16.6	69.9	
Effective Green, g (s)	27.8	27.8	27.8		22.7	22.7	2.9	56.2	56.2	16.6	69.9	
Actuated g/C Ratio	0.19	0.19	0.19		0.16	0.16	0.02	0.39	0.39	0.12	0.49	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	344	362	295		295	240	35	1393	531	205	1720	
v/s Ratio Prot	c0.21	0.03			0.04		0.02	0.17		c0.08	c0.43	
v/s Ratio Perm			0.02			c0.14		0.00				
v/c Ratio	1.08	0.17	0.10		0.27	0.89	0.86	0.44	0.00	0.70	0.87	
Uniform Delay, d1	57.4	47.9	47.2		52.7	58.8	69.7	31.7	26.2	60.6	32.5	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	70.1	0.2	0.1		0.5	30.1	94.8	1.0	0.0	9.9	6.5	
Delay (s)	127.6	48.1	47.3		53.2	88.8	164.5	32.8	26.2	70.5	38.9	
Level of Service	F	D	D		D	F	F	C	C	E	D	
Approach Delay (s)		98.3			83.4			38.8			41.7	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay		57.2								E		
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		142.7				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		78.2%				ICU Level of Service		D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON Year 2015 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	303	477	3	35	173	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	337	530	4	49	197	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	425	29			54	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	425	29			54	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	34	49			87	
cM capacity (veh/h)	511	1046			1552	
Direction, Lane #						
Volume Total	867	54	200			
Volume Left	337	0	197			
Volume Right	530	49	0			
cSH	1126	1700	1552			
Volume to Capacity	0.77	0.03	0.13			
Queue Length 95th (ft)	201	0	11			
Control Delay (s)	18.0	0.0	7.5			
Lane LOS	C		A			
Approach Delay (s)	18.0	0.0	7.5			
Approach LOS	C					
Intersection Summary						
Average Delay		15.3				
Intersection Capacity Utilization		39.9%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2015 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	306	6	594	38	0	1474
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	387	8	660	42	0	1656
RTOR Reduction (vph)	1	0	0	24	0	0
Lane Group Flow (vph)	394	0	660	18	0	1656
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.22		0.19			c0.47
v/s Ratio Perm				0.01		
v/c Ratio	0.47		0.43	0.03		1.09
Uniform Delay, d1	18.5		21.0	17.3		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.2	0.0		51.5
Delay (s)	19.0		21.2	17.3		81.5
Level of Service	B		C	B		F
Approach Delay (s)	19.0		21.0			81.5
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay			57.1		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			0.76			
Actuated Cycle Length (s)			105.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			90.7%		ICU Level of Service	E
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2015 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (veh/h)	4	6	451	3	14	1411
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	524	3	15	1551
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1332	264			528	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1332	264			528	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	94	98			99	
cM capacity (veh/h)	143	734			1035	
Direction, Lane #						
Volume Total	20	350	178	15	775	775
Volume Left	8	0	0	15	0	0
Volume Right	12	0	3	0	0	0
cSH	277	1700	1700	1035	1700	1700
Volume to Capacity	0.07	0.21	0.10	0.01	0.46	0.46
Queue Length 95th (ft)	6	0	0	1	0	0
Control Delay (s)	19.0	0.0	0.0	8.5	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	19.0	0.0		0.1		
Approach LOS	C					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			49.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2015 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	29	54	399	11	98	1317
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	32	59	453	12	108	1447
RTOR Reduction (vph)	0	44	0	7	0	0
Lane Group Flow (vph)	32	15	453	5	108	1447
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.3	21.4	27.9	27.9	7.0	43.7
Effective Green, g (s)	9.3	16.3	27.9	27.9	7.0	43.7
Actuated g/C Ratio	0.15	0.26	0.45	0.45	0.11	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	264	414	1584	708	198	2482
v/s Ratio Prot	c0.02	0.01	0.13		0.06	c0.41
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.04	0.29	0.01	0.55	0.58
Uniform Delay, d1	23.0	17.1	10.9	9.5	26.1	4.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.0	3.1	0.4
Delay (s)	23.2	17.2	11.0	9.5	29.2	5.0
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.3		11.0			6.7
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			8.2		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.60			
Actuated Cycle Length (s)			62.3		Sum of lost time (s)	18.1
Intersection Capacity Utilization			48.3%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2015 Alt 1/2/3

Timing Plan: PM PEAK







	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↩	↕	↕		↕
Volume (veh/h)	0	21	390	17	0	1346
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	28	448	20	0	1463
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1190	234			468	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1190	234			468	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	181	768			1090	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	28	299	169	732	732	
Volume Left	0	0	0	0	0	
Volume Right	28	0	20	0	0	
cSH	768	1700	1700	1700	1700	
Volume to Capacity	0.04	0.18	0.10	0.43	0.43	
Queue Length 95th (ft)	3	0	0	0	0	
Control Delay (s)	9.9	0.0	0.0	0.0	0.0	
Lane LOS	A					
Approach Delay (s)	9.9	0.0		0.0		
Approach LOS	A					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			40.5%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

MILCON Year 2015 Alt 1/2/3

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	29	25	384	17	21	1322
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	40	35	409	18	23	1453
RTOR Reduction (vph)	0	32	0	7	0	0
Lane Group Flow (vph)	40	3	409	11	23	1453
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.4	27.1	27.1	1.8	36.4
Effective Green, g (s)	2.6	4.4	27.1	27.1	1.8	36.4
Actuated g/C Ratio	0.06	0.10	0.59	0.59	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	152	2103	940	69	2824
v/s Ratio Prot	c0.02	0.00	0.12		0.01	c0.41
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.40	0.02	0.19	0.01	0.33	0.51
Uniform Delay, d1	20.7	18.7	4.2	3.8	21.3	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.6	0.1	0.0	0.0	2.8	0.2
Delay (s)	23.4	18.7	4.3	3.8	24.2	1.7
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.2		4.3			2.1
Approach LOS	C		A			A

Intersection Summary





HCM 2000 Control Delay	3.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	45.6	Sum of lost time (s)	14.1
Intersection Capacity Utilization	47.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

MILCON Year 2015 Alt 1/2/3

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	10	13	81	7	0	171	12	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	10	14	105	9	0	192	13	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	10	14	114	206						
Volume Left (vph)	0	0	105	0						
Volume Right (vph)	0	14	0	13						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.13	0.18						
Capacity (veh/h)	873	1121	860	1121						
Control Delay (s)	7.1	6.2	7.7	6.9						
Approach Delay (s)	6.6		7.7	6.9						
Approach LOS	A		A	A						

Intersection Summary
























Delay	7.2		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

NBC Coastal Campus

MILCON Year 2015 Alt 1/2/3

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK

															
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR			
Lane Configurations															
Volume (vph)	9	177	0	0	78	132	11	308	65	0	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3						
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00						
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85						
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00						
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583						
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00						
Satd. Flow (perm)	1301	1863			1863	1583	1770	3539	1583						
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25			
Adj. Flow (vph)	10	201	0	0	90	152	12	338	71	0	0	0			
RTOR Reduction (vph)	0	0	0	0	0	120	0	0	38	0	0	0			
Lane Group Flow (vph)	10	201	0	0	90	32	12	338	33	0	0	0			
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm						
Protected Phases		4			8		5	2							
Permitted Phases	4					8			2						
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.7	18.7	18.7						
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.7	18.7	18.7						
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46						
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3						
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0						
Lane Grp Cap (vph)	269	386			386	328	817	1634	730						
v/s Ratio Prot		c0.11			0.05		0.01	c0.10							
v/s Ratio Perm	0.01					0.02			0.02						
v/c Ratio	0.04	0.52			0.23	0.10	0.01	0.21	0.04						
Uniform Delay, d1	12.8	14.3			13.4	13.0	5.9	6.5	6.0						
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00						
Incremental Delay, d2	0.1	1.3			0.3	0.1	0.0	0.1	0.0						
Delay (s)	12.9	15.5			13.7	13.1	5.9	6.5	6.0						
Level of Service	B	B			B	B	A	A	A						
Approach Delay (s)		15.4			13.3		6.4				0.0				
Approach LOS		B			B		A				A				
Intersection Summary															
HCM 2000 Control Delay			10.5		HCM 2000 Level of Service					B					
HCM 2000 Volume to Capacity ratio			0.30												
Actuated Cycle Length (s)			40.5		Sum of lost time (s)					13.4					
Intersection Capacity Utilization			40.3%		ICU Level of Service					A					
Analysis Period (min)			15												
c Critical Lane Group															

NBC Coastal Campus

MILCON Year 2015 Alt 1/2/3

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: PM PEAK











Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰		↰	↑	↰	↑	↰
Volume (veh/h)	0	155	0	446	0	1483	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	620	0	507	0	1648	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1901	824	1648		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1901	824	1648		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	0	100		0		
cM capacity (veh/h)	61	316	388		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	620	0	253	253	1099	549	0
Volume Left	0	0	0	0	0	0	0
Volume Right	620	0	0	0	0	0	0
cSH	316	1700	1700	1700	1700	1700	1700
Volume to Capacity	1.96	0.00	0.15	0.15	0.65	0.32	0.00
Queue Length 95th (ft)	1083	0	0	0	0	0	0
Control Delay (s)	470.8	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F						
Approach Delay (s)	470.8	0.0			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			105.2				
Intersection Capacity Utilization			57.3%		ICU Level of Service		
Analysis Period (min)			15		B		

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON Year 2015 Alt 1/2/3

Timing Plan: PM PEAK











Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	83	0	64	1	1	0	70	308	11	1	1213	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.85		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3521		1770	3469	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3521		1770	3469	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	111	0	85	2	2	0	77	338	12	1	1348	204
RTOR Reduction (vph)	0	68	0	0	0	0	0	2	0	0	9	0
Lane Group Flow (vph)	111	17	0	2	2	0	77	348	0	1	1543	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	17.9	17.9		0.8	0.8		5.8	52.4		0.8	47.4	
Effective Green, g (s)	17.9	17.9		0.8	0.8		5.8	52.4		0.8	47.4	
Actuated g/C Ratio	0.20	0.20		0.01	0.01		0.06	0.58		0.01	0.52	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	348	312		15	16		113	2031		15	1810	
v/s Ratio Prot	c0.06	0.01		c0.00	0.00		c0.04	0.10		0.00	c0.44	
v/s Ratio Perm												
v/c Ratio	0.32	0.05		0.13	0.12		0.68	0.17		0.07	0.85	
Uniform Delay, d1	31.2	29.6		44.7	44.7		41.6	9.0		44.6	18.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.1		4.0	3.5		15.6	0.0		1.9	4.1	
Delay (s)	31.8	29.6		48.7	48.2		57.2	9.1		46.5	22.8	
Level of Service	C	C		D	D		E	A		D	C	
Approach Delay (s)		30.8			48.4			17.7			22.8	
Approach LOS		C			D			B			C	
Intersection Summary												
HCM 2000 Control Delay		22.6										
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		90.8										
Intersection Capacity Utilization		66.7%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2015 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	54	1170	55	0	344	33	12	38	4	23	25	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Frt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5051			5019		1770	1835			1761	
Flt Permitted	0.95	1.00			1.00		0.71	1.00			0.17	
Satd. Flow (perm)	1770	5051			5019		1316	1835			300	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	61	1330	62	0	366	35	17	54	6	27	29	22
RTOR Reduction (vph)	0	2	0	0	7	0	0	2	0	0	8	0
Lane Group Flow (vph)	61	1390	0	0	394	0	17	58	0	0	71	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1910			2038		255	356			50	
v/s Ratio Prot	c0.03	c0.28			c0.08			c0.03				
v/s Ratio Perm							0.01				c0.24	
v/c Ratio	0.31	0.73			0.19		0.07	0.16			1.41	
Uniform Delay, d1	73.7	48.0			34.5		59.2	60.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.9	2.5			0.2		0.1	0.2			269.3	
Delay (s)	74.6	50.5			34.7		59.3	60.5			344.3	
Level of Service	E	D			C		E	E			F	
Approach Delay (s)		51.5			34.7			60.2			344.3	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		59.8										
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2015 Alt 1/2/3

20: SR-75 (Silver Strand Blvd) & Delaware St

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑↑			↑↑	↑↑							↑
Volume (vph)	0	1199	0	478	379	36	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3493							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3493							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1347	0	509	403	38	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1347	0	509	441	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3174							609
v/s Ratio Prot		c0.26		c0.15	c0.13							
v/s Ratio Perm												0.00
v/c Ratio		0.70		0.26	0.14							0.00
Uniform Delay, d1		47.3		20.5	0.9							34.8
Progression Factor		0.18		1.00	1.00							1.00
Incremental Delay, d2		1.4		0.1	0.0							0.0
Delay (s)		9.8		20.5	0.9							34.9
Level of Service		A		C	A							C
Approach Delay (s)		9.8			11.4		0.0				34.9	
Approach LOS		A			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		10.6					HCM 2000 Level of Service		B			
HCM 2000 Volume to Capacity ratio		0.47										
Actuated Cycle Length (s)		180.0					Sum of lost time (s)		22.3			
Intersection Capacity Utilization		46.0%					ICU Level of Service		A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2015 Alt 1/2/3




















21: Dwy/Silver Strand Blvd & Palm Ave

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑				↑↑
Volume (veh/h)	3	212	0	0	304	40	0	0	0	103	0	8
Sign Control		Free			Free			Stop				Stop
Grade		0%			0%			0%				0%
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	247	0	0	345	45	0	0	0	156	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	391			247			634	644	247	622	622	368
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	391			247			634	644	247	622	622	368
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	61	100	98
cM capacity (veh/h)	1168			1319			384	390	792	398	402	677
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	250	391	0	168								
Volume Left	3	0	0	156								
Volume Right	0	45	0	12								
cSH	1168	1319	1700	411								
Volume to Capacity	0.00	0.00	0.00	0.41								
Queue Length 95th (ft)	0	0	0	49								
Control Delay (s)	0.1	0.0	0.0	19.7								
Lane LOS	A			A								
Approach Delay (s)	0.1	0.0	0.0	19.7								
Approach LOS				A								
Intersection Summary												
Average Delay		4.1										
Intersection Capacity Utilization		31.3%					ICU Level of Service		A			
Analysis Period (min)		15										











NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop				Stop			Stop			Stop	
Volume (vph)	7	293	12	84	318	24	14	38	67	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	376	15	94	357	27	25	67	118	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	391	94	384	209	161						
Volume Left (vph)	9	0	94	0	25	61						
Volume Right (vph)	0	15	0	27	118	28						
Hadj (s)	0.53	0.01	0.53	-0.02	-0.28	0.00						
Departure Headway (s)	7.2	6.7	7.1	6.5	6.6	7.0						
Degree Utilization, x	0.02	0.72	0.19	0.70	0.38	0.31						
Capacity (veh/h)	472	520	485	529	479	437						
Control Delay (s)	9.1	23.9	10.5	22.0	13.7	13.2						
Approach Delay (s)	23.6		19.8		13.7	13.2						
Approach LOS	C		C		B	B						
Intersection Summary												
Delay			19.1									
Level of Service			C									
Intersection Capacity Utilization			41.2%	ICU Level of Service		A						
Analysis Period (min)			15									









NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	72	420	453	39	52	139
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	74	433	527	45	61	164
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	572				1131	286
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	572				1131	286
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	93				66	77
cM capacity (veh/h)	997				182	711
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	74	433	351	221	225	
Volume Left	74	0	0	0	61	
Volume Right	0	0	0	45	164	
cSH	997	1700	1700	1700	397	
Volume to Capacity	0.07	0.25	0.21	0.13	0.57	
Queue Length 95th (ft)	6	0	0	0	84	
Control Delay (s)	8.9	0.0	0.0	0.0	25.2	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		25.2	
Approach LOS					D	
Intersection Summary						
Average Delay			4.8			
Intersection Capacity Utilization			40.2%		ICU Level of Service	A
Analysis Period (min)			15			





NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	429	29	31	455	3	54	19	22	12	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3536			1754			1841	1583
Flt Permitted	0.47	1.00		0.45	1.00			0.79			0.90	1.00
Satd. Flow (perm)	870	3505		835	3536			1417			1669	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	511	35	34	500	3	66	23	27	16	53	39
RTOR Reduction (vph)	0	7	0	0	1	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	539	0	34	502	0	0	95	0	0	69	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Effective Green, g (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	414	1671		398	1686			309			364	345
v/s Ratio Prot		c0.15			0.14							
v/s Ratio Perm	0.04			0.04				c0.07			0.04	0.01
v/c Ratio	0.08	0.32		0.09	0.30			0.31			0.19	0.02
Uniform Delay, d1	4.3	4.9		4.3	4.8			9.9			9.6	9.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.6			0.3	0.0
Delay (s)	4.4	5.0		4.4	4.9			10.5			9.9	9.3
Level of Service	A	A		A	A			B			A	A
Approach Delay (s)		5.0			4.9			10.5			9.7	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		30.2			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		44.6%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												







NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	632	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	771	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			780		771	771
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			780		771	771
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			837		368	400
Direction, Lane #						
Volume Total	771	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	376			
Volume to Capacity	0.45	0.01	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	14.9			
Lane LOS			B			
Approach Delay (s)	0.0		14.9			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			43.3%		ICU Level of Service	A
Analysis Period (min)			15			







NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	40	1492	119	56	753	126	94	87	60	167	76	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5029		1770	4976			3342			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5029		1770	4976			3342			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	43	1587	127	57	761	127	103	96	66	188	85	27
RTOR Reduction (vph)	0	5	0	0	12	0	0	18	0	0	4	0
Lane Group Flow (vph)	43	1709	0	57	876	0	0	247	0	0	296	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2114		157	1982			649			658	
v/s Ratio Prot	0.02	c0.34		c0.03	0.18			c0.07			c0.09	
v/s Ratio Perm												
v/c Ratio	0.22	0.81		0.36	0.44			0.38			0.45	
Uniform Delay, d1	72.9	45.8		77.2	39.5			63.1			64.0	
Progression Factor	1.00	1.00		1.27	0.69			1.00			1.00	
Incremental Delay, d2	0.6	2.4		1.4	0.7			0.4			0.5	
Delay (s)	73.5	48.2		99.7	27.9			63.5			64.5	
Level of Service	E	D		F	C			E			E	
Approach Delay (s)		48.8			32.2			63.5			64.5	
Approach LOS		D			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		46.6			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		116.6%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	19	1765	55	47	1146	53	20	10	34	61	12	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5062		1770	5051			1702		1770	1718	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.63	1.00	
Satd. Flow (perm)	1770	5062		1770	5051			1556		1172	1718	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.83	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	19	1801	56	48	1181	55	24	12	41	72	14	15
RTOR Reduction (vph)	0	1	0	0	2	0	0	24	0	0	13	0
Lane Group Flow (vph)	19	1856	0	48	1234	0	0	53	0	72	16	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Effective Green, g (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3563		157	3667			191		143	210	
v/s Ratio Prot	0.01	c0.37		c0.03	c0.24						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.16	0.52		0.31	0.34			0.28		0.50	0.08	
Uniform Delay, d1	79.3	12.5		76.8	8.9			71.7		73.8	69.9	
Progression Factor	1.46	0.11		1.59	0.31			1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4		1.0	0.2			0.8		2.8	0.2	
Delay (s)	116.3	1.8		122.9	3.0			72.5		76.6	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		2.9			7.4			72.5			74.7	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.4			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.50										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		58.6%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰		↰↰	
Volume (vph)	25	1609	191	152	1218	79	124	39	123	149	43	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5004		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5004		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	27	1712	203	157	1256	81	135	42	134	201	58	26
RTOR Reduction (vph)	0	8	0	0	0	36	0	0	111	0	4	0
Lane Group Flow (vph)	27	1907	0	157	1256	45	0	177	23	0	281	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2			4				
Actuated Green, G (s)	12.0	79.7		19.6	87.7	87.7		30.7	30.7		30.7	
Effective Green, g (s)	12.0	79.7		19.6	87.7	87.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.07	0.44		0.11	0.49	0.49		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	118	2215		192	2477	771		305	269		575	
v/s Ratio Prot	0.02	c0.38		c0.09	0.25			c0.10			c0.08	
v/s Ratio Perm					0.03			0.01				
v/c Ratio	0.23	0.86		0.82	0.51	0.06		0.58	0.08		0.49	
Uniform Delay, d1	79.6	45.2		78.5	31.4	24.4		68.7	62.8		67.5	
Progression Factor	1.05	0.88		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.9	4.1		22.9	0.7	0.1		7.8	0.6		3.0	
Delay (s)	84.2	43.9		101.3	32.2	24.5		76.6	63.4		70.5	
Level of Service	F	D		F	C	C		E	E		E	
Approach Delay (s)		44.4			39.0			70.9			70.5	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		46.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		99.3%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰	↰		↰↰	
Volume (vph)	9	1778	48	165	1508	15	38	8	79	22	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5065		1770	5078			1678			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.84	
Satd. Flow (perm)	1770	5065		1770	5078			1514			1510	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85		0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	10	1976	53	174	1587	16	45	9	93	27	12	12
RTOR Reduction (vph)	0	2	0	0	1	0	0	74	0	0	10	0
Lane Group Flow (vph)	10	2027	0	174	1602	0	0	73	0	0	41	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4				4	
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.2			17.2	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.2			17.2	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2418		234	3050			308			307	
v/s Ratio Prot	0.01	c0.40		c0.10	0.32							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.62	0.84		0.74	0.53			0.24			0.14	
Uniform Delay, d1	41.7	19.2		35.2	9.8			28.1			27.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	57.6	2.7		12.0	0.2			0.4			0.2	
Delay (s)	99.2	21.9		47.3	10.0			28.5			27.7	
Level of Service	F	C		D	A			C			C	
Approach Delay (s)		22.3			13.6			28.5			27.7	
Approach LOS		C			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		18.8			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		84.4			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		65.6%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑↑	↓	↔	↑↑	↓	↔	↑	↓	↔	↑	↓
Volume (vph)	184	1722	23	319	1516	540	63	172	519	572	232	221
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		1770	5085	1583	1770	1631	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		1770	5085	1583	1770	1631	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	194	1813	24	343	1630	581	67	183	552	622	252	240
RTOR Reduction (vph)	0	1	0	0	0	88	0	26	268	0	2	133
Lane Group Flow (vph)	194	1836	0	343	1630	493	67	356	85	622	274	83
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.3	36.4		45.0	70.1	70.1	8.6	36.6	36.6	11.8	39.8	39.8
Effective Green, g (s)	11.3	36.4		45.0	70.1	70.1	8.6	36.6	36.6	11.8	39.8	39.8
Actuated g/C Ratio	0.07	0.24		0.30	0.46	0.46	0.06	0.24	0.24	0.08	0.26	0.26
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1217		525	2349	731	100	393	362	267	458	394
v/s Ratio Prot	0.06	c0.36		c0.19	c0.32		0.04	c0.22		c0.18	c0.16	
v/s Ratio Perm					0.31			0.06				0.06
v/c Ratio	0.76	1.51		0.65	0.69	0.67	0.91	0.24	2.33	0.60	0.21	
Uniform Delay, d1	68.9	57.6		46.5	32.3	31.9	70.2	55.9	46.3	69.9	48.9	43.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.5	233.3		2.9	0.9	2.5	16.2	23.8	0.3	609.9	2.1	0.3
Delay (s)	81.4	290.9		49.5	33.2	34.3	86.4	79.7	46.6	679.9	51.0	44.0
Level of Service	F	F		D	C	C	F	E	D	F	D	D
Approach Delay (s)		270.9			35.6			65.7			400.8	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		175.4			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.12										
Actuated Cycle Length (s)		151.7			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		117.9%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↔	↔
Volume (vph)	0	488	825	0	428	1557
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	548	878	0	470	1711
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	548	878	0	470	1706
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.15	c0.25		0.27	c0.61
v/s Ratio Perm						
v/c Ratio		0.31	1.02		0.71	0.96
Uniform Delay, d1		11.6	30.3		21.3	13.6
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	36.8		3.5	13.3
Delay (s)		11.7	67.1		24.8	26.8
Level of Service		B	E		C	C
Approach Delay (s)		11.7	67.1		26.4	
Approach LOS		B	E		C	
Intersection Summary						
HCM 2000 Control Delay			34.1		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			1.05			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			82.6%		ICU Level of Service	E
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	911	0	0	512	244	418	2	104	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	949	0	0	575	274	449	2	112	0	0	0
RTOR Reduction (vph)	0	0	0	0	99	0	0	39	0	0	0	0
Lane Group Flow (vph)	0	949	0	0	750	0	287	237	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		18.5			18.5		13.4	13.4				
Effective Green, g (s)		18.5			18.5		13.4	13.4				
Actuated g/C Ratio		0.46			0.46		0.34	0.34				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1640			1561		564	542				
v/s Ratio Prot		0.27			0.22							
v/s Ratio Perm							0.17	0.15				
v/c Ratio		0.58			0.48		0.51	0.44				
Uniform Delay, d1		7.8			7.4		10.6	10.3				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.5			0.2		0.7	0.6				
Delay (s)		8.3			7.6		11.3	10.9				
Level of Service		A			A		B	B				
Approach Delay (s)		8.3			7.6		11.1				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		8.7										
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		39.9							8.0			
Intersection Capacity Utilization		46.7%							A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	3	36	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	3	52	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	73	52	52			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	73	52	52			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	926	1015	1554			
Direction, Lane #						
Volume Total	16	12	52			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	1015	1554	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.3	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.3	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.5				
Intersection Capacity Utilization		17.2%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St









MILCON Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1398	34	0	3795	552	0	0	476	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1684	41	0	4125	600	0	0	595	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4745			1745			3132	6470	622	5026	6190	1715
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4745			1745			3132	6470	622	5026	6190	1715
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	84
cM capacity (veh/h)	21			350			4	0	1354	0	0	77
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	674	674	378	1650	1650	1425	595	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	600	595	12				
cSH	1700	1700	1700	1700	1700	1700	1354	77				
Volume to Capacity	0.40	0.40	0.22	0.97	0.97	0.84	0.44	0.16				
Queue Length 95th (ft)	0	0	0	0	0	0	57	13				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	60.6				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	60.6				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				100.7%			ICU Level of Service		G			
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1259	201	0	3694	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1431	228	0	4104	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1679			2953	631
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1679			2953	631
tC, single (s)			4.1			6.8	6.9
tC, 2 stage (s)							
tF (s)			2.2			3.5	3.3
p0 queue free %			100			100	39
cM capacity (veh/h)			371			11	410
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	572	572	515	1368	1368	1368	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	228	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	410
Volume to Capacity	0.34	0.34	0.30	0.80	0.80	0.80	0.61
Queue Length 95th (ft)	0	0	0	0	0	0	99
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	26.7
Lane LOS	D						
Approach Delay (s)	0.0			0.0			26.7
Approach LOS	D						
Intersection Summary							
Average Delay	1.1						
Intersection Capacity Utilization	86.2%			ICU Level of Service		E	
Analysis Period (min)	15						

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1559	1943	342	105	102	0	0	277	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4640		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4640		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1676	2089	368	142	138	0	0	318	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1022	3103	0	142	138	0	0	330	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.6			21.4	
Effective Green, g (s)				131.2	131.2		20.0	46.6			21.4	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1054	3214		186	870			396	
v/s Ratio Prot				c0.67	0.67		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.97	0.97		0.76	0.16			0.83	
Uniform Delay, d1				27.2	27.0		82.4	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				20.4	9.2		16.8	0.1			14.0	
Delay (s)				47.7	36.2		99.2	56.1			96.3	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			39.0			78.0			96.3	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		45.3		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		189.4		Sum of lost time (s)						16.8		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	583	64	0	0	0	0	197	198	451	1442	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3262	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3262	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	634	70	0	0	0	0	229	215	490	1502	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	18	49	0	0	0
Lane Group Flow (vph)	0	635	41	0	0	0	0	288	89	490	1502	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1178	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.42	
v/s Ratio Perm		0.12	0.03						0.06			
v/c Ratio		0.36	0.07					0.24	0.17	0.70	0.73	
Uniform Delay, d1		41.5	37.2					38.4	37.3	63.2	26.0	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.3	
Delay (s)		41.6	37.3					38.5	37.5	66.2	27.3	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.2			36.9	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.0		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)						14.4		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2016 Alt 2/3noB

Timing Plan: AM PEAK

	↙	↖	↑	↗	↘	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	TT		TT		TT	TT
Volume (vph)	210	6	1112	585	0	1077
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Flt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3315			3362
Flt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3315			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	244	7	1196	629	0	1134
RTOR Reduction (vph)	2	0	54	0	0	0
Lane Group Flow (vph)	249	0	1771	0	0	1134
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	16.6		42.2			42.2
Effective Green, g (s)	16.6		42.2			42.2
Actuated g/C Ratio	0.24		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	389		2060			2089
v/s Ratio Prot	c0.16		c0.53			0.34
v/s Ratio Perm						
v/c Ratio	0.64		0.86			0.54
Uniform Delay, d1	23.0		10.4			7.3
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	3.6		3.8			0.3
Delay (s)	26.6		14.3			7.6
Level of Service	C		B			A
Approach Delay (s)	26.6		14.3			7.6
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			12.9		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.84			
Actuated Cycle Length (s)			67.9		Sum of lost time (s)	12.1
Intersection Capacity Utilization			75.7%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON Year 2016 Alt 2/3noB

Timing Plan: AM PEAK

[illegible]

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	22	0	1266	7	415	792	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	33	0	1391	8	423	808	0
RTOR Reduction (vph)	0	0	0	0	30	0	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1391	4	423	808	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.39		c0.24	0.23	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.84	0.01	0.69	0.27	
Uniform Delay, d1					60.6			33.6	20.4	40.9	2.3	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			3.5	0.0	3.4	0.2	
Delay (s)					60.6			16.0	20.4	44.3	2.5	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			16.0			16.9	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.0			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		76.8%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	48	13	1	63	125	133	1108	5	283	245	302
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.98	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3193	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3193	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	46	74	20	1	72	142	148	1231	6	325	282	347
RTOR Reduction (vph)	0	0	19	0	0	119	0	0	3	0	154	0
Lane Group Flow (vph)	46	74	1	0	73	23	148	1231	3	325	475	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1048	
v/s Ratio Prot	0.03	c0.04			c0.04		0.08	c0.35		c0.18	0.15	
v/s Ratio Perm			0.00			0.01			0.00			
v/c Ratio	0.38	0.58	0.01		0.25	0.09	0.27	0.78	0.00	0.95	0.45	
Uniform Delay, d1	64.5	65.5	62.9		53.4	52.1	37.6	34.2	22.3	57.9	38.4	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.91	
Incremental Delay, d2	2.0	6.2	0.1		0.4	0.2	0.3	3.9	0.0	36.0	1.4	
Delay (s)	66.5	71.7	63.0		53.9	52.3	37.9	38.1	22.3	91.6	36.4	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		68.7			52.8			38.0			55.2	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		46.9			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		82.0%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰	↱	↰	↱
Volume (veh/h)	22	193	4	85	317	8
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	26	227	5	106	345	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)			915		600	
pX, platoon unblocked						
vC, conflicting volume	756	58			111	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	756	58			111	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	77			77	
cM capacity (veh/h)	288	1008			1479	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	253	111	353			
Volume Left	26	0	345			
Volume Right	227	106	0			
cSH	1123	1700	1479			
Volume to Capacity	0.23	0.07	0.23			
Queue Length 95th (ft)	22	0	23			
Control Delay (s)	10.5	0.0	8.0			
Lane LOS	B		A			
Approach Delay (s)	10.5	0.0	8.0			
Approach LOS	B					
Intersection Summary						
Average Delay			7.7			
Intersection Capacity Utilization			34.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰	↱	↰	↱
Volume (vph)	25	3	1258	397	0	221
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.98		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1729		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1729		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	33	4	1324	418	0	345
RTOR Reduction (vph)	4	0	0	114	0	0
Lane Group Flow (vph)	33	0	1324	304	0	345
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	1.9		31.5	31.5		31.5
Effective Green, g (s)	1.9		31.5	31.5		31.5
Actuated g/C Ratio	0.04		0.73	0.73		0.73
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	75		2574	1105		2574
v/s Ratio Prot	c0.02		c0.37			0.10
v/s Ratio Perm				0.20		
v/c Ratio	0.44		0.51	0.28		0.13
Uniform Delay, d1	20.2		2.6	2.0		1.8
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.1		0.2	0.1		0.0
Delay (s)	24.3		2.7	2.1		1.8
Level of Service	C		A	A		A
Approach Delay (s)	24.3		2.6			1.8
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			2.8		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.51			
Actuated Cycle Length (s)			43.3		Sum of lost time (s)	9.9
Intersection Capacity Utilization			47.2%		ICU Level of Service	A
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↙
Volume (veh/h)	0	14	2056	5	5	248
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	24	2211	5	7	365
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2410	1108			2216	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2410	1108			2216	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	88			97	
cM capacity (veh/h)	26	204			233	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	24	1474	742	7	182	182
Volume Left	0	0	0	7	0	0
Volume Right	24	0	5	0	0	0
cSH	204	1700	1700	233	1700	1700
Volume to Capacity	0.12	0.87	0.44	0.03	0.11	0.11
Queue Length 95th (ft)	10	0	0	2	0	0
Control Delay (s)	24.9	0.0	0.0	21.0	0.0	0.0
Lane LOS	C			C		
Approach Delay (s)	24.9	0.0		0.4		
Approach LOS	C					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		67.0%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB

12: SR-75 (Silver Strand Blvd) & Leyte Rd

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↙
Volume (vph)	16	84	1973	11	36	211
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	20	104	2122	12	52	306
RTOR Reduction (vph)	0	5	0	1	0	0
Lane Group Flow (vph)	20	99	2122	11	52	306
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.7	25.8	68.3	68.3	5.0	82.1
Effective Green, g (s)	15.7	20.7	68.3	68.3	5.0	82.1
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	259	305	2256	1009	82	2712
v/s Ratio Prot	0.01	c0.06	c0.60		c0.03	0.09
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.33	0.94	0.01	0.63	0.11
Uniform Delay, d1	39.4	37.2	17.6	7.1	50.2	3.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	8.6	0.0	14.9	0.0
Delay (s)	39.6	37.8	26.2	7.1	65.1	3.2
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.1		26.1			12.2
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay		24.8		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio		0.81				
Actuated Cycle Length (s)		107.1		Sum of lost time (s)		18.1
Intersection Capacity Utilization		70.6%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↗		↖	↗
Volume (veh/h)	0	31	1951	25	0	227
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	50	2054	26	0	307
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2220	1040			2080	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2220	1040			2080	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	78			100	
cM capacity (veh/h)	37	227			263	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	50	1369	711	153	153	
Volume Left	0	0	0	0	0	
Volume Right	50	0	26	0	0	
cSH	227	1700	1700	1700	1700	
Volume to Capacity	0.22	0.81	0.42	0.09	0.09	
Queue Length 95th (ft)	20	0	0	0	0	
Control Delay (s)	25.3	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	25.3	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			64.7%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↗	↖	↖	↗
Volume (vph)	9	6	1976	31	14	204
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	15	10	2058	32	17	252
RTOR Reduction (vph)	0	6	0	7	0	0
Lane Group Flow (vph)	15	4	2058	25	17	252
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.9	59.9	2.0	69.4
Effective Green, g (s)	1.4	3.4	59.9	59.9	2.0	69.4
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2738	1225	45	3173
v/s Ratio Prot	c0.01	0.00	c0.58		c0.01	0.07
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.47	0.06	0.75	0.02	0.38	0.08
Uniform Delay, d1	37.6	35.5	4.7	2.0	37.1	0.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.5	0.4	1.2	0.0	5.2	0.0
Delay (s)	48.1	35.8	5.9	2.0	42.3	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	43.2		5.9			3.1
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay			5.9		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.73			
Actuated Cycle Length (s)			77.4		Sum of lost time (s)	14.1
Intersection Capacity Utilization			67.5%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	43	1	0	42	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	80	2	0	67	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	81	67	3					
Volume Left (vph)	0	0	80	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	836	1121	817	843	1121					
Control Delay (s)	7.2	6.2	7.7	7.5	6.2					
Approach Delay (s)	7.2		7.7	7.4						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.1%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK








Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	35	0	0	31	218	3	1787	48	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1358	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	47	0	0	43	303	3	1901	51	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	20	0	0	0	0
Lane Group Flow (vph)	3	47	0	0	43	247	3	1901	31	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	15.9	15.9			15.9	15.9	47.7	43.6	43.6			
Effective Green, g (s)	15.9	15.9			15.9	15.9	47.7	43.6	43.6			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.60	0.60			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	296	406			406	345	1158	2116	946			
v/s Ratio Prot		0.03			0.02		0.00	c0.54				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.12			0.11	0.72	0.00	0.90	0.03			
Uniform Delay, d1	22.3	22.9			22.8	26.4	4.4	12.7	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	6.9	0.0	5.5	0.0			
Delay (s)	22.3	23.0			22.9	33.3	4.4	18.3	6.0			
Level of Service	C	C			C	C	A	B	A			
Approach Delay (s)		23.0			32.0			17.9			0.0	
Approach LOS		C			C			B			A	
Intersection Summary												
HCM 2000 Control Delay		20.1										
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		72.9				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		82.5%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: AM PEAK













Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	243	1594	0	174	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	253	1660	0	220	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None		None		
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1557	110	220		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1557	110	220		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	81		0		
cM capacity (veh/h)	84	922	1346		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	253	830	830	147	73	0
Volume Left	0	253	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1346	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.19	0.49	0.49	0.09	0.04	0.00
Queue Length 95th (ft)	0	17	0	0	0	0	0
Control Delay (s)	0.0	8.3	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	A					
Approach Delay (s)	0.0	1.1			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			1.0				
Intersection Capacity Utilization			54.1%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	378	0	37	2	1	2	25	1722	0	0	129	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3407	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3407	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	430	0	42	6	3	6	26	1813	0	0	187	62
RTOR Reduction (vph)	0	30	0	0	6	0	0	0	0	0	27	0
Lane Group Flow (vph)	430	12	0	6	3	0	26	1813	0	0	222	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	25.1	25.1		1.7	1.7		1.9	43.6			37.5	
Effective Green, g (s)	25.1	25.1		1.7	1.7		1.9	43.6			37.5	
Actuated g/C Ratio	0.29	0.29		0.02	0.02		0.02	0.51			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	522	466		35	33		39	1813			1501	
v/s Ratio Prot	c0.24	0.01		c0.00	0.00		0.01	c0.51			0.07	
v/s Ratio Perm												
v/c Ratio	0.82	0.03		0.17	0.09		0.67	1.00			0.15	
Uniform Delay, d1	27.9	21.3		41.0	40.9		41.3	20.7			14.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	10.2	0.0		2.3	1.2		35.5	21.1			0.0	
Delay (s)	38.1	21.3		43.3	42.2		76.8	41.9			14.3	
Level of Service	D	C		D	D		E	D			B	
Approach Delay (s)		36.6			42.6			42.4			14.3	
Approach LOS		D			D			D			B	
Intersection Summary												
HCM 2000 Control Delay			38.6					HCM 2000 Level of Service			D	
HCM 2000 Volume to Capacity ratio			0.98									
Actuated Cycle Length (s)			85.1					Sum of lost time (s)			18.9	
Intersection Capacity Utilization			83.6%					ICU Level of Service			E	
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB

19: 7th St & SR-75 (Silver Strand Blvd)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	7	176	13	0	1585	16	36	22	1	19	39	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5032			5077		1770	1852			1732	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.19	
Satd. Flow (perm)	1770	5032			5077		1244	1852			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	
Adj. Flow (vph)	8	198	15	0	1742	18	43	26	1	25	51	64
RTOR Reduction (vph)	0	5	0	0	1	0	0	1	0	0	17	0
Lane Group Flow (vph)	8	208	0	0	1759	0	43	26	0	0	123	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2061		241	360			53	
v/s Ratio Prot	c0.00	0.04			c0.35			0.01				
v/s Ratio Perm							c0.03				c0.38	
v/c Ratio	0.04	0.11			0.85		0.18	0.07			2.33	
Uniform Delay, d1	71.4	36.3			48.6		60.5	59.2			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			4.3		0.4	0.1			651.7	
Delay (s)	71.5	36.4			52.9		60.9	59.3			726.7	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		37.7			52.9			60.3			726.7	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		94.7			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		69.4%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB

20: SR-75 (Silver Strand Blvd) & Delaware St

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	194	0	382	1593	8	0	0	0	0	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	237	0	406	1695	9	0	0	0	0	0	16
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	10
Lane Group Flow (vph)	0	237	0	406	1704	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.05		0.12	c0.48							
v/s Ratio Perm												0.00
v/c Ratio		0.12		0.24	0.53							0.01
Uniform Delay, d1		36.5		25.5	1.4							34.9
Progression Factor		0.44		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.1	0.2							0.0
Delay (s)		16.0		25.6	1.6							34.9
Level of Service		B		C	A							C
Approach Delay (s)		16.0			6.2			0.0				34.9
Approach LOS		B			A			A				C
Intersection Summary												
HCM 2000 Control Delay		7.4			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		66.0%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON Year 2016 Alt 2/3noB

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	9	232	0	0	128	107	0	0	0	47	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	11	276	0	0	138	115	0	0	0	52	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	253			276			497	550	276	493	493	195
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	253			276			497	550	276	493	493	195
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1313			1287			478	439	763	484	473	846
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	287	253	0	56								
Volume Left	11	0	0	52								
Volume Right	0	115	0	4								
cSH	1313	1287	1700	500								
Volume to Capacity	0.01	0.00	0.00	0.11								
Queue Length 95th (ft)	1	0	0	9								
Control Delay (s)	0.4	0.0	0.0	13.1								
Lane LOS	A			A	B							
Approach Delay (s)	0.4	0.0	0.0	13.1								
Approach LOS				A	B							
Intersection Summary												
Average Delay				1.4								
Intersection Capacity Utilization				29.5%								A
Analysis Period (min)				15								

NBC Coastal Campus

22: 3rd St & Palm Ave













MILCON Year 2016 Alt 2/3noB

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	270	4	26	212	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	314	5	28	228	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	319	28	254	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.1	5.5	5.1	5.7						
Degree Utilization, x	0.01	0.49	0.05	0.39	0.26	0.07						
Capacity (veh/h)	578	634	566	631	636	548						
Control Delay (s)	7.9	12.4	8.2	10.7	9.9	9.1						
Approach Delay (s)	12.3		10.4		9.9	9.1						
Approach LOS	B		B		A	A						
Intersection Summary												
Delay				10.9								
Level of Service				B								
Intersection Capacity Utilization				37.3%								A
Analysis Period (min)				15								

























NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	224	424	334	152	17	69
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	284	537	407	185	24	97
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	593				1604	296
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	593				1604	296
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	71				65	86
cM capacity (veh/h)	979				68	700
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	284	537	272	321	121	
Volume Left	284	0	0	0	24	
Volume Right	0	0	0	185	97	
cSH	979	1700	1700	1700	248	
Volume to Capacity	0.29	0.32	0.16	0.19	0.49	
Queue Length 95th (ft)	30	0	0	0	62	
Control Delay (s)	10.2	0.0	0.0	0.0	32.7	
Lane LOS	B				D	
Approach Delay (s)	3.5		0.0		32.7	
Approach LOS					D	
Intersection Summary						
Average Delay			4.5			
Intersection Capacity Utilization			41.7%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	417	15	26	335		65	35		1	21	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1720			1858	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.88			0.98	1.00
Satd. Flow (perm)	930	3521		823	3539			1534			1830	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	542	19	34	435	0	98	53	121	2	36	47
RTOR Reduction (vph)	0	3	0	0	0	0	0	33	0	0	0	30
Lane Group Flow (vph)	21	558	0	34	435	0	0	239	0	0	38	17
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.1	13.1		13.1	13.1			13.1			13.1	13.1
Effective Green, g (s)	13.1	13.1		13.1	13.1			13.1			13.1	13.1
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	344	1302		304	1309			567			677	585
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.16			0.02	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.42			0.06	0.03
Uniform Delay, d1	7.2	8.3		7.3	8.0			8.3			7.2	7.1
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.2			0.5			0.0	0.0
Delay (s)	7.3	8.6		7.5	8.2			8.8			7.2	7.1
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.5			8.1			8.8			7.2	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.4							A		
HCM 2000 Volume to Capacity ratio			0.42									
Actuated Cycle Length (s)			35.4						9.2			
Intersection Capacity Utilization			46.3%							A		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	501	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	545	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)			767			
pX, platoon unblocked						
vC, conflicting volume			549		545	545
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			549		545	545
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1021		500	539
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	545	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	527			
Volume to Capacity	0.32	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	11.9			
Lane LOS			B			
Approach Delay (s)	0.0		11.9			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↙
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑	↘	↗	↑↑↑		↗	↑↑	↘	↗	↑↑	↘
Volume (vph)	21	633	34	23	1745	42	158	36	1900	49	87	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6				4.6
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95				0.95
Frt	1.00	0.99		1.00	1.00			0.97				0.98
Flt Protected	0.95	1.00		0.95	1.00			0.97				0.97
Satd. Flow (prot)	1770	5047		1770	5067			3324				3363
Flt Permitted	0.95	1.00		0.95	1.00			0.97				0.97
Satd. Flow (perm)	1770	5047		1770	5067			3324				3363
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	754	40	25	1918	46	190	43	59	106	54	29
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	791	0	25	1963	0	0	280	0	0	181	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2234		118	2159			646			653	
v/s Ratio Prot	0.01	c0.16		c0.01	c0.39			c0.08			c0.05	
v/s Ratio Perm												
v/c Ratio	0.17	0.35		0.21	0.91			0.43			0.28	
Uniform Delay, d1	76.7	33.1		79.5	48.4			63.8			61.7	
Progression Factor	1.00	1.00		1.28	0.70			1.00			1.00	
Incremental Delay, d2	0.6	0.4		0.7	6.0			0.5			0.2	
Delay (s)	77.3	33.6		102.2	40.2			64.2			62.0	
Level of Service	E	C		F	D			E			E	
Approach Delay (s)		34.9			40.9			64.2			62.0	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		42.7			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		71.7%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB

27: Florida St & SR-75 (Palm Ave)

Timing Plan: AM PEAK

	↖	→	↗	↖	←	↖	↖	↑	↗	↗	↓	↖
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↖↖		↖	↖↖↖			↖		↖	↖	
Volume (vph)	2	858	34	20	1914	11	17	4	30	53	10	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5056		1770	5081			1685		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.91		0.67	1.00	
Satd. Flow (perm)	1770	5056		1770	5081			1551		1242	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	964	38	23	2175	12	23	5	41	76	14	20
RTOR Reduction (vph)	0	2	0	0	0	0	0	29	0	0	17	0
Lane Group Flow (vph)	2	1000	0	23	2187	0	0	40	0	76	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases						4				8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3474		118	3717			258		207	283	
v/s Ratio Prot	0.00	0.20		c0.01	c0.43						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.29		0.19	0.59			0.15		0.37	0.06	
Uniform Delay, d1	86.1	11.0		79.4	11.4			64.2		66.6	63.1	
Progression Factor	1.70	0.28		1.41	0.29			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.5	0.4			0.3		1.1	0.1	
Delay (s)	146.9	3.3		112.7	3.7			64.4		67.7	63.2	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.6			4.8			64.4			66.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		7.7			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.54										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		70.6%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB

28: 13th St & SR-75 (Palm Ave)

Timing Plan: AM PEAK

	↖	→	↗	↖	←	↖	↖	↑	↗	↗	↓	↖
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↖↖		↖	↖↖↖	↖		↖		↖	↖	
Volume (vph)	3	927	62	93	1773	50	141	18	88	164	35	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5037		1770	5085	1583		1784	1583		3374	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5037		1770	5085	1583		1784	1583		3374	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1042	70	112	2136	60	158	20	99	219	47	19
RTOR Reduction (vph)	0	4	0	0	0	28	0	0	82	0	3	0
Lane Group Flow (vph)	3	1108	0	112	2136	32	0	178	17	0	282	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		581	
v/s Ratio Prot	0.00	0.22		c0.06	c0.42			c0.10			c0.08	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.50		0.57	0.79	0.04		0.58	0.06		0.48	
Uniform Delay, d1	86.2	35.8		75.9	34.0	20.1		68.5	62.3		67.3	
Progression Factor	1.21	0.63		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.8		4.0	2.4	0.1		2.6	0.1		0.6	
Delay (s)	105.1	23.5		79.9	36.5	20.2		71.2	62.4		67.9	
Level of Service	F	C		E	D	C		E	E		E	
Approach Delay (s)		23.7			38.2			68.0			67.9	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		38.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		88.2%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	↰
Volume (vph)	13	1186	25	42	1900	11	15	6	47	37	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1670			1722	
Flt Permitted	0.95	1.00		0.95	1.00			0.93			0.78	
Satd. Flow (perm)	1770	5070		1770	5081			1566			1384	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	14	1289	27	49	2209	13	18	7	56	49	3	28
RTOR Reduction (vph)	0	2	0	0	0	0	0	44	0	0	22	0
Lane Group Flow (vph)	14	1314	0	49	2222	0	0	37	0	0	58	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Effective Green, g (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2666		72	2829			332			293	
v/s Ratio Prot	0.01	0.26		c0.03	c0.44							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.82	0.49		0.68	0.79			0.11			0.20	
Uniform Delay, d1	35.1	10.8		33.6	12.4			22.6			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	132.1	0.1		23.3	1.5			0.1			0.3	
Delay (s)	167.2	10.9		56.9	13.9			22.7			23.4	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		12.6			14.8			22.7			23.4	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		14.4			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		71.1			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		53.8%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰	↰	↰
Volume (vph)	89	1200	29	239	1842	210	72	71	755	230	90	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	103	1395	34	254	1960	223	80	79	839	274	107	89
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	182	0	3	56
Lane Group Flow (vph)	103	1427	0	254	1960	156	80	312	271	274	113	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.4	30.4	10.4	34.1	34.1
Effective Green, g (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.4	30.4	10.4	34.1	34.1
Actuated g/C Ratio	0.05	0.30		0.15	0.41	0.41	0.06	0.26	0.26	0.09	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	177	1543		273	2070	644	102	406	394	308	514	442
v/s Ratio Prot	0.03	0.28		c0.14	c0.39		0.05	c0.20		c0.08	c0.06	
v/s Ratio Perm						0.10		0.18				0.02
v/c Ratio	0.58	0.92		0.93	0.95	0.24	0.78	0.77	0.69	0.89	0.22	0.05
Uniform Delay, d1	53.7	39.0		48.4	33.1	22.6	53.9	39.5	38.5	52.2	30.9	29.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.8	9.7		36.3	9.9	0.2	31.6	8.5	4.9	25.2	0.2	0.1
Delay (s)	58.5	48.7		84.7	43.0	22.8	85.5	48.0	43.4	77.4	31.1	29.4
Level of Service	E	D		F	D	C	F	D	D	E	C	C
Approach Delay (s)		49.4			45.5			48.9			57.8	
Approach LOS		D			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		48.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.90										
Actuated Cycle Length (s)		115.9			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		83.8%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2016 Alt 2/3noB

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	278	1105	0	152	1188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	312	1188	0	169	1320
RTOR Reduction (vph)	0	0	0	0	0	6
Lane Group Flow (vph)	0	312	1188	0	169	1314
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.34		0.10	c0.47
v/s Ratio Perm						
v/c Ratio		0.12	1.02		0.82	0.86
Uniform Delay, d1		2.5	26.8		34.5	15.3
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	30.9		21.4	5.0
Delay (s)		2.5	57.7		55.8	20.3
Level of Service		A	E		E	C
Approach Delay (s)		2.5	57.7		24.4	
Approach LOS		A	E		C	
Intersection Summary						
HCM 2000 Control Delay			35.3		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.98			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			63.9%		ICU Level of Service	B
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2016 Alt 2/3noB

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	431	0	0	413	513	792	1	141	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3245		1681	1632				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3245		1681	1632				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	495	0	0	449	558	861	1	153	0	0	0
RTOR Reduction (vph)	0	0	0	0	351	0	0	29	0	0	0	0
Lane Group Flow (vph)	0	495	0	0	656	0	517	469	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.4			16.4		19.9	19.9				
Effective Green, g (s)		16.4			16.4		19.9	19.9				
Actuated g/C Ratio		0.37			0.37		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1310			1201		755	733				
v/s Ratio Prot		0.14			c0.20							
v/s Ratio Perm							c0.31	0.29				
v/c Ratio		0.38			0.55		0.68	0.64				
Uniform Delay, d1		10.2			11.0		9.7	9.4				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.5		2.6	1.8				
Delay (s)		10.4			11.5		12.3	11.3				
Level of Service		B			B		B	B				
Approach Delay (s)		10.4			11.5		11.8				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					11.4					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.62							
Actuated Cycle Length (s)					44.3					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					67.5%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰			↱	↰	↱
Volume (veh/h)	0	3	4	69	13	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	96	32	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	139	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	139	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	851	1042	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	101	32			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	1042	1581	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		1.0				
Intersection Capacity Utilization		16.9%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↱			↰↱				↰			↱
Volume (veh/h)	0	4046	17	0	1798	243	0	0	907	0	0	55
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4215	18	0	1854	251	0	0	1008	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2124			4252			4965	6368	1454	3424	6251	783
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2124			4252			4965	6368	1454	3424	6251	783
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	249			34			0	0	1829	1	0	325
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1686	1686	861	741	741	621	1008	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	251	1008	83				
cSH	1700	1700	1700	1700	1700	1700	1829	325				
Volume to Capacity	0.99	0.99	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	89	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.4	19.8				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.4	19.8				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				143.3%			ICU Level of Service	H				
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3812	130	0	1835	0	200	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3930	134	0	1911	0	244	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4084		4674	1417	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4084		4674	1417	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			40		1	122	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1572	1572	920	637	637	637	244
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	244
cSH	1700	1700	1700	1700	1700	1700	122
Volume to Capacity	0.92	0.92	0.54	0.37	0.37	0.37	1.99
Queue Length 95th (ft)	0	0	0	0	0	0	495
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	534.5
Lane LOS							F
Approach Delay (s)	0.0			0.0			534.5
Approach LOS							F
Intersection Summary							
Average Delay			21.0				
Intersection Capacity Utilization			97.6%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	↗
Volume (vph)	0	0	0	963	634	109	86	251			860	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3528	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3528	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1014	667	115	89	259	0	0	887	16
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	507	1277	0	89	259	0	0	901	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1432		98	1989			1568	
v/s Ratio Prot				c0.33	0.28		c0.05	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.08	0.96d1		0.91	0.13			0.57	
Uniform Delay, d1				31.1	29.7		42.3	9.3			18.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				64.3	7.4		61.4	0.0			0.5	
Delay (s)				95.4	37.1		103.7	9.3			19.2	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			53.6			33.5			19.2	
Approach LOS		A			D			C			B	
Intersection Summary												
HCM 2000 Control Delay			41.1			HCM 2000 Level of Service		D				
HCM 2000 Volume to Capacity ratio			0.79									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)		17.2				
Intersection Capacity Utilization		135.5%				ICU Level of Service		H				
Analysis Period (min)			15									
d1 Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔	
Volume (vph)	7	2108	106	0	0	0	0	337	435	760	1087	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3128	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3128	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2316	116	0	0	0	0	392	506	792	1132	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2324	87	0	0	0	0	614	249	792	1132	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm				NA	Perm	Prot	NA		
Protected Phases	4	4					2		1	6		
Permitted Phases			4					2				
Actuated Green, G (s)		63.4	63.4				53.1	53.1	44.1	100.0		
Effective Green, g (s)		63.4	63.4				53.1	53.1	44.1	100.0		
Actuated g/C Ratio		0.36	0.36				0.30	0.30	0.25	0.57		
Clearance Time (s)		5.6	5.6				4.6	4.6	4.2	6.0		
Vehicle Extension (s)		3.0	3.0				3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)		1841	573				949	409	865	2022		
v/s Ratio Prot		c0.46					c0.20		c0.23	0.32		
v/s Ratio Perm			0.06					0.18				
v/c Ratio		1.26	0.15				0.65	0.61	0.92	0.56		
Uniform Delay, d1		55.8	37.7				52.8	52.1	63.6	23.6		
Progression Factor		1.00	1.00				1.00	1.00	1.00	1.00		
Incremental Delay, d2		122.6	0.1				1.5	2.6	14.1	0.3		
Delay (s)		178.4	37.8				54.4	54.6	77.7	24.0		
Level of Service		F	D				D	D	E	C		
Approach Delay (s)		171.7		0.0			54.4			46.1		
Approach LOS		F		A			D			D		
Intersection Summary												
HCM 2000 Control Delay		105.8		HCM 2000 Level of Service			F					
HCM 2000 Volume to Capacity ratio		0.96										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)			14.4					
Intersection Capacity Utilization		135.5%		ICU Level of Service			H					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2016 Alt 2/3noB
Timing Plan: PM PEAK













Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔
Volume (vph)	168	11	847	668	0	1181
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1584		3257			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1584		3257			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	215	14	952	751	0	1270
RTOR Reduction (vph)	2	0	68	0	0	0
Lane Group Flow (vph)	227	0	1635	0	0	1270
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	297		2461			2540
v/s Ratio Prot	c0.14		c0.50			0.38
v/s Ratio Perm						
v/c Ratio	0.77		0.66			0.50
Uniform Delay, d1	61.7		9.6			7.7
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	11.2		1.4			0.7
Delay (s)	72.8		11.0			8.4
Level of Service	E		B			A
Approach Delay (s)	72.8		11.0			8.4
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay		14.4		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.70				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		78.3%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	139	9	28	25	9	24	22	1436	47	65	1398	147
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1695	1583		1721		1770	3522		1770	3489	
Flt Permitted	0.69	0.69	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1219	1217	1583		1463		1770	3522		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	178	12	36	39	14	38	24	1544	51	71	1520	160
RTOR Reduction (vph)	0	0	30	0	23	0	0	1	0	0	3	0
Lane Group Flow (vph)	94	96	6	0	68	0	24	1594	0	71	1677	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4		4							
Actuated Green, G (s)	18.9	18.9	18.9		18.9		3.1	72.0		8.0	76.9	
Effective Green, g (s)	18.9	18.9	18.9		18.9		3.1	72.0		8.0	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	202	263		243		48	2230		124	2359	
v/s Ratio Prot							0.01	0.45		c0.04	c0.48	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.47	0.48	0.02		0.28		0.50	0.71		0.57	0.71	
Uniform Delay, d1	42.8	42.9	39.7		41.4		54.5	14.0		51.2	11.5	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	1.8	0.0		0.6		8.0	1.1		6.3	1.0	
Delay (s)	44.5	44.7	39.7		42.1		62.5	15.1		57.4	12.5	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.8			42.1			15.8			14.3	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.5			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		113.7			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		73.2%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	7	0	140	0	1247	0	31	1533	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1619			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1619			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	10	0	203	0	1327	0	33	1648	0
RTOR Reduction (vph)	0	0	0	0	165	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	48	0	0	1327	0	33	1648	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			45.5		1.7	51.4	
Effective Green, g (s)					14.1			45.5		1.7	51.4	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					301			2129		39	2406	
v/s Ratio Prot					c0.03			0.37		0.02	c0.47	
v/s Ratio Perm												
v/c Ratio					0.16			0.62		0.85	0.68	
Uniform Delay, d1					25.8			9.6		36.8	7.2	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.2			0.6		84.9	0.8	
Delay (s)					26.0			10.2		121.7	8.1	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			26.0			10.2			10.3	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay		11.3			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		75.6			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		59.8%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	284	48	115	6	67	409	27	565	2	135	1361	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1516		1855	1511	1770	3539	1350	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1516		1855	1511	1770	3539	1350	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	374	63	151	7	73	445	30	621	2	144	1448	68
RTOR Reduction (vph)	0	0	122	0	0	226	0	0	1	0	2	0
Lane Group Flow (vph)	374	63	29	0	80	219	30	621	1	144	1514	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.7	27.7	27.7		23.1	23.1	2.9	56.2	56.2	16.6	69.9	
Effective Green, g (s)	27.7	27.7	27.7		23.1	23.1	2.9	56.2	56.2	16.6	69.9	
Actuated g/C Ratio	0.19	0.19	0.19		0.16	0.16	0.02	0.39	0.39	0.12	0.49	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	342	360	293		299	244	35	1390	530	205	1716	
v/s Ratio Prot	c0.21	0.03			0.04		0.02	0.18		c0.08	c0.43	
v/s Ratio Perm			0.02			c0.14		0.00				
v/c Ratio	1.09	0.17	0.10		0.27	0.90	0.86	0.45	0.00	0.70	0.88	
Uniform Delay, d1	57.6	48.1	47.4		52.5	58.8	69.8	32.0	26.4	60.8	32.9	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	76.1	0.2	0.1		0.5	31.4	94.8	1.0	0.0	10.4	6.9	
Delay (s)	133.8	48.3	47.5		53.0	90.1	164.6	33.0	26.4	71.2	39.8	
Level of Service	F	D	D		D	F	F	C	C	E	D	
Approach Delay (s)		102.5			84.5			39.0			42.5	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay		58.6								E		
HCM 2000 Volume to Capacity ratio		0.94										
Actuated Cycle Length (s)		143.0				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		78.6%				ICU Level of Service		D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB

9: Strand Wy & Guadalcanal Rd

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	305	481	3	35	174	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	339	534	4	49	198	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	428	29			54	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	428	29			54	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	33	49			87	
cM capacity (veh/h)	510	1046			1552	
Direction, Lane #						
Volume Total	873	54	201			
Volume Left	339	0	198			
Volume Right	534	49	0			
cSH	1123	1700	1552			
Volume to Capacity	0.78	0.03	0.13			
Queue Length 95th (ft)	207	0	11			
Control Delay (s)	18.4	0.0	7.5			
Lane LOS	C		A			
Approach Delay (s)	18.4	0.0	7.5			
Approach LOS	C					
Intersection Summary						
Average Delay		15.6				
Intersection Capacity Utilization		40.0%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	308	6	600	38	0	1485
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	390	8	667	42	0	1669
RTOR Reduction (vph)	1	0	0	24	0	0
Lane Group Flow (vph)	397	0	667	18	0	1669
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.22		0.19			c0.47
v/s Ratio Perm				0.01		
v/c Ratio	0.47		0.44	0.03		1.10
Uniform Delay, d1	18.6		21.1	17.3		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.2	0.0		54.8
Delay (s)	19.0		21.3	17.3		84.7
Level of Service	B		C	B		F
Approach Delay (s)	19.0		21.0			84.7
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay		59.0		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		0.77				
Actuated Cycle Length (s)		105.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		91.0%		ICU Level of Service		E
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

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11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (veh/h)	4	6	455	3	14	1422
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	529	3	15	1563
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1343	266			533	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1343	266			533	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	94	98			99	
cM capacity (veh/h)	141	732			1031	
Direction, Lane #						
Volume Total	20	353	180	15	781	781
Volume Left	8	0	0	15	0	0
Volume Right	12	0	3	0	0	0
cSH	274	1700	1700	1031	1700	1700
Volume to Capacity	0.07	0.21	0.11	0.01	0.46	0.46
Queue Length 95th (ft)	6	0	0	1	0	0
Control Delay (s)	19.2	0.0	0.0	8.5	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	19.2	0.0		0.1		
Approach LOS	C					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			49.3%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2016 Alt 2/3noB

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	29	55	403	11	99	1327
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	32	60	458	12	109	1458
RTOR Reduction (vph)	0	44	0	7	0	0
Lane Group Flow (vph)	32	16	458	5	109	1458
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.3	21.5	27.8	27.8	7.1	43.7
Effective Green, g (s)	9.3	16.4	27.8	27.8	7.1	43.7
Actuated g/C Ratio	0.15	0.26	0.45	0.45	0.11	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	264	416	1579	706	201	2482
v/s Ratio Prot	c0.02	0.01	0.13		0.06	c0.41
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.04	0.29	0.01	0.54	0.59
Uniform Delay, d1	23.0	17.1	11.0	9.6	26.1	4.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.0	3.0	0.4
Delay (s)	23.2	17.1	11.1	9.6	29.0	5.1
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.2		11.0			6.7
Approach LOS	B		B			A

Intersection Summary

HCM 2000 Control Delay	8.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	62.3	Sum of lost time (s)	18.1
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2016 Alt 2/3noB

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↕	↕			↕
Volume (veh/h)	0	22	394	18	0	1356
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	29	453	21	0	1474
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1200	237			474	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1200	237			474	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	178	765			1085	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	29	302	172	737	737	
Volume Left	0	0	0	0	0	
Volume Right	29	0	21	0	0	
cSH	765	1700	1700	1700	1700	
Volume to Capacity	0.04	0.18	0.10	0.43	0.43	
Queue Length 95th (ft)	3	0	0	0	0	
Control Delay (s)	9.9	0.0	0.0	0.0	0.0	
Lane LOS	A					
Approach Delay (s)	9.9	0.0		0.0		
Approach LOS	A					

Intersection Summary

Average Delay	0.1				
Intersection Capacity Utilization	40.8%		ICU Level of Service	A	
Analysis Period (min)	15				

NBC Coastal Campus

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14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↖	↗	↖	↗
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (vph)	29	25	387	18	22	1332
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	40	35	412	19	24	1464
RTOR Reduction (vph)	0	32	0	8	0	0
Lane Group Flow (vph)	40	3	412	11	24	1464
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.4	27.1	27.1	1.8	36.4
Effective Green, g (s)	2.6	4.4	27.1	27.1	1.8	36.4
Actuated g/C Ratio	0.06	0.10	0.59	0.59	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	152	2103	940	69	2824
v/s Ratio Prot	c0.02	0.00	0.12		0.01	c0.41
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.40	0.02	0.20	0.01	0.35	0.52
Uniform Delay, d1	20.7	18.7	4.2	3.8	21.3	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.6	0.1	0.0	0.0	3.0	0.2
Delay (s)	23.4	18.7	4.3	3.8	24.4	1.7
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.2		4.3			2.1
Approach LOS	C		A			A

Intersection Summary

HCM 2000 Control Delay	3.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	45.6	Sum of lost time (s)	14.1
Intersection Capacity Utilization	47.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

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15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Movement	↖	→	↗	↖	→	↗	↖	→	↗	↖
Lane Configurations	↖	↗	↖	↖	↗	↖	↖	↗	↖	↗
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	10	13	81	7	0	172	12	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	10	14	105	9	0	193	13	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	10	14	114	207						
Volume Left (vph)	0	0	105	0						
Volume Right (vph)	0	14	0	13						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.13	0.18						
Capacity (veh/h)	873	1121	860	1121						
Control Delay (s)	7.1	6.2	7.7	6.9						
Approach Delay (s)	6.6		7.7	6.9						
Approach LOS	A		A	A						

Intersection Summary

Delay	7.2		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

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16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑			↑	↱	↰	↑	↱			
Volume (vph)	9	178	0	0	78	133	11	311	66	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Flt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1301	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	10	202	0	0	90	153	12	342	73	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	121	0	0	39	0	0	0
Lane Group Flow (vph)	10	202	0	0	90	32	12	342	34	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.7	18.7	18.7			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.7	18.7	18.7			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	269	386			386	328	817	1634	730			
v/s Ratio Prot		c0.11			0.05		0.01	c0.10				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.52			0.23	0.10	0.01	0.21	0.05			
Uniform Delay, d1	12.8	14.3			13.4	13.0	5.9	6.5	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.3			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.9	15.6			13.7	13.1	5.9	6.6	6.0			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.3		6.4			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.5			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.31										
Actuated Cycle Length (s)		40.5			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		40.3%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

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17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: PM PEAK











Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰		↰	↑	↱	↑	↱
Volume (veh/h)	0	243	0	450	0	1494	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	972	0	511	0	1660	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1916	830	1660		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1916	830	1660		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	0	100		0		
cM capacity (veh/h)	59	313	384		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	972	0	256	256	1107	553	0
Volume Left	0	0	0	0	0	0	0
Volume Right	972	0	0	0	0	0	0
cSH	313	1700	1700	1700	1700	1700	1700
Volume to Capacity	3.10	0.00	0.15	0.15	0.65	0.33	0.00
Queue Length 95th (ft)	Err	0	0	0	0	0	0
Control Delay (s)	Err	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F						
Approach Delay (s)	Err	0.0			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			3091.9				
Intersection Capacity Utilization			63.0%		ICU Level of Service		
Analysis Period (min)			15				B

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Timing Plan: PM PEAK











Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	0	65	1	1	0	70	310	11	1	1309	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3521		1770	3473	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3521		1770	3473	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	113	0	87	2	2	0	77	341	12	1	1454	207
RTOR Reduction (vph)	0	70	0	0	0	0	0	2	0	0	8	0
Lane Group Flow (vph)	113	17	0	2	2	0	77	351	0	1	1653	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	17.9	17.9		0.8	0.8		5.8	52.4		0.8	47.4	
Effective Green, g (s)	17.9	17.9		0.8	0.8		5.8	52.4		0.8	47.4	
Actuated g/C Ratio	0.20	0.20		0.01	0.01		0.06	0.58		0.01	0.52	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	348	312		15	16		113	2031		15	1812	
v/s Ratio Prot	c0.06	0.01		c0.00	0.00		c0.04	0.10		0.00	c0.48	
v/s Ratio Perm												
v/c Ratio	0.32	0.05		0.13	0.12		0.68	0.17		0.07	0.91	
Uniform Delay, d1	31.3	29.6		44.7	44.7		41.6	9.0		44.6	19.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.1		4.0	3.5		15.6	0.0		1.9	7.4	
Delay (s)	31.8	29.7		48.7	48.2		57.2	9.1		46.5	27.2	
Level of Service	C	C		D	D		E	A		D	C	
Approach Delay (s)		30.9			48.4			17.7			27.2	
Approach LOS		C			D			B			C	
Intersection Summary												
HCM 2000 Control Delay		25.8										
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		90.8										
Intersection Capacity Utilization		69.6%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

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19: 7th St & SR-75 (Silver Strand Blvd)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	1266	56	0	346	33	12	38	4	23	25	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5053			5019		1770	1835			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.17	
Satd. Flow (perm)	1770	5053			5019		1313	1835			299	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	62	1439	64	0	368	35	17	54	6	27	29	24
RTOR Reduction (vph)	0	2	0	0	6	0	0	2	0	0	8	0
Lane Group Flow (vph)	62	1501	0	0	397	0	17	58	0	0	72	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1911			2038		255	356			49	
v/s Ratio Prot	c0.04	c0.30			c0.08			c0.03				
v/s Ratio Perm							0.01				c0.24	
v/c Ratio	0.32	0.79			0.19		0.07	0.16			1.46	
Uniform Delay, d1	73.7	49.5			34.5		59.2	60.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.9	3.3			0.2		0.1	0.2			291.2	
Delay (s)	74.6	52.8			34.7		59.3	60.5			366.2	
Level of Service	E	D			C		E	E			F	
Approach Delay (s)		53.7			34.7			60.2			366.2	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		62.1										
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB

20: SR-75 (Silver Strand Blvd) & Delaware St

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←
Volume (vph)	0	1295	0	483	382	36	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3494							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3494							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1455	0	514	406	38	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1455	0	514	444	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3175							609
v/s Ratio Prot		c0.29		c0.15	c0.13							
v/s Ratio Perm												0.00
v/c Ratio		0.76		0.27	0.14							0.00
Uniform Delay, d1		48.7		20.5	0.9							34.8
Progression Factor		0.18		1.00	1.00							1.00
Incremental Delay, d2		1.7		0.1	0.0							0.0
Delay (s)		10.2		20.6	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		10.2			11.4		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		10.8				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.50										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		48.0%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB








21: Dwy/Silver Strand Blvd & Palm Ave

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		←←			←←			←←			←←	
Volume (veh/h)	3	212	0	0	304	41	0	0	0	107	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	247	0	0	345	47	0	0	0	162	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	392			247			634	646	247	622	622	369
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	392			247			634	646	247	622	622	369
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	59	100	98
cM capacity (veh/h)	1166			1319			384	389	792	398	401	677
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	250	392	0	174								
Volume Left	3	0	0	162								
Volume Right	0	47	0	12								
cSH	1166	1319	1700	410								
Volume to Capacity	0.00	0.00	0.00	0.43								
Queue Length 95th (ft)	0	0	0	52								
Control Delay (s)	0.1	0.0	0.0	20.1								
Lane LOS	A			A			C					
Approach Delay (s)	0.1	0.0	0.0	20.1								
Approach LOS		A		C								
Intersection Summary												
Average Delay		4.3										
Intersection Capacity Utilization		31.6%			ICU Level of Service			A				
Analysis Period (min)		15										







NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	297	12	84	319	24	14	38	67	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	381	15	94	358	27	25	67	118	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	396	94	385	209	161						
Volume Left (vph)	9	0	94	0	25	61						
Volume Right (vph)	0	15	0	27	118	28						
Hadj (s)	0.53	0.01	0.53	-0.01	-0.28	0.00						
Departure Headway (s)	7.2	6.7	7.1	6.6	6.6	7.1						
Degree Utilization, x	0.02	0.73	0.19	0.70	0.38	0.32						
Capacity (veh/h)	472	520	484	528	477	435						
Control Delay (s)	9.1	24.6	10.5	22.3	13.7	13.3						
Approach Delay (s)	24.3		20.0		13.7	13.3						
Approach LOS	C		C		B	B						
Intersection Summary												
Delay			19.5									
Level of Service			C									
Intersection Capacity Utilization			41.3%		ICU Level of Service				A			
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	73	424	455	39	52	140
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	75	437	529	45	61	165
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	574				1139	287
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	574				1139	287
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	92				66	77
cM capacity (veh/h)	995				180	710
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	75	437	353	222	226	
Volume Left	75	0	0	0	61	
Volume Right	0	0	0	45	165	
cSH	995	1700	1700	1700	395	
Volume to Capacity	0.08	0.26	0.21	0.13	0.57	
Queue Length 95th (ft)	6	0	0	0	86	
Control Delay (s)	8.9	0.0	0.0	0.0	25.6	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		25.6	
Approach LOS					D	
Intersection Summary						
Average Delay			4.9			
Intersection Capacity Utilization			40.5%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↱		↰	↰↱			↱		↰	↰↱	↱
Volume (vph)	28	433	29	31	457	3	54	19	22	12	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3536			1754			1841	1583
Flt Permitted	0.47	1.00		0.45	1.00			0.79			0.90	1.00
Satd. Flow (perm)	869	3505		831	3536			1417			1669	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	515	35	34	502	3	66	23	27	16	53	39
RTOR Reduction (vph)	0	7	0	0	1	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	543	0	34	504	0	0	95	0	0	69	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Effective Green, g (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	414	1671		396	1686			309			364	345
v/s Ratio Prot		c0.15			0.14							
v/s Ratio Perm	0.04			0.04			c0.07			0.04		0.01
v/c Ratio	0.08	0.32		0.09	0.30		0.31			0.19		0.02
Uniform Delay, d1	4.3	4.9		4.3	4.8		9.9			9.6		9.3
Progression Factor	1.00	1.00		1.00	1.00		1.00			1.00		1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1		0.6			0.3		0.0
Delay (s)	4.4	5.0		4.4	4.9		10.5			9.9		9.3
Level of Service	A	A		A	A		B			A		A
Approach Delay (s)		5.0			4.9		10.5			9.7		
Approach LOS		A			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		30.2			Sum of lost time (s)		9.2					
Intersection Capacity Utilization		44.7%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↰			↰	↰
Volume (veh/h)	723	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	882	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			891		882	882
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			891		882	882
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	99
cM capacity (veh/h)			760		317	345
Direction, Lane #						
Volume Total	882	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	324			
Volume to Capacity	0.52	0.01	0.04			
Queue Length 95th (ft)	0	0	3			
Control Delay (s)	0.0	0.0	16.6			
Lane LOS			C			
Approach Delay (s)	0.0		16.6			
Approach LOS			C			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			48.1%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	40	1592	120	56	759	127	94	87	61	168	77	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5032		1770	4976			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5032		1770	4976			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	43	1694	128	57	767	128	103	96	67	189	87	28
RTOR Reduction (vph)	0	5	0	0	12	0	0	19	0	0	4	0
Lane Group Flow (vph)	43	1817	0	57	883	0	0	247	0	0	300	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2116		157	1982			649			658	
v/s Ratio Prot	0.02	c0.36		c0.03	0.18			c0.07			c0.09	
v/s Ratio Perm												
v/c Ratio	0.22	0.86		0.36	0.45			0.38			0.46	
Uniform Delay, d1	72.9	47.3		77.2	39.6			63.1			64.1	
Progression Factor	1.00	1.00		1.25	0.69			1.00			1.00	
Incremental Delay, d2	0.6	3.7		1.4	0.7			0.4			0.5	
Delay (s)	73.5	51.0		97.6	28.2			63.5			64.6	
Level of Service	E	D		F	C			E			E	
Approach Delay (s)		51.5			32.4			63.5			64.6	
Approach LOS		D			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		48.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		116.6%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	20	1867	55	47	1154	53	21	10	34	62	12	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.93			1.00	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.95	
Satd. Flow (prot)	1770	5064		1770	5052			1703			1770	
Flt Permitted	0.95	1.00		0.95	1.00			0.90			0.63	
Satd. Flow (perm)	1770	5064		1770	5052			1551			1169	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.83	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	1905	56	48	1190	55	25	12	41	73	14	15
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	13	0
Lane Group Flow (vph)	20	1960	0	48	1243	0	0	55	0	73	16	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Effective Green, g (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3564		157	3668			190		143	210	
v/s Ratio Prot	0.01	c0.39		c0.03	c0.25						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.55		0.31	0.34			0.29		0.51	0.08	
Uniform Delay, d1	79.3	12.9		76.8	9.0			71.8		73.9	69.9	
Progression Factor	1.44	0.10		1.56	0.31			1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4		0.9	0.2			0.9		3.1	0.2	
Delay (s)	114.8	1.7		121.1	3.0			72.7		76.9	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		2.8			7.3			72.7			75.0	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.52										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		58.7%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	1685	192	153	1227	79	125	39	124	150	43	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5007		1770	5085	1583		1794	1583		3371	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5007		1770	5085	1583		1794	1583		3371	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	28	1793	204	158	1265	81	136	42	135	203	58	27
RTOR Reduction (vph)	0	8	0	0	0	37	0	0	112	0	4	0
Lane Group Flow (vph)	28	1989	0	158	1265	44	0	178	23	0	284	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2216		192	2364	736		305	269		574	
v/s Ratio Prot	0.02	c0.40		c0.09	c0.25			c0.10			c0.08	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.18	0.90		0.82	0.54	0.06		0.58	0.09		0.49	
Uniform Delay, d1	75.9	46.4		78.5	34.3	26.5		68.8	62.8		67.6	
Progression Factor	1.04	0.91		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	5.5		23.9	0.9	0.2		7.9	0.6		3.0	
Delay (s)	79.5	47.7		102.4	35.2	26.7		76.7	63.5		70.6	
Level of Service	E	D		F	D	C		E	E		E	
Approach Delay (s)		48.2			41.8			71.0			70.6	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		49.1			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		100.7%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	1879	48	166	1519	15	38	8	79	23	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5066		1770	5078			1678			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.83	
Satd. Flow (perm)	1770	5066		1770	5078			1513			1506	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85		0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	10	2088	53	175	1599	16	45	9	93	28	12	12
RTOR Reduction (vph)	0	2	0	0	1	0	0	74	0	0	10	0
Lane Group Flow (vph)	10	2139	0	175	1614	0	0	73	0	0	42	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.4		11.2	50.8			17.2			17.2	
Effective Green, g (s)	0.8	40.4		11.2	50.8			17.2			17.2	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2422		234	3052			307			306	
v/s Ratio Prot	0.01	c0.42		c0.10	0.32							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.62	0.88		0.75	0.53			0.24			0.14	
Uniform Delay, d1	41.7	19.9		35.3	9.9			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	57.6	4.2		12.3	0.2			0.4			0.2	
Delay (s)	99.3	24.1		47.6	10.0			28.6			27.8	
Level of Service	F	C		D	B			C			C	
Approach Delay (s)		24.5			13.7			28.6			27.8	
Approach LOS		C			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		20.0			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		84.5			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		67.6%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB

30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↖	→	↗	↖	→	↗	↖	→	↗	↖	→	↗
Lane Configurations	↖↖	↖↖↖		↖	↖↖↖	↖	↖	↖	↖	↖↖	↖	↖
Volume (vph)	185	1823	24	321	1527	544	64	173	522	576	234	223
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		1770	5085	1583	1770	1631	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		1770	5085	1583	1770	1631	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	195	1919	25	345	1642	585	68	184	555	626	254	242
RTOR Reduction (vph)	0	1	0	0	0	88	0	26	269	0	2	132
Lane Group Flow (vph)	195	1943	0	345	1642	497	68	358	86	626	276	86
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.3	36.4		45.0	70.1	70.1	8.6	36.8	36.8	11.8	40.0	40.0
Effective Green, g (s)	11.3	36.4		45.0	70.1	70.1	8.6	36.8	36.8	11.8	40.0	40.0
Actuated g/C Ratio	0.07	0.24		0.30	0.46	0.46	0.06	0.24	0.24	0.08	0.26	0.26
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1216		524	2346	730	100	395	364	266	460	396
v/s Ratio Prot	0.06	c0.38		c0.19	c0.32		0.04	c0.22		c0.18	c0.16	
v/s Ratio Perm					0.31			0.06				0.06
v/c Ratio	0.76	1.60		0.66	0.70	0.68	0.91	0.24	2.35	0.60	0.22	
Uniform Delay, d1	69.0	57.8		46.7	32.5	32.1	70.3	55.9	46.3	70.0	48.9	43.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.8	273.0		3.0	0.9	2.6	17.3	23.8	0.3	620.6	2.1	0.3
Delay (s)	81.8	330.8		49.7	33.5	34.7	87.6	79.7	46.6	690.6	51.1	44.0
Level of Service	F	F		D	C	C	F	E	D	F	D	D
Approach Delay (s)		308.1			35.9			65.8			406.5	
Approach LOS		F			D			E			F	

Intersection Summary

HCM 2000 Control Delay	189.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	151.9	Sum of lost time (s)	21.9
Intersection Capacity Utilization	120.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

MILCON Year 2016 Alt 2/3noB

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Timing Plan: PM PEAK

	EBL	EBT	WBT	WBR	SBL	SBR
Movement	↖	→	↖	↗	↖	↗
Lane Configurations		↖↖	↖↖		↖	↖↖
Volume (vph)	0	492	830	0	431	1568
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	553	883	0	474	1723
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	553	883	0	474	1718
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.16	c0.25		0.27	c0.62
v/s Ratio Perm						
v/c Ratio		0.31	1.03		0.71	0.97
Uniform Delay, d1		11.6	30.3		21.3	13.7
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	38.4		3.7	14.3
Delay (s)		11.7	68.7		25.0	28.0
Level of Service		B	E		C	C
Approach Delay (s)		11.7	68.7		27.4	
Approach LOS		B	E		C	

Intersection Summary

HCM 2000 Control Delay	35.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	83.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑				
Volume (vph)	0	917	0	0	515	245	421	2	105	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1614				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1614				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	955	0	0	579	275	453	2	113	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	39	0	0	0	0
Lane Group Flow (vph)	0	955	0	0	756	0	290	239	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		18.7			18.7		13.5	13.5				
Effective Green, g (s)		18.7			18.7		13.5	13.5				
Actuated g/C Ratio		0.47			0.47		0.34	0.34				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1646			1566		564	542				
v/s Ratio Prot		0.27			0.22							
v/s Ratio Perm							0.17	0.15				
v/c Ratio		0.58			0.48		0.51	0.44				
Uniform Delay, d1		7.9			7.4		10.7	10.4				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.5			0.2		0.8	0.6				
Delay (s)		8.4			7.6		11.5	11.0				
Level of Service		A			A		B	B				
Approach Delay (s)		8.4			7.6		11.3				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		8.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		40.2			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		46.9%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	4	40	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	4	58	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	80	58	58			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	80	58	58			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	918	1008	1546			
Direction, Lane #						
Volume Total	16	13	58			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	1008	1546	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	4.9	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	4.9	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.3				
Intersection Capacity Utilization		17.3%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St










MILCON Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1400	34	0	3813	552	0	0	476	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1687	41	0	4145	600	0	0	595	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4765			1748			3141	6492	623	5047	6212	1722
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4765			1748			3141	6492	623	5047	6212	1722
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	84
cM capacity (veh/h)	21			349			4	0	1355	0	0	76
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	675	675	378	1658	1658	1429	595	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	600	595	12				
cSH	1700	1700	1700	1700	1700	1700	1355	76				
Volume to Capacity	0.40	0.40	0.22	0.98	0.98	0.84	0.44	0.16				
Queue Length 95th (ft)	0	0	0	0	0	0	57	13				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	61.3				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	61.3				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				101.1%			ICU Level of Service		G			
Analysis Period (min)				15								

* User Entered Value




















NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1261	201	0	3713	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1433	228	0	4126	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1681	2962		632	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1681	2962		632	
tC, single (s)			4.1	6.8		6.9	
tC, 2 stage (s)							
tF (s)			2.2	3.5		3.3	
p0 queue free %			100	100		39	
cM capacity (veh/h)			370	11		409	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	573	573	515	1375	1375	1375	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	228	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	409
Volume to Capacity	0.34	0.34	0.30	0.81	0.81	0.81	0.61
Queue Length 95th (ft)	0	0	0	0	0	0	99
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	26.8
Lane LOS							D
Approach Delay (s)	0.0			0.0			26.8
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			86.6%	ICU Level of Service		E	
Analysis Period (min)			15				


























NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1577	1944	342	106	102	0	0	277	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4640		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4640		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1696	2090	368	143	138	0	0	318	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1018	3128	0	143	138	0	0	330	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.6			21.4	
Effective Green, g (s)				131.2	131.2		20.0	46.6			21.4	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1054	3214		186	870			396	
v/s Ratio Prot				0.67	c0.67		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.97	0.97		0.77	0.16			0.83	
Uniform Delay, d1				27.0	27.4		82.4	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				19.8	10.4		17.2	0.1			14.0	
Delay (s)				46.8	37.8		99.7	56.1			96.3	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			40.0			78.3			96.3	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay			46.2	HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio			0.93									
Actuated Cycle Length (s)			189.4	Sum of lost time (s)				16.8				
Intersection Capacity Utilization			201.0%	ICU Level of Service				H				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  						 		  	  	
Volume (vph)	1	583	70	0	0	0	0	198	200	451	1460	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3259	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3259	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	634	76	0	0	0	0	230	217	490	1521	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	19	49	0	0	0
Lane Group Flow (vph)	0	635	47	0	0	0	0	291	88	490	1521	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1177	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.43	
v/s Ratio Perm		0.12	0.03						0.06			
v/c Ratio		0.36	0.08					0.25	0.17	0.70	0.74	
Uniform Delay, d1		41.5	37.4					38.4	37.3	63.2	26.2	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.4	
Delay (s)		41.6	37.5					38.6	37.4	66.2	27.6	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.2			37.0	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.1		HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		201.0%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (vph)	212	6	1123	589	0	1112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3315			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3315			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	247	7	1208	633	0	1171
RTOR Reduction (vph)	2	0	53	0	0	0
Lane Group Flow (vph)	252	0	1788	0	0	1171
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	16.7		42.4			42.4
Effective Green, g (s)	16.7		42.4			42.4
Actuated g/C Ratio	0.24		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	389		2060			2090
v/s Ratio Prot	c0.16		c0.54			0.35
v/s Ratio Perm						
v/c Ratio	0.65		0.87			0.56
Uniform Delay, d1	23.1		10.6			7.5
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	3.7		4.2			0.3
Delay (s)	26.8		14.8			7.8
Level of Service	C		B			A
Approach Delay (s)	26.8		14.8			7.8
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			13.2		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.85			
Actuated Cycle Length (s)			68.2		Sum of lost time (s)	12.1
Intersection Capacity Utilization			76.2%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↗	↖	↗	↖	↖	↗	↖
Volume (vph)	46	2	9	7	0	5	19	1333	25	38	1250	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1708		1770	3529		1770	3525	
Frt Permitted	0.74	0.78	1.00		0.87		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1312	1385	1583		1526		1770	3529		1770	3525	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	53	2	10	14	0	10	23	1587	30	41	1359	38
RTOR Reduction (vph)	0	0	8	0	20	0	0	1	0	0	1	0
Lane Group Flow (vph)	28	27	2	0	4	0	23	1616	0	41	1396	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.2	15.2	15.2		15.2		2.6	62.6		4.0	64.0	
Effective Green, g (s)	15.2	15.2	15.2		15.2		2.6	62.6		4.0	64.0	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.65		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	207	219	250		241		47	2303		73	2352	
v/s Ratio Prot							0.01	c0.46		c0.02	0.40	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.14	0.12	0.01		0.02		0.49	0.70		0.56	0.59	
Uniform Delay, d1	34.7	34.6	34.0		34.0		46.0	10.7		45.1	8.8	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		7.8	1.0		9.5	0.4	
Delay (s)	35.0	34.9	34.0		34.1		53.8	11.7		54.6	9.2	
Level of Service	C	C	C		C		D	B		D	A	
Approach Delay (s)		34.8			34.1			12.2			10.5	
Approach LOS		C			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.1		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.59									
Actuated Cycle Length (s)			95.9		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			56.1%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	22	0	1279	7	418	824	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Frt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	33	0	1405	8	427	841	0
RTOR Reduction (vph)	0	0	0	0	30	0	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1405	4	427	841	0
Turn Type	Split			Split	NA		NA	Perm		Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.40		c0.24	0.24	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.85	0.01	0.70	0.28	
Uniform Delay, d1					60.6			33.8	20.4	41.0	2.3	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			3.7	0.0	3.5	0.2	
Delay (s)					60.6			16.1	20.4	44.5	2.6	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			16.1			16.7	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		16.9			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		77.3%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB







8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	49	14	1	63	126	134	1120	5	285	273	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frbp, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.98	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3208	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3208	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	46	75	22	1	72	143	149	1244	6	328	314	349
RTOR Reduction (vph)	0	0	20	0	0	120	0	0	3	0	140	0
Lane Group Flow (vph)	46	75	2	0	73	23	149	1244	3	328	523	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1053	
v/s Ratio Prot	0.03	c0.04			c0.04		0.08	c0.35		c0.19	0.16	
v/s Ratio Perm			0.00			0.02			0.00			
v/c Ratio	0.38	0.59	0.02		0.25	0.09	0.27	0.79	0.00	0.96	0.50	
Uniform Delay, d1	64.5	65.5	62.9		53.4	52.1	37.7	34.4	22.3	58.0	39.1	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.91	
Incremental Delay, d2	2.0	6.7	0.1		0.4	0.2	0.3	4.1	0.0	38.1	1.6	
Delay (s)	66.5	72.2	63.0		53.9	52.3	37.9	38.5	22.3	93.8	37.3	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		68.9			52.8			38.4			56.0	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		47.4			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		83.1%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												







NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	27	194	4	86	319	8
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	32	228	5	108	347	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	761	59			112	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	761	59			112	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	77			77	
cM capacity (veh/h)	286	1007			1477	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	260	112	355			
Volume Left	32	0	347			
Volume Right	228	108	0			
cSH	1147	1700	1477			
Volume to Capacity	0.23	0.07	0.23			
Queue Length 95th (ft)	22	0	23			
Control Delay (s)	10.8	0.0	8.0			
Lane LOS	B		A			
Approach Delay (s)	10.8	0.0	8.0			
Approach LOS	B					
Intersection Summary						
Average Delay			7.8			
Intersection Capacity Utilization			34.8%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	30	3	1270	401	0	249
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1737		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1737		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	40	4	1337	422	0	389
RTOR Reduction (vph)	4	0	0	116	0	0
Lane Group Flow (vph)	40	0	1337	306	0	389
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	1.9		31.0	31.0		31.0
Effective Green, g (s)	1.9		31.0	31.0		31.0
Actuated g/C Ratio	0.04		0.72	0.72		0.72
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	77		2563	1100		2563
v/s Ratio Prot	c0.02		c0.38			0.11
v/s Ratio Perm				0.20		
v/c Ratio	0.52		0.52	0.28		0.15
Uniform Delay, d1	20.0		2.6	2.0		1.8
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	6.2		0.2	0.1		0.0
Delay (s)	26.3		2.8	2.2		1.9
Level of Service	C		A	A		A
Approach Delay (s)	26.3		2.7			1.9
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.0		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.52			
Actuated Cycle Length (s)			42.8		Sum of lost time (s)	9.9
Intersection Capacity Utilization			47.5%		ICU Level of Service	A
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↑↑
Volume (veh/h)	0	15	2076	5	5	281
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2232	5	7	413
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2456	1119			2238	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2456	1119			2238	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	87			97	
cM capacity (veh/h)	25	201			228	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1488	749	7	207	207
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	201	1700	1700	228	1700	1700
Volume to Capacity	0.13	0.88	0.44	0.03	0.12	0.12
Queue Length 95th (ft)	11	0	0	2	0	0
Control Delay (s)	25.5	0.0	0.0	21.3	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	25.5	0.0		0.4		
Approach LOS	D					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		67.5%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB

12: SR-75 (Silver Strand Blvd) & Leyte Rd

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	17	84	1992	11	36	244
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	104	2142	12	52	354
RTOR Reduction (vph)	0	5	0	1	0	0
Lane Group Flow (vph)	21	99	2142	11	52	354
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.7	25.8	68.3	68.3	5.0	82.1
Effective Green, g (s)	15.7	20.7	68.3	68.3	5.0	82.1
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	259	305	2256	1009	82	2712
v/s Ratio Prot	0.01	c0.06	c0.61		c0.03	0.10
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.33	0.95	0.01	0.63	0.13
Uniform Delay, d1	39.5	37.2	17.8	7.1	50.2	3.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	9.5	0.0	14.9	0.0
Delay (s)	39.6	37.8	27.4	7.1	65.1	3.3
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.1		27.2			11.2
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay		25.3		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio		0.82				
Actuated Cycle Length (s)		107.1		Sum of lost time (s)		18.1
Intersection Capacity Utilization		71.1%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↗		↖	↗
Volume (veh/h)	0	31	1970	25	0	259
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	50	2074	26	0	350
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2262	1050			2100	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2262	1050			2100	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	78			100	
cM capacity (veh/h)	35	224			258	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	50	1382	718	175	175	
Volume Left	0	0	0	0	0	
Volume Right	50	0	26	0	0	
cSH	224	1700	1700	1700	1700	
Volume to Capacity	0.22	0.81	0.42	0.10	0.10	
Queue Length 95th (ft)	21	0	0	0	0	
Control Delay (s)	25.7	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	25.7	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		65.3%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↗	↖	↖	↗
Volume (vph)	9	6	1995	31	15	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	15	10	2078	32	19	291
RTOR Reduction (vph)	0	5	0	7	0	0
Lane Group Flow (vph)	15	5	2078	25	19	291
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.8	59.8	2.0	69.3
Effective Green, g (s)	1.4	3.4	59.8	59.8	2.0	69.3
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2737	1224	45	3172
v/s Ratio Prot	c0.01	0.00	c0.59		c0.01	0.08
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.47	0.08	0.76	0.02	0.42	0.09
Uniform Delay, d1	37.6	35.4	4.8	2.0	37.1	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.5	0.5	1.3	0.0	6.3	0.0
Delay (s)	48.0	35.9	6.1	2.0	43.4	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	43.2		6.0			3.1
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		6.0		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.74				
Actuated Cycle Length (s)		77.3		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		68.0%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	44	1	0	43	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	81	2	0	68	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	83	68	3					
Volume Left (vph)	0	0	81	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	834	1121	816	842	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.4						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.2%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	35	0	0	31	219	3	1804	49	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1358	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	47	0	0	43	304	3	1919	52	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	0	21	0	0	0
Lane Group Flow (vph)	3	47	0	0	43	248	3	1919	31	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	15.9	15.9			15.9	15.9	47.7	43.6	43.6			
Effective Green, g (s)	15.9	15.9			15.9	15.9	47.7	43.6	43.6			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.60	0.60			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	296	406			406	345	1158	2116	946			
v/s Ratio Prot		0.03			0.02		0.00	c0.54				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.12			0.11	0.72	0.00	0.91	0.03			
Uniform Delay, d1	22.3	22.9			22.8	26.4	4.4	12.9	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	7.0	0.0	6.1	0.0			
Delay (s)	22.3	23.0			22.9	33.4	4.4	18.9	6.0			
Level of Service	C	C			C	C	A	B	A			
Approach Delay (s)		23.0			32.1			18.6			0.0	
Approach LOS		C			C			B			A	
Intersection Summary												
HCM 2000 Control Delay		20.7										
HCM 2000 Volume to Capacity ratio		0.86										
Actuated Cycle Length (s)		72.9				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		83.0%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: AM PEAK

























							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	262	1610	0	206	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	273	1677	0	261	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None		None		
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1645	130	261		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1645	130	261		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	79		0		
cM capacity (veh/h)	71	895	1301		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	273	839	839	174	87	0
Volume Left	0	273	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1301	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.21	0.49	0.49	0.10	0.05	0.00
Queue Length 95th (ft)	0	20	0	0	0	0	0
Control Delay (s)	0.0	8.5	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	A					
Approach Delay (s)	0.0	1.2			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay		1.0					
Intersection Capacity Utilization		54.5%		ICU Level of Service		A	
Analysis Period (min)		15					

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	385	0	37	2	1	2	25	1752	0	0	130	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3344	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3344	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	438	0	42	6	3	6	26	1844	0	0	188	109
RTOR Reduction (vph)	0	29	0	0	6	0	0	0	0	0	61	0
Lane Group Flow (vph)	438	13	0	6	3	0	26	1844	0	0	236	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	25.4	25.4		1.7	1.7		1.9	43.5			37.4	
Effective Green, g (s)	25.4	25.4		1.7	1.7		1.9	43.5			37.4	
Actuated g/C Ratio	0.30	0.30		0.02	0.02		0.02	0.51			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	527	471		35	33		39	1804			1466	
v/s Ratio Prot	c0.25	0.01		c0.00	0.00		0.01	c0.52			0.07	
v/s Ratio Perm												
v/c Ratio	0.83	0.03		0.17	0.09		0.67	1.02			0.16	
Uniform Delay, d1	27.9	21.2		41.1	41.0		41.4	20.9			14.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	10.7	0.0		2.3	1.2		35.5	27.0			0.1	
Delay (s)	38.7	21.2		43.4	42.3		76.9	47.9			14.5	
Level of Service	D	C		D	D		E	D			B	
Approach Delay (s)		37.1			42.7			48.3			14.5	
Approach LOS		D			D			D			B	
Intersection Summary												
HCM 2000 Control Delay		42.5		HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio		0.99										
Actuated Cycle Length (s)		85.3		Sum of lost time (s)				18.9				
Intersection Capacity Utilization		84.8%		ICU Level of Service				E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB

19: 7th St & SR-75 (Silver Strand Blvd)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰↰↰	↰↰↰		↰	↰		↰	↰↰	↰
Volume (vph)	7	177	14	0	1614	17	36	22	1	19	39	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5029			5077		1770	1852			1731	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.19	
Satd. Flow (perm)	1770	5029			5077		1243	1852			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	
Adj. Flow (vph)	8	199	16	0	1774	19	43	26	1	25	51	65
RTOR Reduction (vph)	0	5	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	8	210	0	0	1792	0	43	26	0	0	124	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1902			2061		241	360			53	
v/s Ratio Prot	c0.00	0.04			c0.35			0.01				
v/s Ratio Perm							c0.03				c0.38	
v/c Ratio	0.04	0.11			0.87		0.18	0.07			2.33	
Uniform Delay, d1	71.4	36.3			49.1		60.5	59.2			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			4.8		0.4	0.1			653.1	
Delay (s)	71.5	36.4			53.9		60.9	59.3			728.1	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		37.7			53.9			60.3			728.1	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		95.2			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		70.0%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB

20: SR-75 (Silver Strand Blvd) & Delaware St

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰↰	↰↰↰							↰
Volume (vph)	0	195	0	475	1622	8	0	0	0	0	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	238	0	505	1726	9	0	0	0	0	0	16
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	10
Lane Group Flow (vph)	0	238	0	505	1735	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.05		0.15	c0.49							
v/s Ratio Perm												0.00
v/c Ratio		0.12		0.29	0.54							0.01
Uniform Delay, d1		36.5		26.4	1.5							34.9
Progression Factor		0.43		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.1	0.2							0.0
Delay (s)		15.9		26.5	1.6							34.9
Level of Service		B		C	A							C
Approach Delay (s)		15.9			7.2			0.0				34.9
Approach LOS		B			A			A				C
Intersection Summary												
HCM 2000 Control Delay		8.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		66.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON Year 2017 Alt 2/3noB

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	10	232	0	0	128	230	0	0	0	61	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	12	276	0	0	138	247	0	0	0	67	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	385			276			566	685	276	561	561	261
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	385			276			566	685	276	561	561	261
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	85	100	99
cM capacity (veh/h)	1174			1287			429	367	763	435	432	777
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	288	385	0	71								
Volume Left	12	0	0	67								
Volume Right	0	247	0	4								
cSH	1174	1287	1700	447								
Volume to Capacity	0.01	0.00	0.00	0.16								
Queue Length 95th (ft)	1	0	0	14								
Control Delay (s)	0.4	0.0	0.0	14.6								
Lane LOS	A			B								
Approach Delay (s)	0.4	0.0	0.0	14.6								
Approach LOS				B								
Intersection Summary												
Average Delay				1.6								
Intersection Capacity Utilization				31.1%								
Analysis Period (min)				15								
ICU Level of Service A												

NBC Coastal Campus

22: 3rd St & Palm Ave

MILCON Year 2017 Alt 2/3noB

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	284	4	26	334	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	330	5	28	359	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	335	28	385	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.02	0.53	-0.01	-0.45	-0.14						
Departure Headway (s)	6.2	5.7	6.1	5.6	5.5	6.1						
Degree Utilization, x	0.01	0.53	0.05	0.60	0.28	0.07						
Capacity (veh/h)	546	609	561	616	583	479						
Control Delay (s)	8.1	13.8	8.3	15.4	10.6	9.6						
Approach Delay (s)	13.7		14.9		10.6	9.6						
Approach LOS	B		B		B	A						
Intersection Summary												
Delay				13.4								
Level of Service				B								
Intersection Capacity Utilization				37.8%								
Analysis Period (min)				15								
ICU Level of Service A												

MILCON Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

HCM Unsignalized Intersection Capacity Analysis
KHA
Synchro 8 Report
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MILCON Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

HCM Signalized Intersection Capacity Analysis
KHA
Synchro 8 Report
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NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	512	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	557	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			561		557	557
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			561		557	557
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1010		492	530
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	557	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	519			
Volume to Capacity	0.33	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.0			
Lane LOS			B			
Approach Delay (s)	0.0		12.0			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.9%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2017 Alt 2/3noB
Timing Plan: AM PEAK








Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑↑↑	↑	↑	↑	↑	↑	↑	↑
Volume (vph)	21	647	34	23	1861	42	160	36	50	88	44	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5048		1770	5069			3323			3363	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5048		1770	5069			3323			3363	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	770	40	25	2045	46	193	43	60	107	54	29
RTOR Reduction (vph)	0	3	0	0	1	0	0	13	0	0	8	0
Lane Group Flow (vph)	25	807	0	25	2090	0	0	283	0	0	182	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2235		118	2159			646			653	
v/s Ratio Prot	0.01	c0.16		c0.01	c0.41			c0.09			c0.05	
v/s Ratio Perm												
v/c Ratio	0.17	0.36		0.21	0.97			0.44			0.28	
Uniform Delay, d1	76.7	33.3		79.5	50.5			63.8			61.7	
Progression Factor	1.00	1.00		1.25	0.75			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.7	11.3			0.5			0.2	
Delay (s)	77.3	33.7		100.3	49.3			64.3			62.0	
Level of Service	E	C		F	D			E			E	
Approach Delay (s)		35.0			49.9			64.3			62.0	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		48.2			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		74.0%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB

27: Florida St & SR-75 (Palm Ave)

Timing Plan: AM PEAK









Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	873	34	20	2032	11	18	4	30	54	10	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5081			1688		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5057		1770	5081			1542		1237	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	981	38	23	2309	12	25	5	41	77	14	20
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	17	0
Lane Group Flow (vph)	2	1017	0	23	2321	0	0	44	0	77	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			257		206	283	
v/s Ratio Prot	0.00	0.20		c0.01	c0.46						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.29		0.19	0.62			0.17		0.37	0.06	
Uniform Delay, d1	86.1	11.0		79.4	11.9			64.3		66.7	63.1	
Progression Factor	1.69	0.28		1.43	0.31			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.5	0.5			0.3		1.1	0.1	
Delay (s)	145.9	3.2		113.8	4.2			64.6		67.8	63.2	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.5			5.3			64.6			66.4	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		7.9			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		72.9%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB









28: 13th St & SR-75 (Palm Ave)

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	943	62	94	1889	51	143	19	89	165	35	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.91	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5038		1770	5085	1583		1784	1583		3374	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5038		1770	5085	1583		1784	1583		3374	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1060	70	113	2276	61	161	21	100	220	47	19
RTOR Reduction (vph)	0	4	0	0	0	29	0	0	83	0	2	0
Lane Group Flow (vph)	3	1126	0	113	2276	32	0	182	17	0	284	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		581	
v/s Ratio Prot	0.00	0.22		c0.06	c0.45			c0.10			c0.08	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.50		0.58	0.84	0.04		0.59	0.06		0.49	
Uniform Delay, d1	86.2	36.0		76.0	35.7	20.2		68.7	62.3		67.3	
Progression Factor	1.21	0.63		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.8		4.1	3.4	0.1		3.1	0.1		0.6	
Delay (s)	105.4	23.4		80.0	39.1	20.2		71.7	62.4		68.0	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.7			40.5			68.4			68.0	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		39.7			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		90.4%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	1204	25	42	2016	11	15	6	48	37	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1670			1722	
Flt Permitted	0.95	1.00		0.95	1.00			0.93			0.78	
Satd. Flow (perm)	1770	5070		1770	5081			1566			1383	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	14	1309	27	49	2344	13	18	7	57	49	3	28
RTOR Reduction (vph)	0	2	0	0	0	0	0	45	0	0	22	0
Lane Group Flow (vph)	14	1334	0	49	2357	0	0	37	0	0	58	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Effective Green, g (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2666		72	2829			332			293	
v/s Ratio Prot	0.01	0.26		c0.03	c0.46							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.82	0.50		0.68	0.83			0.11			0.20	
Uniform Delay, d1	35.1	10.8		33.6	13.0			22.6			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	132.1	0.1		23.3	2.2			0.2			0.3	
Delay (s)	167.2	11.0		56.9	15.3			22.7			23.4	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		12.6			16.1			22.7			23.4	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		15.2			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		71.1			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		56.1%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	1217	29	241	1957	212	73	71	760	231	91	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	105	1415	34	256	2082	226	81	79	844	275	108	89
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	182	0	3	56
Lane Group Flow (vph)	105	1447	0	256	2082	159	81	314	274	275	114	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.4	30.4	10.4	34.1	34.1
Effective Green, g (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.4	30.4	10.4	34.1	34.1
Actuated g/C Ratio	0.05	0.30		0.15	0.41	0.41	0.06	0.26	0.26	0.09	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	177	1543		273	2070	644	102	406	394	308	514	442
v/s Ratio Prot	0.03	0.29		c0.14	c0.41		0.05	c0.20		c0.08	c0.07	
v/s Ratio Perm						0.10		0.18				0.02
v/c Ratio	0.59	0.94		0.94	1.01	0.25	0.79	0.77	0.69	0.89	0.22	0.05
Uniform Delay, d1	53.8	39.2		48.4	34.4	22.6	53.9	39.5	38.6	52.2	30.9	29.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.2	11.2		37.6	21.2	0.2	33.3	8.8	5.3	26.1	0.2	0.1
Delay (s)	59.0	50.4		86.1	55.5	22.8	87.3	48.4	43.8	78.3	31.1	29.4
Level of Service	E	D		F	E	C	F	D	D	E	C	C
Approach Delay (s)		51.0			55.7			49.4			58.3	
Approach LOS		D			E			D			E	
Intersection Summary												
HCM 2000 Control Delay		53.5			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		115.9			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		86.2%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2017 Alt 2/3noB

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	280	1134	0	153	1278
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	315	1219	0	170	1420
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	315	1219	0	170	1415
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.34		0.10	c0.51
v/s Ratio Perm						
v/c Ratio		0.12	1.04		0.82	0.92
Uniform Delay, d1		2.5	26.8		34.5	16.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	38.8		22.3	9.6
Delay (s)		2.5	65.6		56.8	26.1
Level of Service		A	E		E	C
Approach Delay (s)		2.5	65.6		29.4	
Approach LOS		A	E		C	
Intersection Summary						
HCM 2000 Control Delay			40.8		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			1.04			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			67.1%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2017 Alt 2/3noB

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	434	0	0	418	517	817	1	142	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3246		1681	1633				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3246		1681	1633				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	499	0	0	454	562	888	1	154	0	0	0
RTOR Reduction (vph)	0	0	0	0	354	0	0	28	0	0	0	0
Lane Group Flow (vph)	0	499	0	0	662	0	533	482	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.7			16.7		20.5	20.5				
Effective Green, g (s)		16.7			16.7		20.5	20.5				
Actuated g/C Ratio		0.37			0.37		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1307			1199		762	740				
v/s Ratio Prot		0.14			c0.20							
v/s Ratio Perm							c0.32	0.29				
v/c Ratio		0.38			0.55		0.70	0.65				
Uniform Delay, d1		10.5			11.3		9.9	9.6				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.6		2.8	2.1				
Delay (s)		10.6			11.8		12.7	11.6				
Level of Service		B			B		B	B				
Approach Delay (s)		10.6			11.8		12.2				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					11.7		HCM 2000 Level of Service	B				
HCM 2000 Volume to Capacity ratio					0.63							
Actuated Cycle Length (s)					45.2		Sum of lost time (s)	8.0				
Intersection Capacity Utilization					68.5%		ICU Level of Service	C				
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Volume (veh/h)	0	3	4	192	27	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	267	66	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	344	66	66			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	344	66	66			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	650	998	1536			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	272	66			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	998	1536	1700			
Volume to Capacity	0.01	0.00	0.04			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.7	0.2	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.7	0.2	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			23.3%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (veh/h)	0	4064	17	0	1803	243	0	0	908	0	0	55
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%			0%			0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4233	18	0	1859	251	0	0	1009	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2129			4271			4985	6391	1460	3435	6275	785
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2129			4271			4985	6391	1460	3435	6275	785
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	247			33			0	0	1832	1	0	324
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1693	1693	864	744	744	622	1009	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	251	1009	83				
cSH	1700	1700	1700	1700	1700	1700	1832	324				
Volume to Capacity	1.00	1.00	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	89	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3	19.9				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.3	19.9				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				143.7%								H
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3830	130	0	1840	0	200	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3948	134	0	1917	0	244	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4102		4694	1423	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4102		4694	1423	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			39		1	121	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1579	1579	924	639	639	639	244
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	244
cSH	1700	1700	1700	1700	1700	1700	121
Volume to Capacity	0.93	0.93	0.54	0.38	0.38	0.38	2.01
Queue Length 95th (ft)	0	0	0	0	0	0	498
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	543.6
Lane LOS							F
Approach Delay (s)	0.0			0.0			543.6
Approach LOS							F
Intersection Summary							
Average Delay			21.2				
Intersection Capacity Utilization			97.9%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑↑			↑↑↑	
Volume (vph)	0	0	0	968	634	109	92	251		0	0	860
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3528	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3528	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1019	667	115	95	259	0	0	887	16
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	509	1280	0	95	259	0	0	901	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1432		98	1989			1568	
v/s Ratio Prot				c0.33	0.28		c0.05	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.08	0.96d1		0.97	0.13			0.57	
Uniform Delay, d1				31.1	29.7		42.4	9.3			18.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				65.7	7.5		80.0	0.0			0.5	
Delay (s)				96.8	37.2		122.4	9.3			19.2	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			54.1			39.7			19.2	
Approach LOS		A			D			D			B	
Intersection Summary												
HCM 2000 Control Delay			42.1			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			0.80									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			17.2			
Intersection Capacity Utilization		135.6%				ICU Level of Service			H			
Analysis Period (min)			15									
d1 Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔↔	
Volume (vph)	7	2109	108	0	0	0	0	344	452	760	1091	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3125	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3125	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2318	119	0	0	0	0	400	526	792	1136	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2326	90	0	0	0	0	631	260	792	1136	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					948	409	865	2022	
v/s Ratio Prot		c0.46						c0.20		c0.23	0.32	
v/s Ratio Perm			0.06						0.19			
v/c Ratio		1.26	0.16					0.67	0.64	0.92	0.56	
Uniform Delay, d1		55.8	37.7					53.2	52.6	63.6	23.7	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		123.1	0.1					1.8	3.2	14.1	0.4	
Delay (s)		178.9	37.9					55.0	55.8	77.7	24.0	
Level of Service		F	D					D	E	E	C	
Approach Delay (s)		172.0			0.0			55.2			46.1	
Approach LOS		F			A			E			D	
Intersection Summary												
HCM 2000 Control Delay			105.8								F	
HCM 2000 Volume to Capacity ratio			0.97									
Actuated Cycle Length (s)			175.0							14.4		
Intersection Capacity Utilization			135.6%							H		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2017 Alt 2/3noB
Timing Plan: PM PEAK













Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔
Volume (vph)	169	11	879	673	0	1197
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1584		3262			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1584		3262			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	217	14	988	756	0	1287
RTOR Reduction (vph)	2	0	66	0	0	0
Lane Group Flow (vph)	229	0	1678	0	0	1287
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	297		2464			2540
v/s Ratio Prot	c0.14		c0.51			0.38
v/s Ratio Perm						
v/c Ratio	0.77		0.68			0.51
Uniform Delay, d1	61.8		9.8			7.7
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	11.8		1.5			0.7
Delay (s)	73.5		11.4			8.5
Level of Service	E		B			A
Approach Delay (s)	73.5		11.4			8.5
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay			14.6			B
HCM 2000 Volume to Capacity ratio			0.71			
Actuated Cycle Length (s)			160.0			12.1
Intersection Capacity Utilization			79.3%			D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	140	9	28	25	9	24	22	1472	48	65	1416	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1695	1583		1721		1770	3522		1770	3489	
Flt Permitted	0.69	0.69	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1219	1217	1583		1463		1770	3522		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	179	12	36	39	14	38	24	1583	52	71	1539	162
RTOR Reduction (vph)	0	0	30	0	23	0	0	1	0	0	3	0
Lane Group Flow (vph)	95	96	6	0	68	0	24	1634	0	71	1698	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4		4							
Actuated Green, G (s)	18.9	18.9	18.9		18.9		3.1	72.0		8.0	76.9	
Effective Green, g (s)	18.9	18.9	18.9		18.9		3.1	72.0		8.0	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	202	263		243		48	2230		124	2359	
v/s Ratio Prot							0.01	0.46		c0.04	c0.49	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.47	0.48	0.02		0.28		0.50	0.73		0.57	0.72	
Uniform Delay, d1	42.9	42.9	39.7		41.4		54.5	14.3		51.2	11.6	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	1.8	0.0		0.6		8.0	1.3		6.3	1.1	
Delay (s)	44.6	44.7	39.7		42.1		62.5	15.5		57.4	12.7	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.9			42.1			16.2			14.5	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.7										
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		113.7						14.8				
Intersection Capacity Utilization		73.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

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7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	7	0	141	0	1282	0	31	1552	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1619			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1619			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	10	0	204	0	1364	0	33	1669	0
RTOR Reduction (vph)	0	0	0	0	166	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	48	0	0	1364	0	33	1669	0
Turn Type	Split			Split	NA		NA	Perm		Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					14.1			45.5		1.7	51.4	
Effective Green, g (s)					14.1			45.5		1.7	51.4	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					301			2129		39	2406	
v/s Ratio Prot					c0.03			0.39		0.02	c0.47	
v/s Ratio Perm												
v/c Ratio					0.16			0.64		0.85	0.69	
Uniform Delay, d1					25.8			9.8		36.8	7.3	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.2			0.7		84.9	0.9	
Delay (s)					26.0			10.4		121.7	8.2	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			26.0			10.4			10.4	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay		11.4										
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		75.6						18.9				
Intersection Capacity Utilization		60.4%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

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8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	286	49	116	6	68	413	27	594	2	136	1378	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1516		1855	1511	1770	3539	1349	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1516		1855	1511	1770	3539	1349	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	376	64	153	7	74	449	30	653	2	145	1466	68
RTOR Reduction (vph)	0	0	124	0	0	220	0	0	1	0	2	0
Lane Group Flow (vph)	376	64	29	0	81	229	30	653	1	145	1532	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.7	27.7	27.7		23.9	23.9	2.9	56.0	56.0	16.8	69.9	
Effective Green, g (s)	27.7	27.7	27.7		23.9	23.9	2.9	56.0	56.0	16.8	69.9	
Actuated g/C Ratio	0.19	0.19	0.19		0.17	0.17	0.02	0.39	0.39	0.12	0.49	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	340	358	292		308	251	35	1378	525	206	1707	
v/s Ratio Prot	c0.21	0.03			0.04		0.02	0.18		c0.08	c0.44	
v/s Ratio Perm			0.02			c0.15			0.00			
v/c Ratio	1.11	0.18	0.10		0.26	0.91	0.86	0.47	0.00	0.70	0.90	
Uniform Delay, d1	58.1	48.5	47.8		52.3	58.9	70.2	32.9	26.8	61.1	33.7	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	80.4	0.2	0.2		0.5	34.1	94.8	1.2	0.0	10.4	7.9	
Delay (s)	138.5	48.8	47.9		52.7	93.0	165.0	34.0	26.8	71.5	41.6	
Level of Service	F	D	D		D	F	F	C	C	E	D	
Approach Delay (s)		105.4			86.9			39.8			44.2	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay		60.2								E		
HCM 2000 Volume to Capacity ratio		0.95										
Actuated Cycle Length (s)		143.8				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		79.2%				ICU Level of Service		D				
Analysis Period (min)		15										
c Critical Lane Group												

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9: Strand Wy & Guadalcanal Rd

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	309	484	3	40	176	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	343	538	4	56	200	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	436	32			61	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	436	32			61	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	32	48			87	
cM capacity (veh/h)	503	1041			1543	
Direction, Lane #						
Volume Total	881	61	203			
Volume Left	343	0	200			
Volume Right	538	56	0			
cSH	1105	1700	1543			
Volume to Capacity	0.80	0.04	0.13			
Queue Length 95th (ft)	224	0	11			
Control Delay (s)	19.6	0.0	7.6			
Lane LOS	C		A			
Approach Delay (s)	19.6	0.0	7.6			
Approach LOS	C					
Intersection Summary						
Average Delay		16.5				
Intersection Capacity Utilization		40.4%		ICU Level of Service	A	
Analysis Period (min)		15				

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10: SR-75 (Silver Strand Blvd) & Tulagi Rd

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	312	6	629	43	0	1503
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	395	8	699	48	0	1689
RTOR Reduction (vph)	1	0	0	27	0	0
Lane Group Flow (vph)	402	0	699	21	0	1689
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.23		0.20			c0.48
v/s Ratio Perm				0.01		
v/c Ratio	0.48		0.46	0.03		1.11
Uniform Delay, d1	18.6		21.3	17.3		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.2	0.0		59.9
Delay (s)	19.1		21.5	17.3		89.9
Level of Service	B		C	B		F
Approach Delay (s)	19.1		21.2			89.9
Approach LOS	B		C			F

Intersection Summary

HCM 2000 Control Delay	61.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	9.9
Intersection Capacity Utilization	91.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

NBC Coastal Campus

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11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (veh/h)	4	6	489	3	15	1441
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	569	3	16	1584
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1395	286			572	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1395	286			572	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	94	98			98	
cM capacity (veh/h)	130	711			997	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	20	379	193	16	792	792
Volume Left	8	0	0	16	0	0
Volume Right	12	0	3	0	0	0
cSH	255	1700	1700	997	1700	1700
Volume to Capacity	0.08	0.22	0.11	0.02	0.47	0.47
Queue Length 95th (ft)	6	0	0	1	0	0
Control Delay (s)	20.3	0.0	0.0	8.7	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	20.3	0.0		0.1		
Approach LOS	C					

Intersection Summary

Average Delay	0.3		
Intersection Capacity Utilization	49.8%	ICU Level of Service	A
Analysis Period (min)	15		

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12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2017 Alt 2/3noB

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	29	55	436	11	100	1345
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	32	60	495	12	110	1478
RTOR Reduction (vph)	0	44	0	7	0	0
Lane Group Flow (vph)	32	16	495	5	110	1478
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	18	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.3	21.5	27.6	27.6	7.1	43.5
Effective Green, g (s)	9.3	16.4	27.6	27.6	7.1	43.5
Actuated g/C Ratio	0.15	0.26	0.44	0.44	0.11	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	265	418	1572	703	202	2479
v/s Ratio Prot	c0.02	0.01	0.14		0.06	c0.42
v/s Ratio Perm			0.00			
v/c Ratio	0.12	0.04	0.31	0.01	0.54	0.60
Uniform Delay, d1	22.9	17.0	11.1	9.6	26.0	4.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.0	3.0	0.4
Delay (s)	23.1	17.0	11.3	9.6	29.0	5.2
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.1		11.2			6.8
Approach LOS	B		B			A

Intersection Summary

HCM 2000 Control Delay	8.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	62.1	Sum of lost time (s)	18.1
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2017 Alt 2/3noB

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↕	↕			↕
Volume (veh/h)	0	22	427	18	0	1374
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	29	491	21	0	1493
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1248	256			511	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1248	256			511	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	165	743			1050	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	29	327	184	747	747
Volume Left	0	0	0	0	0
Volume Right	29	0	21	0	0
cSH	743	1700	1700	1700	1700
Volume to Capacity	0.04	0.19	0.11	0.44	0.44
Queue Length 95th (ft)	3	0	0	0	0
Control Delay (s)	10.0	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.0	0.0		0.0	
Approach LOS	B				

Intersection Summary

Average Delay	0.1				
Intersection Capacity Utilization	41.3%		ICU Level of Service	A	
Analysis Period (min)	15				

NBC Coastal Campus

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14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↕	↖	↗	↕
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	29	25	420	18	22	1350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	40	35	447	19	24	1484
RTOR Reduction (vph)	0	32	0	8	0	0
Lane Group Flow (vph)	40	3	447	11	24	1484
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.4	27.2	27.2	1.8	36.5
Effective Green, g (s)	2.6	4.4	27.2	27.2	1.8	36.5
Actuated g/C Ratio	0.06	0.10	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	152	2106	942	69	2826
v/s Ratio Prot	c0.02	0.00	0.13		0.01	c0.42
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.40	0.02	0.21	0.01	0.35	0.53
Uniform Delay, d1	20.8	18.7	4.3	3.8	21.4	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.6	0.1	0.1	0.0	3.0	0.2
Delay (s)	23.4	18.8	4.3	3.8	24.4	1.8
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.2		4.3			2.1
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.3		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.64			
Actuated Cycle Length (s)			45.7		Sum of lost time (s)	14.1
Intersection Capacity Utilization			48.2%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Movement	↖	→	↗	↖	→	↗	↖	→	↗	↖
Lane Configurations	↖	↗	↗	↖	↗	↗	↖	↗	↖	↗
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	10	14	82	7	0	174	12	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	10	15	106	9	0	196	13	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	10	15	116	209						
Volume Left (vph)	0	0	106	0						
Volume Right (vph)	0	15	0	13						
Hadj (s)	0.03	-0.57	0.22	0.00						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.13	0.19						
Capacity (veh/h)	873	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	6.9						
Approach Delay (s)	6.6		7.8	6.9						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑		↰	↑	↰	↰	↑	↰			
Volume (vph)	9	180	0	0	79	134	11	343	67	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1300	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	10	205	0	0	91	154	12	377	74	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	122	0	40	0	0	0	0
Lane Group Flow (vph)	10	205	0	0	91	32	12	377	34	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.5	18.5	18.5			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.5	18.5	18.5			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	270	388			388	329	812	1624	726			
v/s Ratio Prot		c0.11			0.05		0.01	c0.11				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.53			0.23	0.10	0.01	0.23	0.05			
Uniform Delay, d1	12.7	14.2			13.3	12.9	5.9	6.6	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.3			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.8	15.5			13.6	13.0	5.9	6.7	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.2		6.6			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.4			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		40.3			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		40.4%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: PM PEAK









Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰		↰	↑	↰	↑	↰
Volume (veh/h)	0	262	0	484	0	1513	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	1048	0	550	0	1681	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1956	841	1681		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1956	841	1681		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	0	100		0		
cM capacity (veh/h)	56	308	377		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	1048	0	275	275	1121	560	0
Volume Left	0	0	0	0	0	0	0
Volume Right	1048	0	0	0	0	0	0
cSH	308	1700	1700	1700	1700	1700	1700
Volume to Capacity	3.40	0.00	0.16	0.16	0.66	0.33	0.00
Queue Length 95th (ft)	Err	0	0	0	0	0	0
Control Delay (s)	Err	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F						
Approach Delay (s)	Err	0.0			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			3195.7				
Intersection Capacity Utilization			64.7%		ICU Level of Service		
Analysis Period (min)			15				C

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Timing Plan: PM PEAK









Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	115	0	65	1	1	0	71	312	11	1	1336	195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3521		1770	3471	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3521		1770	3471	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	153	0	87	2	2	0	78	343	12	1	1484	217
RTOR Reduction (vph)	0	69	0	0	0	0	0	2	0	0	9	0
Lane Group Flow (vph)	153	18	0	2	2	0	78	353	0	1	1692	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	18.6	18.6		0.8	0.8		5.8	50.3		0.8	45.3	
Effective Green, g (s)	18.6	18.6		0.8	0.8		5.8	50.3		0.8	45.3	
Actuated g/C Ratio	0.21	0.21		0.01	0.01		0.06	0.56		0.01	0.51	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	368	329		15	16		114	1981		15	1758	
v/s Ratio Prot	c0.09	0.01		c0.00	0.00		c0.04	0.10		0.00	c0.49	
v/s Ratio Perm												
v/c Ratio	0.42	0.06		0.13	0.12		0.68	0.18		0.07	0.96	
Uniform Delay, d1	30.7	28.4		44.0	44.0		40.9	9.5		43.9	21.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.1		4.0	3.5		15.7	0.0		1.9	13.6	
Delay (s)	31.5	28.4		48.0	47.5		56.6	9.5		45.8	34.9	
Level of Service	C	C		D	D		E	A		D	C	
Approach Delay (s)		30.4			47.7			18.0			34.9	
Approach LOS		C			D			B			C	
Intersection Summary												
HCM 2000 Control Delay		31.4										
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		89.4										
Intersection Capacity Utilization		72.3%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB

19: 7th St & SR-75 (Silver Strand Blvd)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	1293	56	0	349	33	12	38	4	23	25	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5053			5020		1770	1835			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.17	
Satd. Flow (perm)	1770	5053			5020		1313	1835			299	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	62	1469	64	0	371	35	17	54	6	27	29	24
RTOR Reduction (vph)	0	2	0	0	6	0	0	2	0	0	8	0
Lane Group Flow (vph)	62	1531	0	0	400	0	17	58	0	0	72	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1911			2038		255	356			49	
v/s Ratio Prot	c0.04	c0.30			c0.08			c0.03				
v/s Ratio Perm							0.01				c0.24	
v/c Ratio	0.32	0.80			0.20		0.07	0.16			1.46	
Uniform Delay, d1	73.7	49.9			34.5		59.2	60.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.9	3.6			0.2		0.1	0.2			291.2	
Delay (s)	74.6	53.5			34.7		59.3	60.5			366.2	
Level of Service	E	D			C		E	E			F	
Approach Delay (s)		54.4			34.7			60.2			366.2	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		62.4										
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB

20: SR-75 (Silver Strand Blvd) & Delaware St

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←
Volume (vph)	0	1322	0	508	385	1900	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3494							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3494							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1485	0	540	410	38	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1485	0	540	448	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3175							609
v/s Ratio Prot		c0.29		c0.16	c0.13							
v/s Ratio Perm												0.00
v/c Ratio		0.77		0.28	0.14							0.00
Uniform Delay, d1		49.1		20.7	0.9							34.8
Progression Factor		0.18		1.00	1.00							1.00
Incremental Delay, d2		1.8		0.1	0.0							0.0
Delay (s)		10.7		20.8	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		10.7			11.7		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		11.2				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.51										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		49.2%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB




















21: Dwy/Silver Strand Blvd & Palm Ave

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		←←			←←			←←			←←	
Volume (veh/h)	3	212	0	0	305	71	0	0	0	228	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	247	0	0	347	81	0	0	0	345	0	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	427			247			654	681	247	640	640	387
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	427			247			654	681	247	640	640	387
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	11	100	98
cM capacity (veh/h)	1132			1319			371	372	792	387	392	661
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	250	427	0	359								
Volume Left	3	0	0	345								
Volume Right	0	81	0	14								
cSH	1132	1319	1700	393								
Volume to Capacity	0.00	0.00	0.00	0.91								
Queue Length 95th (ft)	0	0	0	242								
Control Delay (s)	0.1	0.0	0.0	59.0								
Lane LOS	A		A	F								
Approach Delay (s)	0.1	0.0	0.0	59.0								
Approach LOS			A	F								
Intersection Summary												
Average Delay		20.5										
Intersection Capacity Utilization		40.2%				ICU Level of Service		A				
Analysis Period (min)		15										













NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop			Stop				Stop		Stop		
Volume (vph)	7	418	12	84	350	24	14	38	67	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	536	15	94	393	27	25	67	118	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	551	94	420	209	161						
Volume Left (vph)	9	0	94	0	25	61						
Volume Right (vph)	0	15	0	27	118	28						
Hadj (s)	0.53	0.01	0.53	-0.01	-0.28	0.00						
Departure Headway (s)	7.5	6.9	7.4	6.9	7.2	7.7						
Degree Utilization, x	0.02	1.06	0.20	0.81	0.42	0.34						
Capacity (veh/h)	464	521	473	511	462	433						
Control Delay (s)	9.4	82.1	11.0	31.4	15.4	14.7						
Approach Delay (s)	81.0		27.7		15.4	14.7						
Approach LOS	F		D		C	B						
Intersection Summary												
Delay			45.1									
Level of Service			E									
Intersection Capacity Utilization			47.1%		ICU Level of Service		A					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			 			
Volume (veh/h)	103	514	477	39	52	148
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	106	530	555	45	61	174
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	600				1320	300
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	600				1320	300
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	89				54	75
cM capacity (veh/h)	973				132	696
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	106	530	370	230	235	
Volume Left	106	0	0	0	61	
Volume Right	0	0	0	45	174	
cSH	973	1700	1700	1700	330	
Volume to Capacity	0.11	0.31	0.22	0.14	0.71	
Queue Length 95th (ft)	9	0	0	0	130	
Control Delay (s)	9.2	0.0	0.0	0.0	38.9	
Lane LOS	A				E	
Approach Delay (s)	1.5		0.0		38.9	
Approach LOS					E	
Intersection Summary						
Average Delay			6.9			
Intersection Capacity Utilization			45.7%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	521	30	31	479	3	54	19	22	12	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3510		1770	3536			1754			1841	1583
Flt Permitted	0.46	1.00		0.40	1.00			0.79			0.89	1.00
Satd. Flow (perm)	849	3510		750	3536			1417			1665	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	620	36	34	526	3	66	23	27	16	53	39
RTOR Reduction (vph)	0	6	0	0	0	0	0	21	0	0	0	31
Lane Group Flow (vph)	33	650	0	34	529	0	0	95	0	0	69	8
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	15.9	15.9		15.9	15.9			6.5			6.5	6.5
Effective Green, g (s)	15.9	15.9		15.9	15.9			6.5			6.5	6.5
Actuated g/C Ratio	0.50	0.50		0.50	0.50			0.21			0.21	0.21
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	427	1766		377	1779			291			342	325
v/s Ratio Prot		c0.19			0.15							
v/s Ratio Perm	0.04			0.05			c0.07			0.04		0.01
v/c Ratio	0.08	0.37		0.09	0.30		0.32			0.20		0.02
Uniform Delay, d1	4.1	4.8		4.1	4.6		10.7			10.4		10.0
Progression Factor	1.00	1.00		1.00	1.00		1.00			1.00		1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1		0.7			0.3		0.0
Delay (s)	4.1	4.9		4.2	4.7		11.3			10.7		10.1
Level of Service	A	A		A	A		B			B		B
Approach Delay (s)		4.9			4.7		11.3			10.5		
Approach LOS		A			A		B			B		
Intersection Summary												
HCM 2000 Control Delay		5.7			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.36										
Actuated Cycle Length (s)		31.6			Sum of lost time (s)		9.2					
Intersection Capacity Utilization		45.4%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												








NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	831	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1013	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			1023		1013	1013
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1023		1013	1013
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	99
cM capacity (veh/h)			678		265	290
Direction, Lane #						
Volume Total	1013	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	270			
Volume to Capacity	0.60	0.01	0.04			
Queue Length 95th (ft)	0	0	3			
Control Delay (s)	0.0	0.0	18.9			
Lane LOS			C			
Approach Delay (s)	0.0		18.9			
Approach LOS			C			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			53.7%		ICU Level of Service	A
Analysis Period (min)			15			








NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	40	1706	122	57	785	128	95	88	61	169	77	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5034		1770	4979			3342			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5034		1770	4979			3342			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	43	1815	130	58	793	129	104	97	67	190	87	28
RTOR Reduction (vph)	0	4	0	0	12	0	0	18	0	0	4	0
Lane Group Flow (vph)	43	1941	0	58	910	0	0	250	0	0	301	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2117		157	1983			649			658	
v/s Ratio Prot	0.02	c0.39		c0.03	0.18			c0.07			c0.09	
v/s Ratio Perm												
v/c Ratio	0.22	0.92		0.37	0.46			0.39			0.46	
Uniform Delay, d1	72.9	49.2		77.2	39.9			63.1			64.1	
Progression Factor	1.00	1.00		1.24	0.72			1.00			1.00	
Incremental Delay, d2	0.6	6.8		1.4	0.7			0.4			0.5	
Delay (s)	73.5	56.0		97.4	29.3			63.5			64.6	
Level of Service	E	E		F	C			E			E	
Approach Delay (s)		56.4			33.3			63.5			64.6	
Approach LOS		E			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		51.2			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		117.5%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	1983	56	48	1183	54	21	10	34	62	12	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5064		1770	5052			1703		1770	1718	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.63	1.00	
Satd. Flow (perm)	1770	5064		1770	5052			1551		1169	1718	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2023	57	49	1220	56	25	12	41	73	14	15
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	13	0
Lane Group Flow (vph)	20	2079	0	49	1274	0	0	55	0	73	16	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Effective Green, g (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3564		157	3668			190		143	210	
v/s Ratio Prot	0.01	c0.41		c0.03	c0.25						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.58		0.31	0.35			0.29		0.51	0.08	
Uniform Delay, d1	79.3	13.4		76.8	9.0			71.8		73.9	69.9	
Progression Factor	1.45	0.10		1.56	0.30			1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4		1.0	0.2			0.9		3.1	0.2	
Delay (s)	115.1	1.6		121.1	2.9			72.7		76.9	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		2.7			7.3			72.7			75.0	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.0			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		59.5%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	1794	194	154	1256	80	126	39	125	151	43	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5011		1770	5085	1583		1794	1583		3371	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5011		1770	5085	1583		1794	1583		3371	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.92		0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	28	1909	206	159	1295	82	137	42	136	204	58	27
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	113	0	4	0
Lane Group Flow (vph)	28	2108	0	159	1295	45	0	179	23	0	285	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2218		192	2364	736		305	269		574	
v/s Ratio Prot	0.02	c0.42		c0.09	c0.25			c0.10			c0.08	
v/s Ratio Perm					0.03			0.01				
v/c Ratio	0.18	0.95		0.83	0.55	0.06		0.59	0.09		0.50	
Uniform Delay, d1	75.9	48.2		78.6	34.6	26.5		68.8	62.8		67.6	
Progression Factor	1.03	0.93		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	9.2		24.4	0.9	0.2		8.0	0.6		3.0	
Delay (s)	79.0	54.0		103.0	35.5	26.7		76.8	63.5		70.7	
Level of Service	E	D		F	D	C		E	E		E	
Approach Delay (s)		54.3			42.0			71.1			70.7	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		52.2			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		102.9%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2017 Alt 2/3noB
Timing Plan: PM PEAK












Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	1995	49	167	1550	15	38	8	80	23	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5067		1770	5078			1678			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.83	
Satd. Flow (perm)	1770	5067		1770	5078			1514			1505	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85		0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	10	2217	54	176	1632	16	45	9	94	28	12	12
RTOR Reduction (vph)	0	2	0	0	1	0	0	75	0	0	10	0
Lane Group Flow (vph)	10	2269	0	176	1647	0	0	73	0	0	42	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.4		11.2	50.8			17.2			17.2	
Effective Green, g (s)	0.8	40.4		11.2	50.8			17.2			17.2	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2422		234	3052			308			306	
v/s Ratio Prot	0.01	c0.45		c0.10	0.32							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.62	0.94		0.75	0.54			0.24			0.14	
Uniform Delay, d1	41.7	20.8		35.3	9.9			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	57.6	7.7		12.8	0.2			0.4			0.2	
Delay (s)	99.3	28.5		48.1	10.1			28.6			27.8	
Level of Service	F	C		D	B			C			C	
Approach Delay (s)		28.9			13.8			28.6			27.8	
Approach LOS		C			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		22.4			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		84.5			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		69.9%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB

30: Saturn Blvd/19th St & SR-75 (Palm Ave)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	186	1937	25	323	1558	548	64	175	526	580	236	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	196	2039	26	347	1675	589	68	186	560	630	257	243
RTOR Reduction (vph)	0	1	0	0	0	87	0	26	271	0	2	131
Lane Group Flow (vph)	196	2064	0	347	1675	502	68	362	87	630	279	88
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.3	36.4		45.0	70.1	70.1	8.6	37.1	37.1	11.8	40.3	40.3
Effective Green, g (s)	11.3	36.4		45.0	70.1	70.1	8.6	37.1	37.1	11.8	40.3	40.3
Actuated g/C Ratio	0.07	0.24		0.30	0.46	0.46	0.06	0.24	0.24	0.08	0.26	0.26
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	254	1213		523	2342	729	100	397	366	266	462	398
v/s Ratio Prot	0.06	c0.41		c0.20	c0.33		0.04	c0.22		c0.18	c0.16	
v/s Ratio Perm						0.32			0.06			0.06
v/c Ratio	0.77	1.70		0.66	0.72	0.69	0.68	0.91	0.24	2.37	0.60	0.22
Uniform Delay, d1	69.2	57.9		47.0	33.0	32.4	70.4	56.0	46.2	70.2	49.0	43.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.5	319.4		3.2	1.1	2.7	17.3	24.8	0.3	627.3	2.2	0.3
Delay (s)	82.7	377.3		50.1	34.1	35.1	87.8	80.8	46.5	697.5	51.2	44.0
Level of Service	F	F		D	C	D	F	F	D	F	D	D
Approach Delay (s)		351.7			36.5			66.3			410.1	
Approach LOS		F			D			E			F	

Intersection Summary





HCM 2000 Control Delay	206.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.19		
Actuated Cycle Length (s)	152.2	Sum of lost time (s)	21.9
Intersection Capacity Utilization	123.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

MILCON Year 2017 Alt 2/3noB

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	498	840	0	434	1595
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	560	894	0	477	1753
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	0	560	894	0	477	1749
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.16	c0.25		0.27	c0.63
v/s Ratio Perm						
v/c Ratio		0.31	1.04		0.72	0.98
Uniform Delay, d1		11.6	30.3		21.4	14.1
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	42.2		3.7	17.7
Delay (s)		11.7	72.5		25.1	31.8
Level of Service		B	E		C	C
Approach Delay (s)		11.7	72.5		30.4	
Approach LOS		B	E		C	

Intersection Summary

HCM 2000 Control Delay	37.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	84.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	926	0	0	520	247	427	2	105	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	965	0	0	584	278	459	2	113	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	37	0	0	0	0
Lane Group Flow (vph)	0	965	0	0	764	0	294	243	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.0			19.0		13.9	13.9				
Effective Green, g (s)		19.0			19.0		13.9	13.9				
Actuated g/C Ratio		0.46			0.46		0.34	0.34				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1644			1564		571	548				
v/s Ratio Prot		0.27			0.23							
v/s Ratio Perm							0.17	0.15				
v/c Ratio		0.59			0.49		0.51	0.44				
Uniform Delay, d1		8.1			7.6		10.8	10.5				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.5			0.2		0.8	0.6				
Delay (s)		8.6			7.8		11.6	11.1				
Level of Service		A			A		B	B				
Approach Delay (s)		8.6			7.8		11.3				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		9.0			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		40.9			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		47.3%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	34	161	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	37	233	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	288	233	233			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	288	233	233			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	698	806	1334			
Direction, Lane #						
Volume Total	16	46	233			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	806	1334	1700			
Volume to Capacity	0.02	0.01	0.14			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	9.6	1.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.6	1.5	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.8				
Intersection Capacity Utilization		18.7%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St










MILCON Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1402	34	0	3821	552	0	0	476	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1689	41	0	4153	600	0	0	595	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4773			1750			3146	6503	624	5056	6223	1724
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4773			1750			3146	6503	624	5056	6223	1724
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	84
cM capacity (veh/h)	20			348			4	0	1355	0	0	75
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	676	676	379	1661	1661	1431	595	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	600	595	12				
cSH	1700	1700	1700	1700	1700	1700	1355	75				
Volume to Capacity	0.40	0.40	0.22	0.98	0.98	0.84	0.44	0.16				
Queue Length 95th (ft)	0	0	0	0	0	0	57	13				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	61.6				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	61.6				
Approach LOS							A	F				
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			101.2%			ICU Level of Service		G				
Analysis Period (min)			15									

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1262	201	0	3721	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1434	228	0	4134	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1682		2966	632	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1682		2966	632	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	39	
cM capacity (veh/h)			370		11	409	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	574	574	515	1378	1378	1378	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	228	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	409
Volume to Capacity	0.34	0.34	0.30	0.81	0.81	0.81	0.61
Queue Length 95th (ft)	0	0	0	0	0	0	99
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	26.8
Lane LOS							D
Approach Delay (s)	0.0			0.0			26.8
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			86.8%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1584	1944	343	106	102	0	0	278	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4639		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4639		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1703	2090	369	143	138	0	0	320	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1022	3132	0	143	138	0	0	332	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3211		186	872			397	
v/s Ratio Prot				0.67	c0.68		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.97	0.98		0.77	0.16			0.84	
Uniform Delay, d1				27.3	27.6		82.5	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				20.8	10.7		17.2	0.1			14.2	
Delay (s)				48.2	38.3		99.7	56.1			96.5	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			40.8			78.3			96.5	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		46.9		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		189.5		Sum of lost time (s)						16.8		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	583	73	0	0	0	0	198	201	451	1467	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3258	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3258	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	634	79	0	0	0	0	230	218	490	1528	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	19	49	0	0	0
Lane Group Flow (vph)	0	635	50	0	0	0	0	292	88	490	1528	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1177	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.43	
v/s Ratio Perm		0.12	0.03						0.06			
v/c Ratio		0.36	0.09					0.25	0.17	0.70	0.74	
Uniform Delay, d1		41.5	37.5					38.5	37.3	63.2	26.3	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.5	
Delay (s)		41.6	37.5					38.6	37.4	66.2	27.8	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.1			0.0			38.2			37.1	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.2		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)						14.4		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2018 Alt 1/2/3

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	214	6	1132	594	0	1130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3315			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3315			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	249	7	1217	639	0	1189
RTOR Reduction (vph)	2	0	53	0	0	0
Lane Group Flow (vph)	254	0	1803	0	0	1189
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	16.7		42.6			42.6
Effective Green, g (s)	16.7		42.6			42.6
Actuated g/C Ratio	0.24		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	388		2064			2093
v/s Ratio Prot	c0.16		c0.54			0.35
v/s Ratio Perm						
v/c Ratio	0.66		0.87			0.57
Uniform Delay, d1	23.3		10.7			7.5
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	4.0		4.4			0.4
Delay (s)	27.2		15.1			7.9
Level of Service	C		B			A
Approach Delay (s)	27.2		15.1			7.9
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			13.4		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.85			
Actuated Cycle Length (s)			68.4		Sum of lost time (s)	12.1
Intersection Capacity Utilization			76.6%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2018 Alt 1/2/3

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Timing Plan: AM PEAK



















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↕	↕	↕	↕	↕	↕
Volume (vph)	46	2	9	7	0	5	19	1344	25	39	1269	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1708		1770	3529		1770	3525	
Frt Permitted	0.74	0.78	1.00		0.87		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1312	1385	1583		1526		1770	3529		1770	3525	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	53	2	10	14	0	10	23	1600	30	42	1379	39
RTOR Reduction (vph)	0	0	8	0	20	0	0	1	0	0	1	0
Lane Group Flow (vph)	28	27	2	0	4	0	23	1629	0	42	1417	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.3	15.3	15.3		15.3		2.7	63.5		4.0	64.8	
Effective Green, g (s)	15.3	15.3	15.3		15.3		2.7	63.5		4.0	64.8	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	207	218	249		240		49	2312		73	2357	
v/s Ratio Prot							0.01	c0.46		c0.02	0.40	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.14	0.12	0.01		0.02		0.47	0.70		0.58	0.60	
Uniform Delay, d1	35.1	35.0	34.4		34.4		46.4	10.7		45.6	8.9	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		6.9	1.0		10.5	0.4	
Delay (s)	35.4	35.3	34.4		34.5		53.3	11.7		56.1	9.3	
Level of Service	D	D	C		C		D	B		E	A	
Approach Delay (s)		35.2			34.5			12.3			10.7	
Approach LOS		D			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.2							HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio			0.59									
Actuated Cycle Length (s)			96.9							Sum of lost time (s)	14.1	
Intersection Capacity Utilization			56.6%							ICU Level of Service	B	
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2018 Alt 1/2/3

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: AM PEAK
























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	22	0	1289	7	421	840	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Frt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.66	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	33	0	1416	8	430	857	0
RTOR Reduction (vph)	0	0	0	0	30	0	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1416	4	430	857	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.40		c0.24	0.24	
v/s Ratio Perm									0.00			
v/c Ratio					0.02			0.85	0.01	0.70	0.29	
Uniform Delay, d1					60.6			34.0	20.4	41.1	2.3	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			3.8	0.0	3.7	0.2	
Delay (s)					60.6			16.3	20.4	44.8	2.6	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			16.3			16.7	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay			17.0		HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio			0.74									
Actuated Cycle Length (s)			145.0		Sum of lost time (s)				18.9			
Intersection Capacity Utilization			77.8%		ICU Level of Service				D			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2018 Alt 1/2/3







8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	49	14	1	64	127	135	1129	5	287	285	307
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.98	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frft	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3213	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3213	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	46	75	22	1	73	144	150	1254	6	330	328	353
RTOR Reduction (vph)	0	0	20	0	0	121	0	0	3	0	135	0
Lane Group Flow (vph)	46	75	2	0	74	23	150	1254	3	330	546	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1054	
v/s Ratio Prot	0.03	c0.04			c0.04		0.08	c0.35		c0.19	0.17	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.38	0.59	0.02		0.25	0.10	0.27	0.80	0.00	0.97	0.52	
Uniform Delay, d1	64.5	65.5	62.9		53.5	52.1	37.7	34.5	22.3	58.1	39.4	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.91	
Incremental Delay, d2	2.0	6.7	0.1		0.4	0.2	0.3	4.3	0.0	39.3	1.8	
Delay (s)	66.5	72.2	63.0		53.9	52.3	37.9	38.8	22.3	95.0	37.8	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		68.9			52.8			38.6			56.5	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay			47.8		HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio			0.72									
Actuated Cycle Length (s)			145.0		Sum of lost time (s)				19.4			
Intersection Capacity Utilization			83.8%		ICU Level of Service				E			
Analysis Period (min)			15									
c Critical Lane Group												







NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	29	196	4	87	321	8
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	34	231	5	109	349	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	766	59			114	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	766	59			114	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	88	77			76	
cM capacity (veh/h)	283	1006			1475	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	265	114	358			
Volume Left	34	0	349			
Volume Right	231	109	0			
cSH	1155	1700	1475			
Volume to Capacity	0.23	0.07	0.24			
Queue Length 95th (ft)	22	0	23			
Control Delay (s)	10.9	0.0	8.0			
Lane LOS	B		A			
Approach Delay (s)	10.9	0.0	8.0			
Approach LOS	B					
Intersection Summary						
Average Delay			7.8			
Intersection Capacity Utilization			34.9%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	32	3	1281	404	0	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1739		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1739		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	43	4	1348	425	0	408
RTOR Reduction (vph)	4	0	0	118	0	0
Lane Group Flow (vph)	43	0	1348	307	0	408
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	1.9		30.7	30.7		30.7
Effective Green, g (s)	1.9		30.7	30.7		30.7
Actuated g/C Ratio	0.04		0.72	0.72		0.72
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	77		2556	1097		2556
v/s Ratio Prot	c0.02		c0.38			0.12
v/s Ratio Perm				0.20		
v/c Ratio	0.56		0.53	0.28		0.16
Uniform Delay, d1	19.9		2.6	2.1		1.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	9.0		0.2	0.1		0.0
Delay (s)	28.9		2.8	2.2		1.9
Level of Service	C		A	A		A
Approach Delay (s)	28.9		2.7			1.9
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.1		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.53			
Actuated Cycle Length (s)			42.5		Sum of lost time (s)	9.9
Intersection Capacity Utilization			47.8%		ICU Level of Service	A
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2018 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↑↑
Volume (veh/h)	0	15	2092	5	5	295
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2249	5	7	434
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2484	1127			2255	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2484	1127			2255	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	87			97	
cM capacity (veh/h)	24	198			225	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1500	755	7	217	217
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	198	1700	1700	225	1700	1700
Volume to Capacity	0.13	0.88	0.44	0.03	0.13	0.13
Queue Length 95th (ft)	11	0	0	3	0	0
Control Delay (s)	25.8	0.0	0.0	21.6	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	25.8	0.0		0.4		
Approach LOS	D					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		68.0%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2018 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	17	85	2008	12	37	257
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	105	2159	13	54	372
RTOR Reduction (vph)	0	4	0	1	0	0
Lane Group Flow (vph)	21	101	2159	12	54	372
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.7	25.8	68.3	68.3	5.0	82.1
Effective Green, g (s)	15.7	20.7	68.3	68.3	5.0	82.1
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	259	305	2256	1009	82	2712
v/s Ratio Prot	0.01	c0.06	c0.61		c0.03	0.11
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.33	0.96	0.01	0.66	0.14
Uniform Delay, d1	39.5	37.2	18.0	7.1	50.2	3.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	10.6	0.0	17.5	0.0
Delay (s)	39.6	37.9	28.6	7.1	67.7	3.3
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.2		28.5			11.4
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay		26.3		HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio		0.83				
Actuated Cycle Length (s)		107.1		Sum of lost time (s)	18.1	
Intersection Capacity Utilization		71.6%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↗		↖	↗
Volume (veh/h)	0	31	1986	25	0	273
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	50	2091	26	0	369
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2288	1058			2117	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2288	1058			2117	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	77			100	
cM capacity (veh/h)	33	221			255	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	50	1394	723	184	184	
Volume Left	0	0	0	0	0	
Volume Right	50	0	26	0	0	
cSH	221	1700	1700	1700	1700	
Volume to Capacity	0.23	0.82	0.43	0.11	0.11	
Queue Length 95th (ft)	21	0	0	0	0	
Control Delay (s)	26.0	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	26.0	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		65.7%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↗	↖	↖	↗
Volume (vph)	9	6	2011	31	15	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	15	10	2095	32	19	309
RTOR Reduction (vph)	0	5	0	7	0	0
Lane Group Flow (vph)	15	5	2095	25	19	309
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.8	59.8	2.0	69.3
Effective Green, g (s)	1.4	3.4	59.8	59.8	2.0	69.3
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2737	1224	45	3172
v/s Ratio Prot	c0.01	0.00	c0.59		c0.01	0.09
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.47	0.08	0.77	0.02	0.42	0.10
Uniform Delay, d1	37.6	35.4	4.9	2.0	37.1	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.5	0.5	1.3	0.0	6.3	0.0
Delay (s)	48.0	35.9	6.2	2.0	43.4	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	43.2		6.1			3.0
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		6.1		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.75				
Actuated Cycle Length (s)		77.3		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		68.4%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2018 Alt 1/2/3

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	44	1	0	43	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	81	2	0	68	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	83	68	3					
Volume Left (vph)	0	0	81	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	834	1121	816	842	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.4						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.2%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2018 Alt 1/2/3

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK








Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	36	0	0	31	221	3	1819	49	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Flt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1358	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	48	0	0	43	307	3	1935	52	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	0	21	0	0	0
Lane Group Flow (vph)	3	48	0	0	43	251	3	1935	31	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.0	16.0			16.0	16.0	47.7	43.6	43.6			
Effective Green, g (s)	16.0	16.0			16.0	16.0	47.7	43.6	43.6			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.60	0.60			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	297	408			408	346	1156	2113	945			
v/s Ratio Prot		0.03			0.02		0.00	c0.55				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.12			0.11	0.72	0.00	0.92	0.03			
Uniform Delay, d1	22.3	22.8			22.8	26.5	4.4	13.1	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	7.3	0.0	6.7	0.0			
Delay (s)	22.3	23.0			22.9	33.8	4.4	19.8	6.1			
Level of Service	C	C			C	C	A	B	A			
Approach Delay (s)		22.9				32.5		19.4			0.0	
Approach LOS		C				C		B			A	
Intersection Summary												
HCM 2000 Control Delay		21.4				HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio		0.86										
Actuated Cycle Length (s)		73.0				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		83.5%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2018 Alt 1/2/3

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: AM PEAK













Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	264	1623	0	220	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	275	1691	0	278	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None		None		
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1674	139	278		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1674	139	278		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	79		0		
cM capacity (veh/h)	68	883	1281		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	275	845	845	186	93	0
Volume Left	0	275	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1281	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.21	0.50	0.50	0.11	0.05	0.00
Queue Length 95th (ft)	0	20	0	0	0	0	0
Control Delay (s)	0.0	8.6	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	A					
Approach Delay (s)	0.0	1.2			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			54.9%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus

MILCON Year 2018 Alt 1/2/3

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	389	0	38	2	1	2	25	1765	0	0	131	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3328	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3328	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	442	0	43	6	3	6	26	1858	0	0	190	126
RTOR Reduction (vph)	0	30	0	0	6	0	0	0	0	0	71	0
Lane Group Flow (vph)	442	13	0	6	3	0	26	1858	0	0	245	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	25.5	25.5		1.7	1.7		1.9	43.5			37.4	
Effective Green, g (s)	25.5	25.5		1.7	1.7		1.9	43.5			37.4	
Actuated g/C Ratio	0.30	0.30		0.02	0.02		0.02	0.51			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	528	472		35	33		39	1802			1457	
v/s Ratio Prot	c0.25	0.01		c0.00	0.00		0.01	c0.52			0.07	
v/s Ratio Perm												
v/c Ratio	0.84	0.03		0.17	0.09		0.67	1.03			0.17	
Uniform Delay, d1	28.0	21.2		41.2	41.1		41.4	21.0			14.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	11.1	0.0		2.3	1.2		35.5	29.6			0.1	
Delay (s)	39.1	21.2		43.5	42.3		77.0	50.6			14.6	
Level of Service	D	C		D	D		E	D			B	
Approach Delay (s)		37.5			42.8			50.9			14.6	
Approach LOS		D			D			D			B	
Intersection Summary												
HCM 2000 Control Delay			44.2					HCM 2000 Level of Service			D	
HCM 2000 Volume to Capacity ratio			1.00									
Actuated Cycle Length (s)			85.4					Sum of lost time (s)			18.9	
Intersection Capacity Utilization			85.4%					ICU Level of Service			E	
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰↰↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	7	179	14	0	1626	17	37	22	1	19	40	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5029			5077		1770	1852			1732	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.19	
Satd. Flow (perm)	1770	5029			5077		1241	1852			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	
Adj. Flow (vph)	8	201	16	0	1787	19	44	26	1	25	52	65
RTOR Reduction (vph)	0	5	0	0	1	0	0	1	0	0	17	0
Lane Group Flow (vph)	8	212	0	0	1805	0	44	26	0	0	125	0
Turn Type	Prot	NA			NA	Perm	NA		Perm	NA		
Protected Phases	1	6			2		4			3		
Permitted Phases						4				3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1902			2061		241	360			53	
v/s Ratio Prot	c0.00	0.04			c0.36			0.01				
v/s Ratio Perm							c0.04				c0.39	
v/c Ratio	0.04	0.11			0.88		0.18	0.07			2.36	
Uniform Delay, d1	71.4	36.3			49.3		60.6	59.2			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			5.1		0.4	0.1			668.2	
Delay (s)	71.5	36.4			54.3		60.9	59.3			743.2	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		37.7			54.3			60.3			743.2	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		96.4			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.89										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		70.2%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰↰	↰↰↰							↰
Volume (vph)	0	197	0	513	1634	8	0	0	0	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	240	0	546	1738	9	0	0	0	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	240	0	546	1747	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.05		0.16	c0.49							
v/s Ratio Perm												0.00
v/c Ratio		0.12		0.32	0.54							0.01
Uniform Delay, d1		36.5		26.8	1.5							34.9
Progression Factor		0.43		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.1	0.2							0.0
Delay (s)		15.9		26.9	1.7							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.9			7.7			0.0				35.0
Approach LOS		B			A			A				C
Intersection Summary												
HCM 2000 Control Delay		8.6			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		67.1%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON Year 2018 Alt 1/2/3

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	11	232	0	0	128	277	0	0	0	66	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	13	276	0	0	138	298	0	0	0	73	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	435			276			593	738	276	589	589	287
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	435			276			593	738	276	589	589	287
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	83	100	99
cM capacity (veh/h)	1124			1287			411	342	763	416	416	752
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	289	435	0	77								
Volume Left	13	0	0	73								
Volume Right	0	298	0	4								
cSH	1124	1287	1700	427								
Volume to Capacity	0.01	0.00	0.00	0.18								
Queue Length 95th (ft)	1	0	0	16								
Control Delay (s)	0.5	0.0	0.0	15.3								
Lane LOS	A			A								
Approach Delay (s)	0.5	0.0	0.0	15.3								
Approach LOS				A								
Intersection Summary												
Average Delay				1.6								
Intersection Capacity Utilization				34.3%								A
Analysis Period (min)				15								

NBC Coastal Campus

22: 3rd St & Palm Ave

MILCON Year 2018 Alt 1/2/3

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	290	4	26	381	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	337	5	28	410	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	342	28	435	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.02	0.53	-0.01	-0.45	-0.14						
Departure Headway (s)	6.3	5.8	6.2	5.6	5.6	6.3						
Degree Utilization, x	0.01	0.55	0.05	0.68	0.29	0.08						
Capacity (veh/h)	537	599	559	617	565	473						
Control Delay (s)	8.2	14.5	8.3	18.6	10.9	9.8						
Approach Delay (s)	14.3		18.0		10.9	9.8						
Approach LOS	B		C		B	A						
Intersection Summary												
Delay				15.2								
Level of Service				C								
Intersection Capacity Utilization				37.8%								A
Analysis Period (min)				15								

MILCON Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

HCM Unsignalized Intersection Capacity Analysis
KHA

Synchro 8 Report
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MILCON Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

HCM Signalized Intersection Capacity Analysis
KHA

Synchro 8 Report
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NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	516	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	561	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)			767			
pX, platoon unblocked						
vC, conflicting volume			565		561	561
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			565		561	561
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1007		489	527
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	561	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	516			
Volume to Capacity	0.33	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.1			
Lane LOS			B			
Approach Delay (s)	0.0		12.1			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			37.2%		ICU Level of Service	A
Analysis Period (min)			15			








NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑↑↑	↑	↑	↑↑↑	↑	↑	↑↑↑	↑
Volume (vph)	21	655	34	23	1908	43	162	36	1900	88	45	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5048		1770	5069			3324			3364	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5048		1770	5069			3324			3364	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	780	40	25	2097	47	195	43	60	107	55	29
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	817	0	25	2143	0	0	286	0	0	183	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2235		118	2159			646			654	
v/s Ratio Prot	0.01	c0.16		c0.01	c0.42			c0.09			c0.05	
v/s Ratio Perm												
v/c Ratio	0.17	0.37		0.21	0.99			0.44			0.28	
Uniform Delay, d1	76.7	33.3		79.5	51.4			63.9			61.8	
Progression Factor	1.00	1.00		1.23	0.78			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.7	15.6			0.5			0.2	
Delay (s)	77.3	33.8		98.9	55.4			64.4			62.0	
Level of Service	E	C		F	E			E			E	
Approach Delay (s)		35.1			55.9			64.4			62.0	
Approach LOS		D			E			E			E	
Intersection Summary												
HCM 2000 Control Delay		51.9			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		74.9%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	883	34	20	2079	11	18	4	30	54	10	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5081			1688		1770	1695	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5057		1770	5081			1542		1237	1695	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	992	38	23	2362	12	25	5	41	77	14	21
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	18	0
Lane Group Flow (vph)	2	1028	0	23	2374	0	0	44	0	77	18	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			257		206	282	
v/s Ratio Prot	0.00	0.20		c0.01	c0.47						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.30		0.19	0.64			0.17		0.37	0.06	
Uniform Delay, d1	86.1	11.1		79.4	12.2			64.3		66.7	63.2	
Progression Factor	1.70	0.27		1.42	0.32			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.5	0.5			0.3		1.1	0.1	
Delay (s)	146.9	3.2		113.4	4.4			64.6		67.8	63.2	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.5			5.4			64.6			66.4	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		7.9			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		73.8%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	952	62	95	1935	51	144	19	89	166	35	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.91	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5038		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5038		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1070	70	114	2331	61	162	21	100	221	47	20
RTOR Reduction (vph)	0	4	0	0	0	29	0	0	83	0	3	0
Lane Group Flow (vph)	3	1136	0	114	2331	32	0	183	17	0	285	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.23		c0.06	c0.46			c0.10			c0.08	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.51		0.58	0.86	0.04		0.60	0.06		0.49	
Uniform Delay, d1	86.2	36.1		76.0	36.5	20.2		68.7	62.3		67.4	
Progression Factor	1.22	0.63		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.8		4.3	3.9	0.1		3.1	0.1		0.7	
Delay (s)	106.4	23.4		80.4	40.4	20.2		71.8	62.4		68.0	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.6			41.7			68.5			68.0	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		40.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		91.3%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	↰
Volume (vph)	14	1215	25	43	2063	11	16	6	48	37	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1671			1722	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.78	
Satd. Flow (perm)	1770	5070		1770	5081			1562			1382	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	15	1321	27	50	2399	13	19	7	57	49	3	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	45	0	0	22	0
Lane Group Flow (vph)	15	1347	0	50	2412	0	0	38	0	0	58	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Effective Green, g (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2666		72	2829			331			293	
v/s Ratio Prot	0.01	0.27		c0.03	c0.47							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.88	0.51		0.69	0.85			0.12			0.20	
Uniform Delay, d1	35.2	10.9		33.7	13.3			22.6			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	159.7	0.2		25.2	2.7			0.2			0.3	
Delay (s)	194.9	11.0		58.8	16.0			22.8			23.4	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		13.1			16.8			22.8			23.4	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		15.8			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		71.1			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		56.8%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	90	1228	29	242	2004	213	75	72	765	233	92	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	105	1428	34	257	2132	227	83	80	850	277	110	90
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	183	0	3	59
Lane Group Flow (vph)	105	1460	0	257	2132	160	83	318	276	277	116	22
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.3	29.8	29.8	10.4	31.9	31.9
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.3	29.8	29.8	10.4	31.9	31.9
Actuated g/C Ratio	0.05	0.31		0.16	0.41	0.41	0.07	0.26	0.26	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	178	1548		275	2079	647	127	400	389	309	484	416
v/s Ratio Prot	0.03	0.29		c0.15	c0.42		0.05	c0.20		c0.08	0.07	
v/s Ratio Perm						0.10			0.18			0.01
v/c Ratio	0.59	0.94		0.93	1.03	0.25	0.65	0.79	0.71	0.90	0.24	0.05
Uniform Delay, d1	53.4	39.0		48.1	34.0	22.4	52.0	39.8	38.8	51.9	32.3	30.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.9	11.9		36.9	26.5	0.2	11.5	10.4	5.8	26.5	0.3	0.1
Delay (s)	58.3	50.9		84.9	60.6	22.6	63.5	50.2	44.6	78.4	32.5	30.6
Level of Service	E	D		F	E	C	E	D	D	E	C	C
Approach Delay (s)		51.4			59.7			48.8			58.8	
Approach LOS		D			E			D			E	
Intersection Summary												
HCM 2000 Control Delay		55.4			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.96										
Actuated Cycle Length (s)		115.2			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		87.3%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2018 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	282	1148	0	154	1312
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	317	1234	0	171	1458
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	317	1234	0	171	1453
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.35		0.10	c0.52
v/s Ratio Perm						
v/c Ratio		0.12	1.06		0.83	0.95
Uniform Delay, d1		2.5	26.8		34.5	16.9
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	42.9		22.8	12.6
Delay (s)		2.5	69.7		57.3	29.6
Level of Service		A	E		E	C
Approach Delay (s)		2.5	69.7		32.5	
Approach LOS		A	E		C	
Intersection Summary						
HCM 2000 Control Delay			44.0		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			1.06			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			68.4%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2018 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	437	0	0	422	520	828	1	142	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.96				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3246		1681	1633				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3246		1681	1633				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	502	0	0	459	565	900	1	154	0	0	0
RTOR Reduction (vph)	0	0	0	0	357	0	0	28	0	0	0	0
Lane Group Flow (vph)	0	502	0	0	667	0	540	487	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.7			16.7		20.6	20.6				
Effective Green, g (s)		16.7			16.7		20.6	20.6				
Actuated g/C Ratio		0.37			0.37		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1304			1196		764	742				
v/s Ratio Prot		0.14			c0.21							
v/s Ratio Perm							c0.32	0.30				
v/c Ratio		0.38			0.56		0.71	0.66				
Uniform Delay, d1		10.5			11.4		9.9	9.6				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.6		3.0	2.1				
Delay (s)		10.7			11.9		12.9	11.7				
Level of Service		B			B		B	B				
Approach Delay (s)		10.7			11.9		12.3				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					11.9		HCM 2000 Level of Service	B				
HCM 2000 Volume to Capacity ratio					0.64							
Actuated Cycle Length (s)					45.3		Sum of lost time (s)	8.0				
Intersection Capacity Utilization					69.0%		ICU Level of Service	C				
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰			↱	↰	
Volume (veh/h)	0	3	4	240	32	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	333	78	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	422	78	78			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	422	78	78			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	586	983	1520			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	339	78			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	983	1520	1700			
Volume to Capacity	0.01	0.00	0.05			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.7	0.2	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.7	0.2	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			25.8%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↱			↰↱				↰			↰
Volume (veh/h)	0	4072	17	0	1806	244	0	0	908	0	0	55
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4242	18	0	1862	252	0	0	1009	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2133			4279			4994	6404	1463	3442	6287	786
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2133			4279			4994	6404	1463	3442	6287	786
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	247			33			0	0	1834	1	0	324
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1697	1697	866	745	745	624	1009	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	252	1009	83				
cSH	1700	1700	1700	1700	1700	1700	1834	324				
Volume to Capacity	1.00	1.00	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	89	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3	19.9				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.3	19.9				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				143.9%	ICU Level of Service		H					
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3837	130	0	1843	0	200	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3956	134	0	1920	0	244	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4110		4703	1426	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4110		4703	1426	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			39		1	121	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1582	1582	925	640	640	640	244
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	244
cSH	1700	1700	1700	1700	1700	1700	121
Volume to Capacity	0.93	0.93	0.54	0.38	0.38	0.38	2.02
Queue Length 95th (ft)	0	0	0	0	0	0	499
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	547.1
Lane LOS							F
Approach Delay (s)	0.0			0.0			547.1
Approach LOS							F
Intersection Summary							
Average Delay			21.3				
Intersection Capacity Utilization			98.1%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↖	↑↑↑			↑↑	↗
Volume (vph)	0	0	0	970	634	109	95	252		0	0	861
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4636		1770	3539				3528
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4636		1770	3539				3528
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1021	667	115	98	260	0	0	0	888
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	0	2
Lane Group Flow (vph)	0	0	0	510	1281	0	98	260	0	0	0	902
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA				NA
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1432		98	1989				1568
v/s Ratio Prot				c0.34	0.28		c0.06	0.07				c0.26
v/s Ratio Perm												
v/c Ratio				1.09	0.97dl		1.00	0.13				0.58
Uniform Delay, d1				31.1	29.7		42.5	9.3				18.7
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				66.4	7.6		90.9	0.0				0.5
Delay (s)				97.5	37.3		133.4	9.3				19.2
Level of Service				F	D		F	A				B
Approach Delay (s)		0.0			54.3			43.3				19.2
Approach LOS		A			D			D				B
Intersection Summary												
HCM 2000 Control Delay			42.7				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.80									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			17.2			
Intersection Capacity Utilization		135.6%				ICU Level of Service			H			
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔	
Volume (vph)	7	2110	108	0	0	0	0	347	458	760	1093	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3125	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3125	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2319	119	0	0	0	0	403	533	792	1139	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2327	90	0	0	0	0	637	264	792	1139	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					948	409	865	2022	
v/s Ratio Prot		c0.46						c0.20		c0.23	0.32	
v/s Ratio Perm			0.06						0.20			
v/c Ratio		1.26	0.16					0.67	0.64	0.92	0.56	
Uniform Delay, d1		55.8	37.7					53.3	52.8	63.6	23.7	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		123.3	0.1					1.9	3.5	14.1	0.4	
Delay (s)		179.1	37.9					55.2	56.3	77.7	24.1	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		172.2			0.0			55.6			46.1	
Approach LOS		F			A			E			D	
Intersection Summary												
HCM 2000 Control Delay		105.8									F	
HCM 2000 Volume to Capacity ratio		0.97										
Actuated Cycle Length (s)		175.0							14.4			
Intersection Capacity Utilization		135.6%							H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2018 Alt 1/2/3
Timing Plan: PM PEAK













Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔		↔↔			↔↔
Volume (vph)	171	12	895	679	0	1207
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3263			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3263			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	219	15	1006	763	0	1298
RTOR Reduction (vph)	2	0	65	0	0	0
Lane Group Flow (vph)	232	0	1704	0	0	1298
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	296		2465			2540
v/s Ratio Prot	c0.15		c0.52			0.39
v/s Ratio Perm						
v/c Ratio	0.79		0.69			0.51
Uniform Delay, d1	61.9		10.0			7.8
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	12.8		1.6			0.7
Delay (s)	74.7		11.6			8.5
Level of Service	E		B			A
Approach Delay (s)	74.7		11.6			8.5
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay		14.9				B
HCM 2000 Volume to Capacity ratio		0.72				
Actuated Cycle Length (s)		160.0				12.1
Intersection Capacity Utilization		79.9%				D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2018 Alt 1/2/3

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	141	9	28	25	9	24	22	1493	48	66	1428	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1695	1583		1721		1770	3523		1770	3489	
Flt Permitted	0.69	0.69	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1219	1217	1583		1462		1770	3523		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	181	12	36	39	14	38	24	1605	52	72	1552	163
RTOR Reduction (vph)	0	0	30	0	23	0	0	1	0	0	3	0
Lane Group Flow (vph)	96	97	6	0	68	0	24	1656	0	72	1712	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4		4							
Actuated Green, G (s)	19.0	19.0	19.0		19.0		3.1	72.0		8.0	76.9	
Effective Green, g (s)	19.0	19.0	19.0		19.0		3.1	72.0		8.0	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	203	203	264		244		48	2228		124	2357	
v/s Ratio Prot							0.01	0.47		c0.04	c0.49	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.47	0.48	0.02		0.28		0.50	0.74		0.58	0.73	
Uniform Delay, d1	42.9	42.9	39.6		41.4		54.6	14.5		51.3	11.8	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	1.8	0.0		0.6		8.0	1.4		6.8	1.1	
Delay (s)	44.6	44.7	39.7		42.0		62.6	15.9		58.0	12.9	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.9			42.0			16.5			14.7	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.9			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		113.8			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		74.2%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2018 Alt 1/2/3

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	7	0	142	0	1302	0	31	1566	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1619			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1619			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	10	0	206	0	1385	0	33	1684	0
RTOR Reduction (vph)	0	0	0	0	168	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	48	0	0	1385	0	33	1684	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			45.4		1.7	51.3	
Effective Green, g (s)					14.1			45.4		1.7	51.3	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					302			2128		39	2404	
v/s Ratio Prot					c0.03			0.39		0.02	c0.48	
v/s Ratio Perm												
v/c Ratio					0.16			0.65		0.85	0.70	
Uniform Delay, d1					25.7			9.9		36.8	7.4	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			0.7		84.9	0.9	
Delay (s)					26.0			10.6		121.6	8.3	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			26.0			10.6			10.5	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay		11.6			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		75.5			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		60.9%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON Year 2018 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	288	49	117	6	68	416	27	608	2	137	1391	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1516		1855	1511	1770	3539	1348	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1516		1855	1511	1770	3539	1348	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	379	64	154	7	74	452	30	668	2	146	1480	69
RTOR Reduction (vph)	0	0	124	0	0	217	0	0	1	0	2	0
Lane Group Flow (vph)	379	64	30	0	81	235	30	668	1	146	1547	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.7	27.7	27.7		24.4	24.4	2.9	55.9	55.9	16.9	69.9	
Effective Green, g (s)	27.7	27.7	27.7		24.4	24.4	2.9	55.9	55.9	16.9	69.9	
Actuated g/C Ratio	0.19	0.19	0.19		0.17	0.17	0.02	0.39	0.39	0.12	0.48	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	339	357	291		313	255	35	1370	522	207	1701	
v/s Ratio Prot	c0.21	0.03			0.04		0.02	0.19		c0.08	c0.44	
v/s Ratio Perm			0.02			c0.16		0.00				
v/c Ratio	1.12	0.18	0.10		0.26	0.92	0.86	0.49	0.00	0.71	0.91	
Uniform Delay, d1	58.3	48.8	48.0		52.1	59.0	70.5	33.4	27.1	61.3	34.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	84.7	0.2	0.2		0.4	36.0	94.8	1.2	0.0	10.4	8.7	
Delay (s)	143.0	49.0	48.2		52.5	95.0	165.3	34.6	27.1	71.7	43.0	
Level of Service	F	D	D		D	F	F	C	C	E	D	
Approach Delay (s)		108.4			88.5			40.2			45.5	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay		61.6			HCM 2000 Level of Service					E		
HCM 2000 Volume to Capacity ratio		0.96										
Actuated Cycle Length (s)		144.3			Sum of lost time (s)					19.4		
Intersection Capacity Utilization		79.7%			ICU Level of Service					D		
Analysis Period (min)		15										

c Critical Lane Group

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON Year 2018 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	312	488	3	43	177	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	347	542	4	61	201	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	440	35			65	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	440	35			65	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	31	48			87	
cM capacity (veh/h)	499	1039			1537	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	889	65	205			
Volume Left	347	0	201			
Volume Right	542	61	0			
cSH	1005	1700	1537			
Volume to Capacity	0.88	0.04	0.13			
Queue Length 95th (ft)	309	0	11			
Control Delay (s)	28.4	0.0	7.6			
Lane LOS	D		A			
Approach Delay (s)	28.4	0.0	7.6			
Approach LOS	D					
Intersection Summary						
Average Delay		23.1				
Intersection Capacity Utilization		40.6%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2018 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↖		↗
Volume (vph)	315	6	644	46	0	1516
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	399	8	716	51	0	1703
RTOR Reduction (vph)	1	0	0	29	0	0
Lane Group Flow (vph)	406	0	716	22	0	1703
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.23		0.20			c0.48
v/s Ratio Perm				0.01		
v/c Ratio	0.48		0.47	0.03		1.12
Uniform Delay, d1	18.7		21.4	17.3		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.2	0.0		63.6
Delay (s)	19.1		21.7	17.4		93.5
Level of Service	B		C	B		F
Approach Delay (s)	19.1		21.4			93.5
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay		63.8		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		0.78				
Actuated Cycle Length (s)		105.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		91.8%		ICU Level of Service		F
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2018 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↗	↖	↗	↗
Volume (veh/h)	4	6	504	3	15	1454
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	586	3	16	1598
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1420	295			590	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1420	295			590	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	94	98			98	
cM capacity (veh/h)	125	702			982	
Direction, Lane #						
Volume Total	20	391	199	16	799	799
Volume Left	8	0	0	16	0	0
Volume Right	12	0	3	0	0	0
cSH	247	1700	1700	982	1700	1700
Volume to Capacity	0.08	0.23	0.12	0.02	0.47	0.47
Queue Length 95th (ft)	7	0	0	1	0	0
Control Delay (s)	20.8	0.0	0.0	8.7	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	20.8	0.0		0.1		
Approach LOS	C					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			50.2%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	29	56	451	12	101	1358
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	32	61	512	14	111	1492
RTOR Reduction (vph)	0	45	0	8	0	0
Lane Group Flow (vph)	32	16	512	6	111	1492
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.3	21.5	27.7	27.7	7.1	43.6
Effective Green, g (s)	9.3	16.4	27.7	27.7	7.1	43.6
Actuated g/C Ratio	0.15	0.26	0.45	0.45	0.11	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	264	417	1576	704	202	2480
v/s Ratio Prot	c0.02	0.01	0.14		0.06	c0.42
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.04	0.32	0.01	0.55	0.60
Uniform Delay, d1	22.9	17.0	11.2	9.6	26.0	4.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.0	3.0	0.4
Delay (s)	23.1	17.1	11.3	9.6	29.1	5.2
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.2		11.3			6.9
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			8.4		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.62			
Actuated Cycle Length (s)			62.2		Sum of lost time (s)	18.1
Intersection Capacity Utilization			49.5%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2018 Alt 1/2/3
Timing Plan: PM PEAK







	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↕	↕			↕
Volume (veh/h)	0	22	442	18	0	1387
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	29	508	21	0	1508
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1272	264			529	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1272	264			529	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	159	734			1035	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	29	339	190	754	754	
Volume Left	0	0	0	0	0	
Volume Right	29	0	21	0	0	
cSH	734	1700	1700	1700	1700	
Volume to Capacity	0.04	0.20	0.11	0.44	0.44	
Queue Length 95th (ft)	3	0	0	0	0	
Control Delay (s)	10.1	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.1	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			41.7%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2018 Alt 1/2/3

Timing Plan: PM PEAK





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	29	25	435	18	22	1363
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	40	35	463	19	24	1498
RTOR Reduction (vph)	0	32	0	8	0	0
Lane Group Flow (vph)	40	3	463	11	24	1498
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	27.5	27.5	1.7	36.7
Effective Green, g (s)	2.6	4.3	27.5	27.5	1.7	36.7
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	148	2120	948	65	2829
v/s Ratio Prot	c0.02	0.00	0.13		0.01	c0.42
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.40	0.02	0.22	0.01	0.37	0.53
Uniform Delay, d1	20.9	18.9	4.2	3.7	21.6	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.6	0.1	0.1	0.0	3.5	0.2
Delay (s)	23.5	19.0	4.3	3.7	25.1	1.8
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.4		4.3			2.1
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.3	HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.64			
Actuated Cycle Length (s)			45.9	Sum of lost time (s)		14.1
Intersection Capacity Utilization			48.6%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON Year 2018 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	10	14	83	7	0	175	13	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	10	15	108	9	0	197	15	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	10	15	117	211						
Volume Left (vph)	0	0	108	0						
Volume Right (vph)	0	15	0	15						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.13	0.19						
Capacity (veh/h)	872	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	6.9						
Approach Delay (s)	6.6		7.8	6.9						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%	ICU Level of Service					H	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2018 Alt 1/2/3

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑		↰	↑	↰	↰	↑	↰			
Volume (vph)	9	181	0	0	80	135	12	358	67	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1299	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	10	206	0	0	92	155	13	393	74	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	122	0	40	0	0	0	0
Lane Group Flow (vph)	10	206	0	0	92	33	13	393	34	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.5	8.5			8.5	8.5	18.5	18.5	18.5			
Effective Green, g (s)	8.5	8.5			8.5	8.5	18.5	18.5	18.5			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	273	391			391	333	810	1620	724			
v/s Ratio Prot		c0.11			0.05		0.01	c0.11				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.53			0.24	0.10	0.02	0.24	0.05			
Uniform Delay, d1	12.7	14.2			13.3	12.9	6.0	6.7	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.3			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.7	15.4			13.6	13.0	6.0	6.8	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.3			13.2		6.6			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.3			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.33										
Actuated Cycle Length (s)		40.4			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		40.4%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2018 Alt 1/2/3

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: PM PEAK









Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰		↰	↑	↰	↑	↰
Volume (veh/h)	0	264	0	499	0	1528	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	1056	0	567	0	1698	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1981	849	1698		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1981	849	1698		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	0	100		0		
cM capacity (veh/h)	54	304	371		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	1056	0	284	284	1132	566	0
Volume Left	0	0	0	0	0	0	0
Volume Right	1056	0	0	0	0	0	0
cSH	304	1700	1700	1700	1700	1700	1700
Volume to Capacity	3.47	0.00	0.17	0.17	0.67	0.33	0.00
Queue Length 95th (ft)	Err	0	0	0	0	0	0
Control Delay (s)	Err	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F						
Approach Delay (s)	Err	0.0			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			3179.6				
Intersection Capacity Utilization			65.3%		ICU Level of Service		
Analysis Period (min)			15				C

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON Year 2018 Alt 1/2/3

Timing Plan: PM PEAK









Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	128	0	66	1	1	0	71	315	12	1	1346	199
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3520		1770	3471	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3520		1770	3471	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	171	0	88	2	2	0	78	346	13	1	1496	221
RTOR Reduction (vph)	0	69	0	0	0	0	0	2	0	0	9	0
Lane Group Flow (vph)	171	19	0	2	2	0	78	357	0	1	1708	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	19.0	19.0		0.8	0.8		5.8	49.5		0.8	44.5	
Effective Green, g (s)	19.0	19.0		0.8	0.8		5.8	49.5		0.8	44.5	
Actuated g/C Ratio	0.21	0.21		0.01	0.01		0.07	0.56		0.01	0.50	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	377	337		15	16		115	1957		15	1735	
v/s Ratio Prot	c0.10	0.01		c0.00	0.00		c0.04	0.10		0.00	c0.49	
v/s Ratio Perm												
v/c Ratio	0.45	0.06		0.13	0.12		0.68	0.18		0.07	0.98	
Uniform Delay, d1	30.5	27.9		43.8	43.8		40.7	9.8		43.7	21.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.9	0.1		4.0	3.5		14.7	0.0		1.9	17.9	
Delay (s)	31.3	27.9		47.8	47.3		55.4	9.8		45.6	39.8	
Level of Service	C	C		D	D		E	A		D	D	
Approach Delay (s)		30.2			47.5			17.9			39.8	
Approach LOS		C			D			B			D	
Intersection Summary												
HCM 2000 Control Delay		34.8										
HCM 2000 Volume to Capacity ratio		0.80										
Actuated Cycle Length (s)		89.0										
Intersection Capacity Utilization		73.4%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2018 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	56	1302	57	0	351	34	13	39	4	23	25	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.99			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5053			5018		1770	1836			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.17	
Satd. Flow (perm)	1770	5053			5018		1313	1836			299	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	64	1480	65	0	373	36	19	56	6	27	29	24
RTOR Reduction (vph)	0	2	0	0	7	0	0	2	0	0	8	0
Lane Group Flow (vph)	64	1543	0	0	402	0	19	60	0	0	72	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1911			2037		255	357			49	
v/s Ratio Prot	c0.04	c0.31			c0.08			c0.03				
v/s Ratio Perm							0.01				c0.24	
v/c Ratio	0.33	0.81			0.20		0.07	0.17			1.46	
Uniform Delay, d1	73.8	50.1			34.5		59.3	60.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	3.8			0.2		0.1	0.2			291.2	
Delay (s)	74.8	53.9			34.7		59.4	60.6			366.2	
Level of Service	E	D			C		E	E			F	
Approach Delay (s)		54.7			34.7			60.3			366.2	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		62.6										
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2018 Alt 1/2/3

20: SR-75 (Silver Strand Blvd) & Delaware St

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←
Volume (vph)	0	1332	0	520	388	37	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3493							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3493							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1497	0	553	413	39	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1497	0	553	452	0	0	0	0	0	0	3
Turn Type	NA			Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3174							609
v/s Ratio Prot		c0.29		c0.16	c0.13							
v/s Ratio Perm												0.00
v/c Ratio		0.78		0.29	0.14							0.00
Uniform Delay, d1		49.3		20.8	0.9							34.8
Progression Factor		0.19		1.00	1.00							1.00
Incremental Delay, d2		1.8		0.1	0.0							0.0
Delay (s)		10.9		20.9	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		10.9			11.9		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		11.4				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.52										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		49.7%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2018 Alt 1/2/3



















21: Dwy/Silver Strand Blvd & Palm Ave

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		←←			←←			←←				←←
Volume (veh/h)	3	212	0	0	305	83	0	0	0	275	0	10
Sign Control		Free			Free			Stop				Stop
Grade		0%			0%			0%				0%
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	247	0	0	347	94	0	0	0	417	0	15
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	441			247			662	694	247	647	647	394
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	441			247			662	694	247	647	647	394
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	0	100	98
cM capacity (veh/h)	1119			1319			365	365	792	383	388	655
Direction, Lane #												
Volume Total	250	441	0	432								
Volume Left	3	0	0	417								
Volume Right	0	94	0	15								
cSH	1119	1319	1700	389								
Volume to Capacity	0.00	0.00	0.00	1.11								
Queue Length 95th (ft)	0	0	0	393								
Control Delay (s)	0.1	0.0	0.0	111.8								
Lane LOS	A			F								
Approach Delay (s)	0.1	0.0	0.0	111.8								
Approach LOS				F								
Intersection Summary												
Average Delay		43.0										
Intersection Capacity Utilization		43.6%				ICU Level of Service		A				
Analysis Period (min)		15										











NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop			Stop				Stop			Stop	
Volume (vph)	7	465	12	85	362	24	14	38	67	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	596	15	96	407	27	25	67	118	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	612	96	434	209	161						
Volume Left (vph)	9	0	96	0	25	61						
Volume Right (vph)	0	15	0	27	118	28						
Hadj (s)	0.53	0.02	0.53	-0.01	-0.28	0.00						
Departure Headway (s)	7.5	7.0	7.5	6.9	7.3	7.7						
Degree Utilization, x	0.02	1.19	0.20	0.83	0.42	0.35						
Capacity (veh/h)	462	521	473	512	459	431						
Control Delay (s)	9.5	124.5	11.1	34.4	15.5	14.8						
Approach Delay (s)	122.8		30.2		15.5	14.8						
Approach LOS	F		D		C	B						
Intersection Summary												
Delay			64.4									
Level of Service			F									
Intersection Capacity Utilization			49.6%		ICU Level of Service		A					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	115	550	487	39	52	151
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	119	567	566	45	61	178
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	612				1393	306
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	612				1393	306
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	88				47	74
cM capacity (veh/h)	963				116	690
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	119	567	378	234	239	
Volume Left	119	0	0	0	61	
Volume Right	0	0	0	45	178	
cSH	963	1700	1700	1700	305	
Volume to Capacity	0.12	0.33	0.22	0.14	0.78	
Queue Length 95th (ft)	10	0	0	0	155	
Control Delay (s)	9.3	0.0	0.0	0.0	48.9	
Lane LOS	A				E	
Approach Delay (s)	1.6		0.0		48.9	
Approach LOS					E	
Intersection Summary						
Average Delay			8.3			
Intersection Capacity Utilization			47.8%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	557	31	31	488	3	54	19	22	12	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3511		1770	3536			1754			1841	1583
Flt Permitted	0.45	1.00		0.39	1.00			0.79			0.89	1.00
Satd. Flow (perm)	840	3511		718	3536			1417			1664	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	663	37	34	536	3	66	23	27	16	53	39
RTOR Reduction (vph)	0	5	0	0	0	0	0	22	0	0	0	31
Lane Group Flow (vph)	33	695	0	34	539	0	0	94	0	0	69	8
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	17.0	17.0		17.0	17.0			6.5			6.5	6.5
Effective Green, g (s)	17.0	17.0		17.0	17.0			6.5			6.5	6.5
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.20			0.20	0.20
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	436	1825		373	1838			281			330	314
v/s Ratio Prot		c0.20			0.15							
v/s Ratio Perm	0.04			0.05			c0.07			0.04		0.00
v/c Ratio	0.08	0.38		0.09	0.29		0.34			0.21		0.02
Uniform Delay, d1	3.9	4.7		4.0	4.4		11.2			11.0		10.5
Progression Factor	1.00	1.00		1.00	1.00		1.00			1.00		1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1		0.7			0.3		0.0
Delay (s)	4.0	4.8		4.1	4.5		12.0			11.3		10.6
Level of Service	A	A		A	A		B			B		B
Approach Delay (s)		4.8			4.5		12.0			11.0		
Approach LOS		A			A		B			B		
Intersection Summary												
HCM 2000 Control Delay		5.7			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.37										
Actuated Cycle Length (s)		32.7			Sum of lost time (s)		9.2					
Intersection Capacity Utilization		45.4%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												








NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	868	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1059	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			1068		1059	1059
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1068		1059	1059
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		96	99
cM capacity (veh/h)			652		249	273
Direction, Lane #						
Volume Total	1059	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	254			
Volume to Capacity	0.62	0.01	0.05			
Queue Length 95th (ft)	0	0	4			
Control Delay (s)	0.0	0.0	19.9			
Lane LOS			C			
Approach Delay (s)	0.0		19.9			
Approach LOS			C			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			55.7%		ICU Level of Service	B
Analysis Period (min)			15			








NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	41	1752	124	57	799	129	96	88	61	171	78	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5035		1770	4979			3342			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5035		1770	4979			3342			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	44	1864	132	58	807	130	105	97	67	192	88	28
RTOR Reduction (vph)	0	4	0	0	11	0	0	18	0	0	4	0
Lane Group Flow (vph)	44	1992	0	58	926	0	0	251	0	0	304	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2117		157	1983			649			658	
v/s Ratio Prot	0.02	c0.40		c0.03	0.19			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.22	0.94		0.37	0.47			0.39			0.46	
Uniform Delay, d1	72.9	50.0		77.2	40.0			63.2			64.2	
Progression Factor	1.00	1.00		1.24	0.73			1.00			1.00	
Incremental Delay, d2	0.6	9.1		1.4	0.8			0.4			0.5	
Delay (s)	73.5	59.1		97.2	30.1			63.5			64.7	
Level of Service	E	E		F	C			E			E	
Approach Delay (s)		59.4			34.0			63.5			64.7	
Approach LOS		E			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		53.2			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		117.5%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	2031	56	48	1199	54	21	10	34	62	12	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5065		1770	5052			1703		1770	1714	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.63	1.00	
Satd. Flow (perm)	1770	5065		1770	5052			1550		1169	1714	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2072	57	49	1236	56	25	12	41	73	14	16
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	14	0
Lane Group Flow (vph)	20	2128	0	49	1290	0	0	55	0	73	16	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Effective Green, g (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3565		157	3668			190		143	210	
v/s Ratio Prot	0.01	c0.42		c0.03	c0.26						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.60		0.31	0.35			0.29		0.51	0.08	
Uniform Delay, d1	79.3	13.6		76.8	9.1			71.8		73.9	69.9	
Progression Factor	1.44	0.10		1.56	0.30			1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.4		1.0	0.2			0.9		3.1	0.2	
Delay (s)	114.6	1.8		120.9	2.9			72.7		76.9	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		2.8			7.2			72.7			74.9	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		7.9			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		60.1%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	1838	196	155	1273	80	127	40	126	152	44	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5012		1770	5085	1583		1794	1583		3371	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5012		1770	5085	1583		1794	1583		3371	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.92	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	28	1955	209	160	1312	82	138	43	137	205	59	27
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	114	0	4	0
Lane Group Flow (vph)	28	2157	0	160	1312	45	0	181	23	0	287	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2219		192	2364	736		305	269		574	
v/s Ratio Prot	0.02	c0.43		c0.09	c0.26			c0.10			c0.09	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.18	0.97		0.83	0.55	0.06		0.59	0.09		0.50	
Uniform Delay, d1	75.9	49.1		78.6	34.7	26.5		68.9	62.8		67.7	
Progression Factor	1.03	0.94		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.4	11.9		25.5	0.9	0.2		8.2	0.6		3.1	
Delay (s)	78.4	57.9		104.1	35.7	26.7		77.1	63.5		70.8	
Level of Service	E	E		F	D	C		E	E		E	
Approach Delay (s)		58.2			42.2			71.3			70.8	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		54.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		103.8%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	2041	49	168	1569	16	38	8	80	23	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5068		1770	5078			1678			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.83	
Satd. Flow (perm)	1770	5068		1770	5078			1514			1505	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.95	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	10	2268	54	177	1652	17	45	9	94	28	12	12
RTOR Reduction (vph)	0	2	0	0	1	0	0	75	0	0	10	0
Lane Group Flow (vph)	10	2320	0	177	1668	0	0	73	0	0	42	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.4		11.2	50.8			17.2			17.2	
Effective Green, g (s)	0.8	40.4		11.2	50.8			17.2			17.2	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2423		234	3052			308			306	
v/s Ratio Prot	0.01	c0.46		c0.10	0.33							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.62	0.96		0.76	0.55			0.24			0.14	
Uniform Delay, d1	41.7	21.2		35.3	10.0			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	57.6	10.1		13.0	0.2			0.4			0.2	
Delay (s)	99.3	31.3		48.4	10.2			28.6			27.8	
Level of Service	F	C		D	B			C			C	
Approach Delay (s)		31.6			13.9			28.6			27.8	
Approach LOS		C			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		24.0			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		84.5			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		70.9%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2018 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↔↔↔		↔	↔↔↔	↔	↔	↔	↔	↔↔	↔	↔
Volume (vph)	187	1982	26	325	1576	551	64	176	529	583	237	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	197	2086	27	349	1695	592	68	187	563	634	258	246
RTOR Reduction (vph)	0	1	0	0	0	87	0	26	272	0	2	131
Lane Group Flow (vph)	197	2112	0	349	1695	505	68	364	88	634	281	90
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.3	36.3		45.0	70.0	70.0	8.6	37.2	37.2	11.8	40.4	40.4
Effective Green, g (s)	11.3	36.3		45.0	70.0	70.0	8.6	37.2	37.2	11.8	40.4	40.4
Actuated g/C Ratio	0.07	0.24		0.30	0.46	0.46	0.06	0.24	0.24	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	254	1210		523	2338	728	100	398	367	266	463	399
v/s Ratio Prot	0.06	c0.42		c0.20	c0.33		0.04	c0.22		c0.18	c0.16	
v/s Ratio Perm					0.32			0.06				0.06
v/c Ratio	0.78	1.75		0.67	0.72	0.69	0.68	0.92	0.24	2.38	0.61	0.23
Uniform Delay, d1	69.2	57.9		47.0	33.3	32.6	70.4	56.0	46.2	70.2	48.9	43.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.8	339.0		3.2	1.1	2.9	17.3	25.2	0.3	634.0	2.2	0.3
Delay (s)	83.0	396.9		50.2	34.4	35.5	87.8	81.2	46.5	704.2	51.2	44.0
Level of Service	F	F		D	C	D	F	F	D	F	D	D
Approach Delay (s)		370.2			36.8			66.5			413.6	
Approach LOS		F			D			E			F	

Intersection Summary

HCM 2000 Control Delay	214.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	152.2	Sum of lost time (s)	21.9
Intersection Capacity Utilization	124.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2018 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔↔	↔↔		↔	↔↔
Volume (vph)	0	501	847	0	437	1612
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	563	901	0	480	1771
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	0	563	901	0	480	1767
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.16	c0.25		0.27	c0.63
v/s Ratio Perm						
v/c Ratio		0.32	1.05		0.72	0.99
Uniform Delay, d1		11.7	30.3		21.4	14.4
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	44.7		3.9	20.0
Delay (s)		11.8	75.0		25.4	34.4
Level of Service		B	E		C	C
Approach Delay (s)		11.8	75.0		32.5	
Approach LOS		B	E		C	

Intersection Summary

HCM 2000 Control Delay	39.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	84.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	932	0	0	523	249	432	2	106	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.25	0.25	0.25	
Adj. Flow (vph)	0	971	0	0	588	280	465	2	114	0	0	0
RTOR Reduction (vph)	0	0	0	0	99	0	0	36	0	0	0	0
Lane Group Flow (vph)	0	971	0	0	769	0	298	247	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.1			19.1		14.2	14.2				
Effective Green, g (s)		19.1			19.1		14.2	14.2				
Actuated g/C Ratio		0.46			0.46		0.34	0.34				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1636			1557		577	555				
v/s Ratio Prot		0.27			0.23							
v/s Ratio Perm							0.18	0.15				
v/c Ratio		0.59			0.49		0.52	0.44				
Uniform Delay, d1		8.2			7.7		10.8	10.5				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.6			0.2		0.8	0.6				
Delay (s)		8.8			8.0		11.6	11.1				
Level of Service		A			A		B	B				
Approach Delay (s)		8.8			8.0		11.3				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		9.1			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		41.3			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		47.7%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												
















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	46	209	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	50	303	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	370	303	303			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	370	303	303			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	626	737	1258			
Direction, Lane #						
Volume Total	16	59	303			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	737	1258	1700			
Volume to Capacity	0.02	0.01	0.18			
Queue Length 95th (ft)	2	1	0			
Control Delay (s)	10.0	1.2	0.0			
Lane LOS	A	A				
Approach Delay (s)	10.0	1.2	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.6				
Intersection Capacity Utilization		21.0%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St









MILCON Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1403	34	0	3830	552	0	0	476	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1690	41	0	4163	600	0	0	595	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4783			1751			3151	6514	624	5066	6234	1728
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4783			1751			3151	6514	624	5066	6234	1728
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	84
cM capacity (veh/h)	20			348			4	0	1355	0	0	75
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	676	676	379	1665	1665	1433	595	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	600	595	12				
cSH	1700	1700	1700	1700	1700	1700	1355	75				
Volume to Capacity	0.40	0.40	0.22	0.98	0.98	0.84	0.44	0.16				
Queue Length 95th (ft)	0	0	0	0	0	0	57	13				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	61.9				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	61.9				
Approach LOS							A	F				
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			101.4%			ICU Level of Service		G				
Analysis Period (min)			15									

* User Entered Value


















NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1264	202	0	3730	0	232	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1436	230	0	4144	0	252	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1686	2973		634	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1686	2973		634	
tC, single (s)			4.1	6.8		6.9	
tC, 2 stage (s)							
tF (s)			2.2	3.5		3.3	
p0 queue free %			100	100		38	
cM capacity (veh/h)			369	11		408	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	575	575	517	1381	1381	1381	252
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	230	0	0	0	252
cSH	1700	1700	1700	1700	1700	1700	408
Volume to Capacity	0.34	0.34	0.30	0.81	0.81	0.81	0.62
Queue Length 95th (ft)	0	0	0	0	0	0	101
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.1
Lane LOS							D
Approach Delay (s)	0.0			0.0			27.1
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			86.9%	ICU Level of Service		E	
Analysis Period (min)			15				





























NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1593	1945	343	106	102	0	0	278	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4639		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4639		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1713	2091	369	143	138	0	0	320	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1028	3137	0	143	138	0	0	332	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3211		186	872			397	
v/s Ratio Prot				0.68	c0.68		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.98	0.98		0.77	0.16			0.84	
Uniform Delay, d1				27.7	27.7		82.5	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				21.9	11.0		17.2	0.1			14.2	
Delay (s)				49.6	38.7		99.7	56.1			96.5	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			41.4			78.3			96.5	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay			47.4	HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio			0.93									
Actuated Cycle Length (s)			189.5	Sum of lost time (s)				16.8				
Intersection Capacity Utilization			201.0%	ICU Level of Service				H				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		   						   		   		
Volume (vph)	1	583	76	0	0	0	0	198	202	451	1476	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3258	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3258	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	634	83	0	0	0	0	230	220	490	1538	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	19	49	0	0	0
Lane Group Flow (vph)	0	635	54	0	0	0	0	292	90	490	1538	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1177	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.43	
v/s Ratio Perm		0.12	0.03						0.06			
v/c Ratio		0.36	0.10					0.25	0.17	0.70	0.75	
Uniform Delay, d1		41.5	37.6					38.5	37.3	63.2	26.4	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.5	
Delay (s)		41.6	37.6					38.6	37.5	66.2	27.9	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.1			0.0			38.2			37.2	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.2		HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		201.0%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2019 Alt 1/2/3

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Timing Plan: AM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	215	6	1142	598	0	1151
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3316			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3316			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	250	7	1228	643	0	1212
RTOR Reduction (vph)	2	0	53	0	0	0
Lane Group Flow (vph)	255	0	1818	0	0	1212
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	16.8		42.8			42.8
Effective Green, g (s)	16.8		42.8			42.8
Actuated g/C Ratio	0.24		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	389		2065			2094
v/s Ratio Prot	c0.16		c0.55			0.36
v/s Ratio Perm						
v/c Ratio	0.66		0.88			0.58
Uniform Delay, d1	23.4		10.8			7.6
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	4.0		4.8			0.4
Delay (s)	27.3		15.6			8.0
Level of Service	C		B			A
Approach Delay (s)	27.3		15.6			8.0
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			13.7		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.86			
Actuated Cycle Length (s)			68.7		Sum of lost time (s)	12.1
Intersection Capacity Utilization			77.0%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2019 Alt 1/2/3

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	46	2	9	7	0	5	19	1355	25	39	1292	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1708		1770	3530		1770	3525	
Frt Permitted	0.74	0.78	1.00		0.87		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1312	1384	1583		1526		1770	3530		1770	3525	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	53	2	10	14	0	10	23	1613	30	42	1404	39
RTOR Reduction (vph)	0	0	8	0	20	0	0	1	0	0	1	0
Lane Group Flow (vph)	28	27	2	0	4	0	23	1642	0	42	1442	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.3	15.3	15.3		15.3		2.7	63.9		4.0	65.2	
Effective Green, g (s)	15.3	15.3	15.3		15.3		2.7	63.9		4.0	65.2	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	206	217	248		239		49	2318		72	2362	
v/s Ratio Prot							0.01	c0.47		c0.02	0.41	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.14	0.12	0.01		0.02		0.47	0.71		0.58	0.61	
Uniform Delay, d1	35.3	35.2	34.6		34.6		46.6	10.7		45.8	9.0	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		6.9	1.0		11.5	0.5	
Delay (s)	35.6	35.5	34.6		34.7		53.5	11.7		57.3	9.4	
Level of Service	D	D	C		C		D	B		E	A	
Approach Delay (s)		35.4			34.7			12.3			10.8	
Approach LOS		D			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.2		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.60									
Actuated Cycle Length (s)			97.3		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			57.3%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2019 Alt 1/2/3

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	22	0	1300	7	424	859	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	33	0	1429	8	433	877	0
RTOR Reduction (vph)	0	0	0	0	30	0	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1429	4	433	877	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.40		c0.24	0.25	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.86	0.01	0.71	0.29	
Uniform Delay, d1					60.6			34.2	20.4	41.2	2.4	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			4.0	0.0	3.8	0.3	
Delay (s)					60.6			16.6	20.4	45.0	2.6	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			16.6			16.6	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.1			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		78.5%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2019 Alt 1/2/3







8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	31	50	14	1	64	128	136	1138	5	289	300	309
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.98	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3220	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3220	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	48	77	22	1	73	145	151	1264	6	332	345	355
RTOR Reduction (vph)	0	0	20	0	0	122	0	0	3	0	128	0
Lane Group Flow (vph)	48	77	2	0	74	23	151	1264	3	332	572	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1057	
v/s Ratio Prot	0.03	c0.04			c0.04		0.09	c0.36		c0.19	0.18	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.39	0.60	0.02		0.25	0.10	0.28	0.80	0.00	0.97	0.54	
Uniform Delay, d1	64.6	65.6	62.9		53.5	52.1	37.7	34.7	22.3	58.1	39.8	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.92	
Incremental Delay, d2	2.1	7.7	0.1		0.4	0.2	0.3	4.4	0.0	40.9	2.0	
Delay (s)	66.7	73.3	63.0		53.9	52.3	38.0	39.1	22.3	96.7	38.4	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		69.6			52.8			38.9			57.2	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		48.3			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		84.5%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												







NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	31	197	4	88	324	8
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	36	232	5	110	352	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	773	60			115	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	773	60			115	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	87	77			76	
cM capacity (veh/h)	280	1005			1474	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	268	115	361			
Volume Left	36	0	352			
Volume Right	232	110	0			
cSH	1164	1700	1474			
Volume to Capacity	0.23	0.07	0.24			
Queue Length 95th (ft)	22	0	23			
Control Delay (s)	11.0	0.0	8.1			
Lane LOS	B		A			
Approach Delay (s)	11.0	0.0	8.1			
Approach LOS	B					
Intersection Summary						
Average Delay			7.9			
Intersection Capacity Utilization			35.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	34	3	1291	407	0	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1742		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1742		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	45	4	1359	428	0	430
RTOR Reduction (vph)	4	0	0	120	0	0
Lane Group Flow (vph)	45	0	1359	308	0	430
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	2.0		30.7	30.7		30.7
Effective Green, g (s)	2.0		30.7	30.7		30.7
Actuated g/C Ratio	0.05		0.72	0.72		0.72
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	81		2550	1095		2550
v/s Ratio Prot	c0.03		c0.38			0.12
v/s Ratio Perm				0.20		
v/c Ratio	0.56		0.53	0.28		0.17
Uniform Delay, d1	19.9		2.7	2.1		1.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	8.1		0.2	0.1		0.0
Delay (s)	28.0		2.9	2.2		1.9
Level of Service	C		A	A		A
Approach Delay (s)	28.0		2.7			1.9
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.1		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.53			
Actuated Cycle Length (s)			42.6		Sum of lost time (s)	9.9
Intersection Capacity Utilization			48.1%		ICU Level of Service	A
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↙
Volume (veh/h)	0	15	2110	5	5	312
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2269	5	7	459
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2516	1137			2274	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2516	1137			2274	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	87			97	
cM capacity (veh/h)	22	196			221	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1513	762	7	229	229
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	196	1700	1700	221	1700	1700
Volume to Capacity	0.13	0.89	0.45	0.03	0.13	0.13
Queue Length 95th (ft)	11	0	0	3	0	0
Control Delay (s)	26.2	0.0	0.0	21.9	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	26.2	0.0		0.3		
Approach LOS	D					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		68.5%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↙
Volume (vph)	17	85	2025	12	37	274
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	105	2177	13	54	397
RTOR Reduction (vph)	0	4	0	1	0	0
Lane Group Flow (vph)	21	101	2177	12	54	397
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.7	25.8	68.3	68.3	5.0	82.1
Effective Green, g (s)	15.7	20.7	68.3	68.3	5.0	82.1
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	259	305	2256	1009	82	2712
v/s Ratio Prot	0.01	c0.06	c0.62		c0.03	0.11
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.33	0.96	0.01	0.66	0.15
Uniform Delay, d1	39.5	37.2	18.3	7.1	50.2	3.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	11.8	0.0	17.5	0.0
Delay (s)	39.6	37.9	30.1	7.1	67.7	3.3
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.2		29.9			11.0
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay		27.2		HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio		0.84				
Actuated Cycle Length (s)		107.1		Sum of lost time (s)	18.1	
Intersection Capacity Utilization		72.1%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↑↑			↑↑
Volume (veh/h)	0	32	2003	25	0	290
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	52	2108	26	0	392
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2318	1067			2135	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2318	1067			2135	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	76			100	
cM capacity (veh/h)	32	218			250	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	52	1406	729	196	196	
Volume Left	0	0	0	0	0	
Volume Right	52	0	26	0	0	
cSH	218	1700	1700	1700	1700	
Volume to Capacity	0.24	0.83	0.43	0.12	0.12	
Queue Length 95th (ft)	22	0	0	0	0	
Control Delay (s)	26.6	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	26.6	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		66.2%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	9	6	2028	32	15	266
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	15	10	2112	33	19	328
RTOR Reduction (vph)	0	5	0	7	0	0
Lane Group Flow (vph)	15	5	2112	26	19	328
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.8	59.8	2.0	69.3
Effective Green, g (s)	1.4	3.4	59.8	59.8	2.0	69.3
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2737	1224	45	3172
v/s Ratio Prot	c0.01	0.00	c0.60		c0.01	0.09
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.47	0.08	0.77	0.02	0.42	0.10
Uniform Delay, d1	37.6	35.4	4.9	2.0	37.1	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.5	0.5	1.4	0.0	6.3	0.0
Delay (s)	48.0	35.9	6.3	2.0	43.4	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	43.2		6.2			2.8
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		6.1		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.75				
Actuated Cycle Length (s)		77.3		Sum of lost time (s)		14.1
Intersection Capacity Utilization		68.9%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2019 Alt 1/2/3

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	44	1	0	43	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	81	2	0	68	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	83	68	3					
Volume Left (vph)	0	0	81	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	834	1121	816	842	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.4						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.2%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2019 Alt 1/2/3

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	36	0	0	32	223	3	1835	50	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1357	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	48	0	0	44	310	3	1952	53	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	22	0	0	0	0
Lane Group Flow (vph)	3	48	0	0	44	254	3	1952	31	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.4	16.4			16.4	16.4	47.7	43.6	43.6			
Effective Green, g (s)	16.4	16.4			16.4	16.4	47.7	43.6	43.6			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	303	416			416	353	1150	2102	940			
v/s Ratio Prot		0.03			0.02		0.00	c0.55				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.12			0.11	0.72	0.00	0.93	0.03			
Uniform Delay, d1	22.2	22.7			22.7	26.4	4.5	13.5	6.2			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	6.9	0.0	7.8	0.0			
Delay (s)	22.2	22.8			22.8	33.3	4.5	21.3	6.2			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.8			32.0			20.9			0.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay		22.5						HCM 2000 Level of Service			C	
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		73.4						Sum of lost time (s)			13.4	
Intersection Capacity Utilization		84.1%						ICU Level of Service			E	
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

























							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	394	1637	0	236	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	410	1705	0	299	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None		None		
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1972	149	299		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1972	149	299		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	67		0		
cM capacity (veh/h)	37	870	1259		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	410	853	853	199	100	0
Volume Left	0	410	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1259	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.33	0.50	0.50	0.12	0.06	0.00
Queue Length 95th (ft)	0	36	0	0	0	0	0
Control Delay (s)	0.0	9.2	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	A					
Approach Delay (s)	0.0	1.8			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay		1.6					
Intersection Capacity Utilization		55.3%		ICU Level of Service		B	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	394	0	38	2	1	2	25	1906	0	0	132	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3307	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3307	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	448	0	43	6	3	6	26	2006	0	0	191	148
RTOR Reduction (vph)	0	30	0	0	6	0	0	0	0	0	83	0
Lane Group Flow (vph)	448	13	0	6	3	0	26	2006	0	0	256	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	25.7	25.7		1.7	1.7		1.9	43.5			37.4	
Effective Green, g (s)	25.7	25.7		1.7	1.7		1.9	43.5			37.4	
Actuated g/C Ratio	0.30	0.30		0.02	0.02		0.02	0.51			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	531	475		35	33		39	1798			1444	
v/s Ratio Prot	c0.25	0.01		c0.00	0.00		0.01	c0.57			0.08	
v/s Ratio Perm												
v/c Ratio	0.84	0.03		0.17	0.09		0.67	1.12			0.18	
Uniform Delay, d1	28.1	21.1		41.3	41.2		41.5	21.0			14.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	11.7	0.0		2.3	1.2		35.5	60.4			0.1	
Delay (s)	39.7	21.2		43.6	42.4		77.1	81.4			14.8	
Level of Service	D	C		D	D		E	F			B	
Approach Delay (s)		38.1			42.9			81.4			14.8	
Approach LOS		D			D			F			B	
Intersection Summary												
HCM 2000 Control Delay		65.9						HCM 2000 Level of Service		E		
HCM 2000 Volume to Capacity ratio		1.06										
Actuated Cycle Length (s)		85.6						Sum of lost time (s)		18.9		
Intersection Capacity Utilization		89.6%						ICU Level of Service		E		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	7	180	14	0	1766	17	37	22	1	19	40	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5029			5078		1770	1852			1732	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.19	
Satd. Flow (perm)	1770	5029			5078		1240	1852			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	8	202	16	0	1941	19	44	26	1	25	52	66
RTOR Reduction (vph)	0	5	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	8	213	0	0	1959	0	44	26	0	0	126	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1902			2062		241	360			53	
v/s Ratio Prot	c0.00	0.04			c0.39			0.01				
v/s Ratio Perm							c0.04				c0.39	
v/c Ratio	0.04	0.11			0.95		0.18	0.07			2.37	
Uniform Delay, d1	71.4	36.3			51.7		60.6	59.2			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			10.0		0.4	0.1			669.6	
Delay (s)	71.5	36.4			61.7		60.9	59.3			744.6	
Level of Service	E	D			E		E	E			F	
Approach Delay (s)		37.7			61.7			60.3			744.6	
Approach LOS		D			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		100.1			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		72.9%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	198	0	561	1774	8	0	0	0	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3537							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3537							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	241	0	597	1887	9	0	0	0	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	241	0	597	1896	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3214							609
v/s Ratio Prot		0.05		0.17	c0.54							
v/s Ratio Perm												0.00
v/c Ratio		0.13		0.35	0.59							0.01
Uniform Delay, d1		36.5		27.2	1.6							34.9
Progression Factor		0.43		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.1	0.3							0.0
Delay (s)		15.8		27.4	1.9							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.8			8.0			0.0				35.0
Approach LOS		B			A			A				C
Intersection Summary												
HCM 2000 Control Delay		8.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		71.0%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	11	233	0	0	128	339	0	0	0	73	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	13	277	0	0	138	365	0	0	0	80	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	502			277			628	806	277	623	623	320
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	502			277			628	806	277	623	623	320
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	80	100	99
cM capacity (veh/h)	1062			1285			389	312	761	394	397	721
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	290	502	0	85								
Volume Left	13	0	0	80								
Volume Right	0	365	0	4								
cSH	1062	1285	1700	404								
Volume to Capacity	0.01	0.00	0.00	0.21								
Queue Length 95th (ft)	1	0	0	19								
Control Delay (s)	0.5	0.0	0.0	16.3								
Lane LOS	A			A								
Approach Delay (s)	0.5	0.0	0.0	16.3								
Approach LOS				A								
Intersection Summary												
Average Delay				1.7								
Intersection Capacity Utilization				38.5%								A
Analysis Period (min)				15								

NBC Coastal Campus

22: 3rd St & Palm Ave

MILCON Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	297	4	26	444	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	345	5	28	477	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	350	28	503	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.02	0.53	0.00	-0.45	-0.14						
Departure Headway (s)	6.4	5.9	6.2	5.7	5.8	6.6						
Degree Utilization, x	0.01	0.58	0.05	0.80	0.30	0.08						
Capacity (veh/h)	526	587	557	617	550	470						
Control Delay (s)	8.3	15.4	8.3	25.9	11.3	10.1						
Approach Delay (s)	15.3		25.0		11.3	10.1						
Approach LOS	C		D		B	B						
Intersection Summary												
Delay				19.0								
Level of Service				C								
Intersection Capacity Utilization				41.0%								A
Analysis Period (min)				15								





















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑	↗	↗	↰	↰
Volume (veh/h)	232	444	507	152	17	128
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	294	562	618	185	24	180
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	804				1860	402
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	804				1860	402
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	64				42	70
cM capacity (veh/h)	816				41	598
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	294	562	412	391	204	
Volume Left	294	0	0	0	24	
Volume Right	0	0	0	185	180	
cSH	816	1700	1700	1700	232	
Volume to Capacity	0.36	0.33	0.24	0.23	0.88	
Queue Length 95th (ft)	41	0	0	0	179	
Control Delay (s)	11.9	0.0	0.0	0.0	76.1	
Lane LOS	B				F	
Approach Delay (s)	4.1		0.0		76.1	
Approach LOS					F	
Intersection Summary						
Average Delay			10.2			
Intersection Capacity Utilization			50.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	437	15	26	506	0	67	35	81	1	21	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	1.00		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3522		1770	3539			1720			1858	1583
Flt Permitted	0.38	1.00		0.43	1.00			0.87			0.98	1.00
Satd. Flow (perm)	709	3522		796	3539			1528			1830	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	568	19	34	657	0	102	53	123	2	36	47
RTOR Reduction (vph)	0	3	0	0	0	0	0	34	0	0	0	30
Lane Group Flow (vph)	21	584	0	34	657	0	0	244	0	0	38	17
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.9	14.9		14.9	14.9			13.5			13.5	13.5
Effective Green, g (s)	14.9	14.9		14.9	14.9			13.5			13.5	13.5
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.36			0.36	0.36
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	280	1395		315	1402			548			657	568
v/s Ratio Prot		0.17			c0.19							
v/s Ratio Perm	0.03			0.04				c0.16			0.02	0.01
v/c Ratio	0.07	0.42		0.11	0.47			0.45			0.06	0.03
Uniform Delay, d1	7.1	8.2		7.2	8.4			9.2			7.9	7.8
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.2			0.6			0.0	0.0
Delay (s)	7.2	8.4		7.3	8.7			9.8			7.9	7.8
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.4			8.6			9.8			7.9	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.7	HCM 2000 Level of Service				A				
HCM 2000 Volume to Capacity ratio			0.46									
Actuated Cycle Length (s)			37.6	Sum of lost time (s)				9.2				
Intersection Capacity Utilization			46.4%	ICU Level of Service				A				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	522	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	567	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			572		567	567
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			572		567	567
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1001		485	523
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	567	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	511			
Volume to Capacity	0.33	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.1			
Lane LOS			B			
Approach Delay (s)	0.0		12.1			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			37.5%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑↑↑	↑	↑	↑	↑	↑	↑	↑
Volume (vph)	21	664	35	23	2092	43	163	37	1900	1900	89	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6				4.6
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95				0.95
Frt	1.00	0.99		1.00	1.00			0.97				0.98
Flt Protected	0.95	1.00		0.95	1.00			0.97				0.97
Satd. Flow (prot)	1770	5047		1770	5070			3325				3364
Flt Permitted	0.95	1.00		0.95	1.00			0.97				0.97
Satd. Flow (perm)	1770	5047		1770	5070			3325				3364
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	790	42	25	2299	47	196	45	60	109	55	29
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	829	0	25	2345	0	0	289	0	0	185	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0				35.0
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0				35.0
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19				0.19
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6				4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0				3.0
Lane Grp Cap (vph)	147	2234		118	2160			646				654
v/s Ratio Prot	0.01	c0.16		c0.01	c0.46			c0.09				c0.05
v/s Ratio Perm												
v/c Ratio	0.17	0.37		0.21	1.09			0.45				0.28
Uniform Delay, d1	76.7	33.4		79.5	51.6			64.0				61.8
Progression Factor	1.00	1.00		1.19	0.86			1.00				1.00
Incremental Delay, d2	0.6	0.5		0.7	45.2			0.5				0.2
Delay (s)	77.3	33.9		95.3	89.7			64.5				62.0
Level of Service	E	C		F	F			E				E
Approach Delay (s)		35.2			89.8			64.5				62.0
Approach LOS		D			F			E				E
Intersection Summary												
HCM 2000 Control Delay		73.7			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		78.5%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

27: Florida St & SR-75 (Palm Ave)

MILCON Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰		↰	↰	↰	↰	↰	↰
Volume (vph)	2	894	35	20	2265	12	18	4	30	54	10	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5081			1688		1770	1695	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5057		1770	5081			1542		1237	1695	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	1004	39	23	2574	14	25	5	41	77	14	21
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	18	0
Lane Group Flow (vph)	2	1041	0	23	2588	0	0	44	0	77	18	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			257		206	282	
v/s Ratio Prot	0.00	0.21		c0.01	c0.51						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.30		0.19	0.70			0.17		0.37	0.06	
Uniform Delay, d1	86.1	11.1		79.4	13.2			64.3		66.7	63.2	
Progression Factor	1.68	0.27		1.43	0.35			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.4	0.5			0.3		1.1	0.1	
Delay (s)	145.4	3.2		113.9	5.1			64.6		67.8	63.2	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.5			6.0			64.6			66.4	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		77.4%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

28: 13th St & SR-75 (Palm Ave)

MILCON Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰	↰	↰
Volume (vph)	3	963	63	95	2119	51	145	19	90	167	36	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.91	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5038		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5038		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1082	71	114	2553	61	163	21	101	223	48	20
RTOR Reduction (vph)	0	4	0	0	0	29	0	0	84	0	3	0
Lane Group Flow (vph)	3	1149	0	114	2553	32	0	184	17	0	288	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.23		c0.06	c0.50			c0.10			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.52		0.58	0.94	0.04		0.60	0.06		0.50	
Uniform Delay, d1	86.2	36.2		76.0	39.7	20.2		68.8	62.4		67.4	
Progression Factor	1.22	0.63		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.8		4.3	8.5	0.1		3.1	0.1		0.7	
Delay (s)	105.7	23.5		80.4	48.1	20.2		71.9	62.5		68.1	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.7			48.8			68.6			68.1	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		44.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		94.9%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰	↰	↰	↰	↰
Volume (vph)	14	1228	25	43	2247	12	16	6	48	38	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1671			1723	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.78	
Satd. Flow (perm)	1770	5070		1770	5081			1561			1379	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	15	1335	27	50	2613	14	19	7	57	50	3	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	45	0	0	22	0
Lane Group Flow (vph)	15	1361	0	50	2627	0	0	38	0	0	59	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Effective Green, g (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2666		72	2829			331			292	
v/s Ratio Prot	0.01	0.27		c0.03	c0.52							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.88	0.51		0.69	0.93			0.12			0.20	
Uniform Delay, d1	35.2	10.9		33.7	14.5			22.6			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	159.7	0.2		25.2	6.1			0.2			0.3	
Delay (s)	194.9	11.1		58.8	20.5			22.8			23.4	
Level of Service	F	B		E	C			C			C	
Approach Delay (s)		13.1			21.2			22.8			23.4	
Approach LOS		B			C			C			C	
Intersection Summary												
HCM 2000 Control Delay		18.6			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		71.1			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		60.5%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	91	1241	29	244	2187	215	75	72	770	234	92	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	106	1443	34	260	2327	229	83	80	856	279	110	90
RTOR Reduction (vph)	0	2	0	0	0	67	0	155	183	0	3	59
Lane Group Flow (vph)	106	1475	0	260	2327	162	83	319	279	279	116	22
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.3	29.8	29.8	10.4	31.9	31.9
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.3	29.8	29.8	10.4	31.9	31.9
Actuated g/C Ratio	0.05	0.31		0.16	0.41	0.41	0.07	0.26	0.26	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	178	1548		275	2079	647	127	400	389	309	484	416
v/s Ratio Prot	0.03	0.29		c0.15	c0.46		0.05	c0.21		c0.08	0.07	
v/s Ratio Perm						0.10			0.19			0.01
v/c Ratio	0.60	0.95		0.95	1.12	0.25	0.65	0.80	0.72	0.90	0.24	0.05
Uniform Delay, d1	53.4	39.2		48.2	34.0	22.4	52.0	39.9	38.9	51.9	32.3	30.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.3	13.3		39.4	60.8	0.2	11.5	10.6	6.2	27.8	0.3	0.1
Delay (s)	58.7	52.5		87.5	94.9	22.6	63.5	50.5	45.1	79.7	32.5	30.6
Level of Service	E	D		F	F	C	E	D	D	E	C	C
Approach Delay (s)		52.9			88.3			49.1			59.7	
Approach LOS		D			F			D			E	
Intersection Summary												
HCM 2000 Control Delay		69.7			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		1.01										
Actuated Cycle Length (s)		115.2			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		90.9%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↔	↔
Volume (vph)	0	285	1189	0	155	1458
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	320	1278	0	172	1620
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	0	320	1278	0	172	1616
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.36		0.10	c0.58
v/s Ratio Perm						
v/c Ratio		0.12	1.10		0.83	1.05
Uniform Delay, d1		2.5	26.8		34.5	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	56.3		23.7	39.0
Delay (s)		2.5	83.1		58.2	57.0
Level of Service		A	F		E	E
Approach Delay (s)		2.5	83.1		57.1	
Approach LOS		A	F		E	
Intersection Summary						
HCM 2000 Control Delay		61.7		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		1.14				
Actuated Cycle Length (s)		80.0		Sum of lost time (s)		14.2
Intersection Capacity Utilization		73.5%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↔	↔				
Volume (vph)	0	441	0	0	426	523	865	1	143	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.96				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3247		1681	1635				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3247		1681	1635				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	507	0	0	463	568	940	1	155	0	0	0
RTOR Reduction (vph)	0	0	0	0	361	0	0	26	0	0	0	0
Lane Group Flow (vph)	0	507	0	0	670	0	555	515	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.8			16.8		21.2	21.2				
Effective Green, g (s)		16.8			16.8		21.2	21.2				
Actuated g/C Ratio		0.37			0.37		0.46	0.46				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1292			1185		774	753				
v/s Ratio Prot		0.14			c0.21							
v/s Ratio Perm							c0.33	0.31				
v/c Ratio		0.39			0.57		0.72	0.68				
Uniform Delay, d1		10.8			11.7		10.0	9.8				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.6		3.2	2.6				
Delay (s)		11.0			12.3		13.2	12.3				
Level of Service		B			B		B	B				
Approach Delay (s)		11.0			12.3		12.8				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay		12.2					HCM 2000 Level of Service				B	
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		46.0					Sum of lost time (s)				8.0	
Intersection Capacity Utilization		70.3%					ICU Level of Service				C	
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Volume (veh/h)	0	3	4	302	39	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	419	95	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	526	95	95			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	526	95	95			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	511	961	1499			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	425	95			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	961	1499	1700			
Volume to Capacity	0.01	0.00	0.06			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.8	0.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.8	0.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			29.1%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (veh/h)	0	4082	17	0	1808	244	0	0	908	0	0	55
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4252	18	0	1864	252	0	0	1009	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2135			4290			5006	6416	1466	3447	6299	787
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2135			4290			5006	6416	1466	3447	6299	787
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	246			33			0	0	1836	1	0	323
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1701	1701	868	746	746	624	1009	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	252	1009	83				
cSH	1700	1700	1700	1700	1700	1700	1836	323				
Volume to Capacity	1.00	1.00	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	88	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3	20.0				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.3	20.0				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				144.1%							H	
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3847	130	0	1845	0	200	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3966	134	0	1922	0	244	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4120		4714	1429	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4120		4714	1429	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			39		1	120	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1586	1586	927	641	641	641	244
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	244
cSH	1700	1700	1700	1700	1700	1700	120
Volume to Capacity	0.93	0.93	0.55	0.38	0.38	0.38	2.03
Queue Length 95th (ft)	0	0	0	0	0	0	501
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	552.3
Lane LOS							F
Approach Delay (s)	0.0			0.0			552.3
Approach LOS							F
Intersection Summary							
Average Delay			21.5				
Intersection Capacity Utilization			98.3%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑↑			↑↑↑	
Volume (vph)	0	0	0	972	634	109	98	252	0	0	861	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3528	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3528	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1023	667	115	101	260	0	0	888	16
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	511	1282	0	101	260	0	0	902	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1432		98	1989			1568	
v/s Ratio Prot				c0.34	0.28		c0.06	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.09	0.97dl		1.03	0.13			0.58	
Uniform Delay, d1				31.1	29.7		42.5	9.3			18.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				67.2	7.6		99.4	0.0			0.5	
Delay (s)				98.3	37.3		141.9	9.3			19.2	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			54.6			46.4			19.2	
Approach LOS		A			D			D			B	
Intersection Summary												
HCM 2000 Control Delay			43.2			HCM 2000 Level of Service		D				
HCM 2000 Volume to Capacity ratio			0.80									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)		17.2				
Intersection Capacity Utilization		135.6%				ICU Level of Service		H				
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔	
Volume (vph)	7	2110	109	0	0	0	0	350	467	761	1096	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3124	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3124	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2319	120	0	0	0	0	407	543	793	1142	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2327	91	0	0	0	0	645	270	793	1142	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					947	409	865	2022	
v/s Ratio Prot		c0.46						c0.21		c0.23	0.32	
v/s Ratio Perm			0.06						0.20			
v/c Ratio		1.26	0.16					0.68	0.66	0.92	0.56	
Uniform Delay, d1		55.8	37.8					53.5	53.1	63.7	23.7	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		123.3	0.1					2.0	3.8	14.2	0.4	
Delay (s)		179.1	37.9					55.6	56.9	77.9	24.1	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		172.2			0.0			56.0			46.1	
Approach LOS		F			A			E			D	
Intersection Summary												
HCM 2000 Control Delay		105.7		HCM 2000 Level of Service						F		
HCM 2000 Volume to Capacity ratio		0.98										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)					14.4			
Intersection Capacity Utilization		135.6%		ICU Level of Service					H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2019 Alt 1/2/3
Timing Plan: PM PEAK













Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔
Volume (vph)	172	12	915	684	0	1219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3265			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3265			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	221	15	1028	769	0	1311
RTOR Reduction (vph)	2	0	65	0	0	0
Lane Group Flow (vph)	234	0	1732	0	0	1311
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	296		2467			2540
v/s Ratio Prot	c0.15		c0.53			0.39
v/s Ratio Perm						
v/c Ratio	0.79		0.70			0.52
Uniform Delay, d1	62.0		10.2			7.8
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	13.5		1.7			0.8
Delay (s)	75.5		11.9			8.6
Level of Service	E		B			A
Approach Delay (s)	75.5		11.9			8.6
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay		15.1		HCM 2000 Level of Service		
HCM 2000 Volume to Capacity ratio		0.73			B	
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		
Intersection Capacity Utilization		80.6%		ICU Level of Service		
Analysis Period (min)		15			D	
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON Year 2019 Alt 1/2/3

Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	142	9	28	25	9	24	22	1517	49	66	1442	151
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1695	1583		1721		1770	3523		1770	3489	
Flt Permitted	0.69	0.69	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1219	1216	1583		1461		1770	3523		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	182	12	36	39	14	38	24	1631	53	72	1567	164
RTOR Reduction (vph)	0	0	30	0	23	0	0	1	0	0	2	0
Lane Group Flow (vph)	96	98	6	0	68	0	24	1683	0	72	1729	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4		4							
Actuated Green, G (s)	19.0	19.0	19.0		19.0		3.1	72.0		8.0	76.9	
Effective Green, g (s)	19.0	19.0	19.0		19.0		3.1	72.0		8.0	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	203	203	264		243		48	2228		124	2357	
v/s Ratio Prot							0.01	0.48		c0.04	c0.50	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.47	0.48	0.02		0.28		0.50	0.76		0.58	0.73	
Uniform Delay, d1	42.9	42.9	39.6		41.4		54.6	14.7		51.3	11.9	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	1.8	0.0		0.6		8.0	1.5		6.8	1.2	
Delay (s)	44.6	44.8	39.7		42.0		62.6	16.2		58.0	13.1	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.9			42.0			16.9			14.9	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		18.1			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		113.8			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		74.6%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON Year 2019 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	7	0	144	0	1324	0	32	1580	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1619			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1619			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	10	0	209	0	1409	0	34	1699	0
RTOR Reduction (vph)	0	0	0	0	170	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	49	0	0	1409	0	34	1699	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					14.1			45.3		1.7	51.2	
Effective Green, g (s)					14.1			45.3		1.7	51.2	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					302			2126		39	2403	
v/s Ratio Prot					c0.03			0.40		0.02	c0.48	
v/s Ratio Perm												
v/c Ratio					0.16			0.66		0.87	0.71	
Uniform Delay, d1					25.7			10.0		36.7	7.5	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			0.8		94.3	1.0	
Delay (s)					26.0			10.8		131.1	8.4	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			26.0			10.8			10.8	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay		11.8			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		75.4			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		61.4%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON Year 2019 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	290	50	118	6	69	419	27	626	2	138	1404	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1516		1855	1510	1770	3539	1347	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1516		1855	1510	1770	3539	1347	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	382	66	155	7	75	455	30	688	2	147	1494	69
RTOR Reduction (vph)	0	0	125	0	0	213	0	0	1	0	2	0
Lane Group Flow (vph)	382	66	30	0	82	242	30	688	1	147	1561	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.7	27.7	27.7		25.0	25.0	2.9	55.8	55.8	17.0	69.9	
Effective Green, g (s)	27.7	27.7	27.7		25.0	25.0	2.9	55.8	55.8	17.0	69.9	
Actuated g/C Ratio	0.19	0.19	0.19		0.17	0.17	0.02	0.39	0.39	0.12	0.48	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	338	356	289		320	260	35	1362	518	207	1694	
v/s Ratio Prot	c0.22	0.04			0.04		0.02	0.19		c0.08	c0.44	
v/s Ratio Perm			0.02			c0.16		0.00				
v/c Ratio	1.13	0.19	0.10		0.26	0.93	0.86	0.51	0.00	0.71	0.92	
Uniform Delay, d1	58.6	49.1	48.3		51.9	59.1	70.8	34.0	27.4	61.6	34.9	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	89.0	0.3	0.2		0.4	36.7	94.8	1.3	0.0	10.9	9.8	
Delay (s)	147.6	49.4	48.5		52.3	95.8	165.6	35.4	27.4	72.5	44.7	
Level of Service	F	D	D		D	F	F	D	C	E	D	
Approach Delay (s)		111.4			89.2			40.8			47.1	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay		63.0								E		
HCM 2000 Volume to Capacity ratio		0.97										
Actuated Cycle Length (s)		144.9				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		80.2%				ICU Level of Service		D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON Year 2019 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	314	492	3	45	178	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	349	547	4	63	202	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	444	36			68	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	444	36			68	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	30	47			87	
cM capacity (veh/h)	496	1037			1534	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	896	68	206			
Volume Left	349	0	202			
Volume Right	547	63	0			
cSH	1001	1700	1534			
Volume to Capacity	0.89	0.04	0.13			
Queue Length 95th (ft)	322	0	11			
Control Delay (s)	29.8	0.0	7.6			
Lane LOS	D		A			
Approach Delay (s)	29.8	0.0	7.6			
Approach LOS	D					
Intersection Summary						
Average Delay		24.1				
Intersection Capacity Utilization		40.7%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2019 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕		↕
Volume (vph)	318	6	662	48	0	1531
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	403	8	736	53	0	1720
RTOR Reduction (vph)	1	0	0	30	0	0
Lane Group Flow (vph)	410	0	736	23	0	1720
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.23		0.21			c0.49
v/s Ratio Perm				0.02		
v/c Ratio	0.49		0.48	0.04		1.13
Uniform Delay, d1	18.8		21.6	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.2	0.0		68.1
Delay (s)	19.2		21.8	17.4		98.0
Level of Service	B		C	B		F
Approach Delay (s)	19.2		21.5			98.0
Approach LOS	B		C			F

Intersection Summary

HCM 2000 Control Delay	66.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	9.9
Intersection Capacity Utilization	92.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2019 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕	↕	↕
Volume (veh/h)	4	6	524	3	15	1469
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	609	3	16	1614
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1451	306			613	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1451	306			613	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	98			98	
cM capacity (veh/h)	119	690			962	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	20	406	207	16	807	807
Volume Left	8	0	0	16	0	0
Volume Right	12	0	3	0	0	0
cSH	237	1700	1700	962	1700	1700
Volume to Capacity	0.08	0.24	0.12	0.02	0.47	0.47
Queue Length 95th (ft)	7	0	0	1	0	0
Control Delay (s)	21.6	0.0	0.0	8.8	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	21.6	0.0		0.1		
Approach LOS	C					

Intersection Summary

Average Delay	0.3		
Intersection Capacity Utilization	50.6%	ICU Level of Service	A
Analysis Period (min)	15		

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2019 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	30	56	470	12	101	1372
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	33	61	534	14	111	1508
RTOR Reduction (vph)	0	45	0	8	0	0
Lane Group Flow (vph)	33	16	534	6	111	1508
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	18	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.3	21.5	28.0	28.0	7.1	43.9
Effective Green, g (s)	9.3	16.4	28.0	28.0	7.1	43.9
Actuated g/C Ratio	0.15	0.26	0.45	0.45	0.11	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	263	415	1585	709	201	2485
v/s Ratio Prot	c0.02	0.01	0.15		0.06	c0.43
v/s Ratio Perm				0.00		
v/c Ratio	0.13	0.04	0.34	0.01	0.55	0.61
Uniform Delay, d1	23.1	17.2	11.2	9.6	26.2	4.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.0	3.3	0.4
Delay (s)	23.3	17.2	11.3	9.6	29.5	5.2
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.3		11.3			6.9
Approach LOS	B		B			A

Intersection Summary

HCM 2000 Control Delay	8.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	62.5	Sum of lost time (s)	18.1
Intersection Capacity Utilization	49.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2019 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↕	↕			↕
Volume (veh/h)	0	22	461	18	0	1402
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	29	530	21	0	1524
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1302	275			551	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1302	275			551	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	152	722			1015	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	29	353	197	762	762
Volume Left	0	0	0	0	0
Volume Right	29	0	21	0	0
cSH	722	1700	1700	1700	1700
Volume to Capacity	0.04	0.21	0.12	0.45	0.45
Queue Length 95th (ft)	3	0	0	0	0
Control Delay (s)	10.2	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.2	0.0		0.0	
Approach LOS	B				

Intersection Summary







Average Delay	0.1				
Intersection Capacity Utilization	42.1%		ICU Level of Service	A	
Analysis Period (min)	15				

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2019 Alt 1/2/3

Timing Plan: PM PEAK





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	30	25	454	18	22	1378
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	42	35	483	19	24	1514
RTOR Reduction (vph)	0	32	0	8	0	0
Lane Group Flow (vph)	42	3	483	11	24	1514
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	27.5	27.5	1.7	36.7
Effective Green, g (s)	2.6	4.3	27.5	27.5	1.7	36.7
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	148	2120	948	65	2829
v/s Ratio Prot	c0.02	0.00	0.14		0.01	c0.43
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.42	0.02	0.23	0.01	0.37	0.54
Uniform Delay, d1	20.9	18.9	4.3	3.7	21.6	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.8	0.1	0.1	0.0	3.5	0.2
Delay (s)	23.8	19.0	4.3	3.7	25.1	1.8
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.6		4.3			2.2
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.4		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.65			
Actuated Cycle Length (s)			45.9		Sum of lost time (s)	14.1
Intersection Capacity Utilization			49.0%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON Year 2019 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	11	14	83	7	0	176	13	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	11	15	108	9	0	198	15	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	11	15	117	212						
Volume Left (vph)	0	0	108	0						
Volume Right (vph)	0	15	0	15						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.13	0.19						
Capacity (veh/h)	872	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	6.9						
Approach Delay (s)	6.6		7.8	6.9						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2019 Alt 1/2/3

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑		↰	↑	↰	↰	↑	↰			
Volume (vph)	9	183	0	0	80	136	12	376	68	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1299	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	10	208	0	0	92	156	13	413	75	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	123	0	41	0	0	0	0
Lane Group Flow (vph)	10	208	0	0	92	33	13	413	34	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.4	18.4	18.4			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.4	18.4	18.4			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	271	389			389	330	810	1619	724			
v/s Ratio Prot		c0.11			0.05		0.01	c0.12				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.53			0.24	0.10	0.02	0.26	0.05			
Uniform Delay, d1	12.7	14.2			13.2	12.8	6.0	6.7	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.4			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.7	15.6			13.5	13.0	6.0	6.8	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.2		6.6			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.3			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.34										
Actuated Cycle Length (s)		40.2			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		40.5%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2019 Alt 1/2/3

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: PM PEAK









							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	394	0	519	0	1543	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	1576	0	590	0	1714	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2009	857	1714		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2009	857	1714		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	0	100		0		
cM capacity (veh/h)	51	301	366		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	1576	0	295	295	1143	571	0
Volume Left	0	0	0	0	0	0	0
Volume Right	1576	0	0	0	0	0	0
cSH	301	1700	1700	1700	1700	1700	1700
Volume to Capacity	5.24	0.00	0.17	0.17	0.67	0.34	0.00
Queue Length 95th (ft)	Err	0	0	0	0	0	0
Control Delay (s)	Err	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F						
Approach Delay (s)	Err	0.0			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay	4061.2						
Intersection Capacity Utilization	73.7%			ICU Level of Service			D
Analysis Period (min)	15						

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON Year 2019 Alt 1/2/3

Timing Plan: PM PEAK









Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	144	0	66	1	1	0	72	317	12	1	1484	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.85		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3520		1770	3475	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3520		1770	3475	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	192	0	88	2	2	0	79	348	13	1	1649	228
RTOR Reduction (vph)	0	69	0	0	0	0	0	2	0	0	8	0
Lane Group Flow (vph)	192	19	0	2	2	0	79	359	0	1	1869	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	19.5	19.5		0.8	0.8		5.8	49.4		0.8	44.4	
Effective Green, g (s)	19.5	19.5		0.8	0.8		5.8	49.4		0.8	44.4	
Actuated g/C Ratio	0.22	0.22		0.01	0.01		0.06	0.55		0.01	0.50	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	386	345		15	16		114	1945		15	1725	
v/s Ratio Prot	c0.11	0.01		c0.00	0.00		c0.04	0.10		0.00	c0.54	
v/s Ratio Perm												
v/c Ratio	0.50	0.06		0.13	0.12		0.69	0.18		0.07	1.08	
Uniform Delay, d1	30.7	27.7		44.0	44.0		40.9	10.0		43.9	22.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.0	0.1		4.0	3.5		16.7	0.0		1.9	48.1	
Delay (s)	31.7	27.7		48.0	47.5		57.6	10.0		45.8	70.6	
Level of Service	C	C		D	D		E	B		D	E	
Approach Delay (s)	30.4			47.7			18.6			70.6		
Approach LOS	C			D			B			E		
Intersection Summary												
HCM 2000 Control Delay	57.4											
HCM 2000 Volume to Capacity ratio	0.88											
Actuated Cycle Length (s)	89.4											
Intersection Capacity Utilization	78.3%											
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2019 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	56	1440	57	0	354	34	13	39	4	23	25	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Frt	1.00	0.99			0.99		1.00	0.99			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5056			5019		1770	1836			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.17	
Satd. Flow (perm)	1770	5056			5019		1313	1836			299	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	64	1636	65	0	377	36	19	56	6	27	29	24
RTOR Reduction (vph)	0	2	0	0	7	0	0	2	0	0	8	0
Lane Group Flow (vph)	64	1699	0	0	406	0	19	60	0	0	72	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1912			2038		255	357			49	
v/s Ratio Prot	c0.04	c0.34			c0.08			c0.03				
v/s Ratio Perm							0.01				c0.24	
v/c Ratio	0.33	0.89			0.20		0.07	0.17			1.46	
Uniform Delay, d1	73.8	52.4			34.5		59.3	60.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	6.6			0.2		0.1	0.2			291.2	
Delay (s)	74.8	59.0			34.8		59.4	60.6			366.2	
Level of Service	E	E			C		E	E			F	
Approach Delay (s)	59.6				34.8		60.3				366.2	
Approach LOS	E				C		E				F	
Intersection Summary												
HCM 2000 Control Delay	65.7											
HCM 2000 Volume to Capacity ratio	0.74											
Actuated Cycle Length (s)	180.0											
Intersection Capacity Utilization	67.8%											
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2019 Alt 1/2/3

20: SR-75 (Silver Strand Blvd) & Delaware St

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑
Volume (vph)	0	1470	0	536	391	1900	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3494							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3494							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1652	0	570	416	39	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1652	0	570	455	0	0	0	0	0	0	3
Turn Type	NA			Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3175							609
v/s Ratio Prot		c0.32		c0.17	c0.13							
v/s Ratio Perm												0.00
v/c Ratio		0.86		0.30	0.14							0.00
Uniform Delay, d1		51.5		20.9	0.9							34.8
Progression Factor		0.23		1.00	1.00							1.00
Incremental Delay, d2		2.3		0.1	0.0							0.0
Delay (s)		14.3		21.0	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		14.3			12.1		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		13.5				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		52.9%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2019 Alt 1/2/3




















21: Dwy/Silver Strand Blvd & Palm Ave

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	4	213	0	0	305	98	0	0	0	336	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	5	248	0	0	347	111	0	0	0	509	0	15
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	458			248			674	715	248	659	659	402
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	458			248			674	715	248	659	659	402
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	0	100	98
cM capacity (veh/h)	1103			1318			358	355	791	376	382	648
Direction, Lane #												
Volume Total	252	458	0	524								
Volume Left	5	0	0	509								
Volume Right	0	111	0	15								
cSH	1103	1318	1700	380								
Volume to Capacity	0.00	0.00	0.00	1.38								
Queue Length 95th (ft)	0	0	0	642								
Control Delay (s)	0.2	0.0	0.0	214.3								
Lane LOS	A			F								
Approach Delay (s)	0.2	0.0	0.0	214.3								
Approach LOS				F								
Intersection Summary												
Average Delay		91.0										
Intersection Capacity Utilization		47.9%				ICU Level of Service		A				
Analysis Period (min)		15										











NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	526	12	85	377	24	14	38	67	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	674	15	96	424	27	25	67	118	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	690	96	451	209	161						
Volume Left (vph)	9	0	96	0	25	61						
Volume Right (vph)	0	15	0	27	118	28						
Hadj (s)	0.53	0.02	0.53	-0.01	-0.28	0.00						
Departure Headway (s)	7.6	7.0	7.5	6.9	7.3	7.8						
Degree Utilization, x	0.02	1.35	0.20	0.87	0.42	0.35						
Capacity (veh/h)	460	522	473	512	456	430						
Control Delay (s)	9.5	188.5	11.1	38.8	15.6	14.9						
Approach Delay (s)	186.2		34.0		15.6	14.9						
Approach LOS	F		D		C	B						
Intersection Summary												
Delay			95.6									
Level of Service			F									
Intersection Capacity Utilization			52.8%		ICU Level of Service		A					
Analysis Period (min)			15									




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	132	595	499	39	52	155
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	136	613	580	45	61	182
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	626				1488	313
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	626				1488	313
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	86				38	73
cM capacity (veh/h)	952				98	683
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	136	613	387	239	244	
Volume Left	136	0	0	0	61	
Volume Right	0	0	0	45	182	
cSH	952	1700	1700	1700	274	
Volume to Capacity	0.14	0.36	0.23	0.14	0.89	
Queue Length 95th (ft)	12	0	0	0	196	
Control Delay (s)	9.4	0.0	0.0	0.0	69.8	
Lane LOS	A				F	
Approach Delay (s)	1.7		0.0		69.8	
Approach LOS					F	
Intersection Summary						
Average Delay			11.3			
Intersection Capacity Utilization			50.4%		ICU Level of Service	A
Analysis Period (min)			15			










NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	602	31	31	500	3	55	19	22	12	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3513		1770	3536			1754			1841	1583
Flt Permitted	0.45	1.00		0.37	1.00			0.78			0.89	1.00
Satd. Flow (perm)	830	3513		681	3536			1415			1663	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	717	37	34	549	3	67	23	27	16	53	39
RTOR Reduction (vph)	0	5	0	0	0	0	0	22	0	0	0	31
Lane Group Flow (vph)	33	749	0	34	552	0	0	95	0	0	69	8
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases	2			6			8			4		
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	17.4	17.4		17.4	17.4			6.5			6.5	6.5
Effective Green, g (s)	17.4	17.4		17.4	17.4			6.5			6.5	6.5
Actuated g/C Ratio	0.53	0.53		0.53	0.53			0.20			0.20	0.20
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	436	1846		357	1858			277			326	310
v/s Ratio Prot	0.021			0.16								
v/s Ratio Perm	0.04			0.05				0.07			0.04	0.00
v/c Ratio	0.08	0.41		0.10	0.30			0.34			0.21	0.02
Uniform Delay, d1	3.9	4.7		3.9	4.4			11.5			11.2	10.7
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.7			0.3	0.0
Delay (s)	4.0	4.9		4.0	4.5			12.2			11.5	10.8
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)	4.8			4.5				12.2			11.2	
Approach LOS	A			A				B			B	
Intersection Summary												
HCM 2000 Control Delay	5.7			HCM 2000 Level of Service				A				
HCM 2000 Volume to Capacity ratio	0.39											
Actuated Cycle Length (s)	33.1			Sum of lost time (s)				9.2				
Intersection Capacity Utilization	45.5%			ICU Level of Service				A				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	1044	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1273	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)			767			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			1283		1273	1273
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1283		1273	1273
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		95	99
cM capacity (veh/h)			541		185	204
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	1273	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	189			
Volume to Capacity	0.75	0.01	0.06			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.0	0.0	25.3			
Lane LOS			D			
Approach Delay (s)	0.0		25.3			
Approach LOS			D			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			64.9%		ICU Level of Service C	
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	41	1934	124	58	815	130	97	89	62	172	78	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5039		1770	4981			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5039		1770	4981			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	44	2057	132	59	823	131	107	98	68	193	88	28
RTOR Reduction (vph)	0	4	0	0	11	0	0	18	0	0	4	0
Lane Group Flow (vph)	44	2185	0	59	943	0	0	255	0	0	305	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2119		157	1984			649			658	
v/s Ratio Prot	0.02	c0.43		c0.03	0.19			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.22	1.03		0.38	0.48			0.39			0.46	
Uniform Delay, d1	72.9	52.1		77.3	40.2			63.2			64.2	
Progression Factor	1.00	1.00		1.24	0.75			1.00			1.00	
Incremental Delay, d2	0.6	28.1		1.4	0.8			0.4			0.5	
Delay (s)	73.5	80.2		97.2	30.9			63.6			64.7	
Level of Service	E	F		F	C			E			E	
Approach Delay (s)		80.1			34.8			63.6			64.7	
Approach LOS		F			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		65.7			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		118.3%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	20	2214	57	48	1218	54	21	10	35	63	13	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5066		1770	5053			1702		1770	1719	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.62	1.00	
Satd. Flow (perm)	1770	5066		1770	5053			1551		1162	1719	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2259	58	49	1256	56	25	12	42	74	15	16
RTOR Reduction (vph)	0	1	0	0	2	0	0	24	0	0	14	0
Lane Group Flow (vph)	20	2316	0	49	1310	0	0	55	0	74	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Effective Green, g (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3565		157	3669			190		142	211	
v/s Ratio Prot	0.01	c0.46		c0.03	c0.26						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.65		0.31	0.36			0.29		0.52	0.08	
Uniform Delay, d1	79.3	14.5		76.8	9.1			71.8		74.0	69.9	
Progression Factor	1.45	0.16		1.57	0.30			1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.3		1.0	0.2			0.9		3.4	0.2	
Delay (s)	115.3	2.7		121.2	2.9			72.7		77.4	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.7			7.2			72.7			75.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		63.7%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰		↰↰	
Volume (vph)	26	1984	198	156	1292	81	129	40	127	153	44	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5016		1770	5085	1583		1794	1583		3371	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5016		1770	5085	1583		1794	1583		3371	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	28	2111	211	161	1332	84	140	43	138	207	59	27
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	114	0	4	0
Lane Group Flow (vph)	28	2315	0	161	1332	47	0	183	24	0	289	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2220		192	2364	736		305	269		574	
v/s Ratio Prot	0.02	c0.46		c0.09	c0.26			c0.10			c0.09	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.18	1.04		0.84	0.56	0.06		0.60	0.09		0.50	
Uniform Delay, d1	75.9	50.1		78.6	34.9	26.6		69.0	62.9		67.7	
Progression Factor	1.01	0.96		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.4	29.3		26.1	1.0	0.2		8.5	0.6		3.1	
Delay (s)	76.8	77.5		104.7	35.9	26.7		77.4	63.5		70.9	
Level of Service	E	E		F	D	C		E	E		E	
Approach Delay (s)		77.5			42.4			71.4			70.9	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		64.4										
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		180.0							19.3			
Intersection Capacity Utilization		106.7%							G			
Analysis Period (min)		15										
c Critical Lane Group												













NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰	↰		↰↰	
Volume (vph)	9	2225	49	170	1590	16	39	8	81	23	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5069		1770	5078			1678			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.83	
Satd. Flow (perm)	1770	5069		1770	5078			1512			1504	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85		0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	10	2472	54	179	1674	17	46	9	95	28	12	12
RTOR Reduction (vph)	0	2	0	0	1	0	0	76	0	0	10	0
Lane Group Flow (vph)	10	2524	0	179	1690	0	0	74	0	0	42	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4				4	
Actuated Green, G (s)	0.8	40.4		11.2	50.8			17.3			17.3	
Effective Green, g (s)	0.8	40.4		11.2	50.8			17.3			17.3	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2420		234	3049			309			307	
v/s Ratio Prot	0.01	c0.50		c0.10	0.33							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.62	1.04		0.76	0.55			0.24			0.14	
Uniform Delay, d1	41.8	22.1		35.4	10.1			28.2			27.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	57.6	30.8		13.8	0.2			0.4			0.2	
Delay (s)	99.3	52.9		49.2	10.3			28.6			27.8	
Level of Service	F	D		D	B			C			C	
Approach Delay (s)		53.1			14.1			28.6			27.8	
Approach LOS		D			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		36.1										
HCM 2000 Volume to Capacity ratio		0.80										
Actuated Cycle Length (s)		84.6							15.7			
Intersection Capacity Utilization		74.7%							D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	188	2165	26	328	1597	555	66	177	533	587	239	227
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	198	2279	27	353	1717	597	70	188	567	638	260	247
RTOR Reduction (vph)	0	1	0	0	0	87	0	26	274	0	2	129
Lane Group Flow (vph)	198	2305	0	353	1717	510	70	366	89	638	283	93
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.3	36.3		45.0	70.0	70.0	8.6	37.4	37.4	11.8	40.6	40.6
Effective Green, g (s)	11.3	36.3		45.0	70.0	70.0	8.6	37.4	37.4	11.8	40.6	40.6
Actuated g/C Ratio	0.07	0.24		0.30	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	254	1209		522	2335	727	99	400	369	265	465	400
v/s Ratio Prot	0.06	c0.45		c0.20	c0.34		0.04	c0.22		c0.19	c0.16	
v/s Ratio Perm						0.32			0.06			0.06
v/c Ratio	0.78	1.91		0.68	0.74	0.70	0.71	0.92	0.24	2.41	0.61	0.23
Uniform Delay, d1	69.3	58.1		47.3	33.6	32.9	70.7	56.0	46.1	70.3	48.9	43.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.0	411.1		3.5	1.2	3.1	20.5	25.2	0.3	644.8	2.3	0.3
Delay (s)	83.3	469.2		50.7	34.9	36.0	91.2	81.1	46.5	715.1	51.2	44.0
Level of Service	F	F		D	C	D	F	F	D	F	D	D
Approach Delay (s)		438.7			37.2			66.7			419.7	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		242.7			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.25										
Actuated Cycle Length (s)		152.4			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		129.0%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑	↑↑↑
Volume (vph)	0	506	855	0	440	1630
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	569	910	0	484	1791
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	0	569	910	0	484	1787
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.16	c0.26		0.27	c0.64
v/s Ratio Perm						
v/c Ratio		0.32	1.06		0.73	1.01
Uniform Delay, d1		11.7	30.3		21.5	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	48.1		4.1	22.9
Delay (s)		11.8	78.4		25.6	37.4
Level of Service		B	E		C	D
Approach Delay (s)		11.8	78.4		34.9	
Approach LOS		B	E		C	
Intersection Summary						
HCM 2000 Control Delay			41.9		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			1.09			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			85.7%		ICU Level of Service	E
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	940	0	0	526	250	437	2	107	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	979	0	0	591	281	470	2	115	0	0	0
RTOR Reduction (vph)	0	0	0	0	99	0	0	35	0	0	0	0
Lane Group Flow (vph)	0	979	0	0	773	0	301	251	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.2			19.2		14.5	14.5				
Effective Green, g (s)		19.2			19.2		14.5	14.5				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1629			1550		584	561				
v/s Ratio Prot		0.28			0.23							
v/s Ratio Perm							0.18	0.16				
v/c Ratio		0.60			0.50		0.52	0.45				
Uniform Delay, d1		8.4			7.9		10.8	10.5				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.6			0.3		0.8	0.6				
Delay (s)		9.0			8.1		11.6	11.1				
Level of Service		A			A		B	B				
Approach Delay (s)		9.0			8.1		11.3			0.0		
Approach LOS		A			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		9.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		41.7			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		48.1%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	62	270	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	67	391	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	476	391	391			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	476	391	391			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	543	657	1167			
Direction, Lane #						
Volume Total	16	76	391			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	657	1167	1700			
Volume to Capacity	0.02	0.01	0.23			
Queue Length 95th (ft)	2	1	0			
Control Delay (s)	10.6	1.0	0.0			
Lane LOS	B	A				
Approach Delay (s)	10.6	1.0	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		24.2%		ICU Level of Service		
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St









MILCON Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1405	34	0	3843	553	0	0	476	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1693	41	0	4177	601	0	0	595	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4798			1754			3158	6532	625	5082	6251	1733
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4798			1754			3158	6532	625	5082	6251	1733
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	84
cM capacity (veh/h)	20			347			4	0	1356	0	0	74
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	677	677	380	1671	1671	1437	595	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	601	595	12				
cSH	1700	1700	1700	1700	1700	1700	1356	74				
Volume to Capacity	0.40	0.40	0.22	0.98	0.98	0.85	0.44	0.16				
Queue Length 95th (ft)	0	0	0	0	0	0	57	13				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	62.5				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	62.5				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				101.7%			ICU Level of Service		G			
Analysis Period (min)				15								

* User Entered Value



















NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1265	202	0	3743	0	232	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1438	230	0	4159	0	252	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1687			2979	634
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1687			2979	634
tC, single (s)			4.1			6.8	6.9
tC, 2 stage (s)							
tF (s)			2.2			3.5	3.3
p0 queue free %			100			100	38
cM capacity (veh/h)			369			11	408
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	575	575	517	1386	1386	1386	252
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	230	0	0	0	252
cSH	1700	1700	1700	1700	1700	1700	408
Volume to Capacity	0.34	0.34	0.30	0.82	0.82	0.82	0.62
Queue Length 95th (ft)	0	0	0	0	0	0	101
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.1
Lane LOS							D
Approach Delay (s)	0.0				0.0	27.1	
Approach LOS							D
Intersection Summary							
Average Delay				1.1			
Intersection Capacity Utilization	87.2%			ICU Level of Service		E	
Analysis Period (min)	15						


























NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1605	1945	343	107	102	0	0	278	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4639		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4639		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1726	2091	369	145	138	0	0	320	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1036	3142	0	145	138	0	0	332	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3211		186	872			397	
v/s Ratio Prot				c0.68	0.68		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.98	0.98		0.78	0.16			0.84	
Uniform Delay, d1				28.1	27.8		82.6	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				23.7	11.2		18.4	0.1			14.2	
Delay (s)				51.8	39.0		101.0	56.1			96.5	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			42.2			79.1			96.5	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay			48.1	HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio			0.94									
Actuated Cycle Length (s)			189.5	Sum of lost time (s)				16.8				
Intersection Capacity Utilization			201.0%	ICU Level of Service				H				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  						 		  	 	
Volume (vph)	1	583	80	0	0	0	0	199	204	451	1488	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3257	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3257	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	634	87	0	0	0	0	231	222	490	1550	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	19	49	0	0	0
Lane Group Flow (vph)	0	635	58	0	0	0	0	294	91	490	1550	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1176	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.44	
v/s Ratio Perm		0.12	0.04						0.06			
v/c Ratio		0.36	0.10					0.25	0.18	0.70	0.75	
Uniform Delay, d1		41.5	37.7					38.5	37.4	63.2	26.6	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.6	
Delay (s)		41.6	37.7					38.6	37.5	66.2	28.2	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.1			0.0			38.3			37.3	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.3		HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		201.0%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2020 Alt 1/2/3

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	217	6	1153	603	0	1177
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3316			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3316			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	252	7	1240	648	0	1239
RTOR Reduction (vph)	2	0	52	0	0	0
Lane Group Flow (vph)	257	0	1836	0	0	1239
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	16.8		43.2			43.2
Effective Green, g (s)	16.8		43.2			43.2
Actuated g/C Ratio	0.24		0.63			0.63
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	387		2073			2101
v/s Ratio Prot	c0.16		c0.55			0.37
v/s Ratio Perm						
v/c Ratio	0.67		0.89			0.59
Uniform Delay, d1	23.6		10.9			7.7
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	4.3		4.9			0.4
Delay (s)	27.9		15.8			8.1
Level of Service	C		B			A
Approach Delay (s)	27.9		15.8			8.1
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			13.9		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.87			
Actuated Cycle Length (s)			69.1		Sum of lost time (s)	12.1
Intersection Capacity Utilization			77.6%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2020 Alt 1/2/3

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↕	↕	↕	↔	↔	↔
Volume (vph)	47	2	10	7	0	5	19	1368	26	39	1318	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1708		1770	3529		1770	3525	
Frt Permitted	0.74	0.78	1.00		0.87		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1312	1380	1583		1526		1770	3529		1770	3525	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	55	2	12	14	0	10	23	1629	31	42	1433	39
RTOR Reduction (vph)	0	0	10	0	20	0	0	1	0	0	1	0
Lane Group Flow (vph)	29	28	2	0	4	0	23	1659	0	42	1471	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.4	15.4	15.4		15.4		2.7	64.1		4.0	65.4	
Effective Green, g (s)	15.4	15.4	15.4		15.4		2.7	64.1		4.0	65.4	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	207	217	249		240		48	2317		72	2362	
v/s Ratio Prot							0.01	c0.47		c0.02	0.42	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.14	0.13	0.01		0.02		0.48	0.72		0.58	0.62	
Uniform Delay, d1	35.4	35.3	34.7		34.7		46.8	10.9		46.0	9.1	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		7.4	1.1		11.5	0.5	
Delay (s)	35.7	35.6	34.7		34.7		54.1	11.9		57.5	9.6	
Level of Service	D	D	C		C		D	B		E	A	
Approach Delay (s)		35.5			34.7			12.5			11.0	
Approach LOS		D			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.4							HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio			0.60									
Actuated Cycle Length (s)			97.6							Sum of lost time (s)	14.1	
Intersection Capacity Utilization			58.0%							ICU Level of Service	B	
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2020 Alt 1/2/3

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	22	0	1313	7	427	882	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	33	0	1443	8	436	900	0
RTOR Reduction (vph)	0	0	0	0	30	0	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1443	4	436	900	0
Turn Type	Split			Split	NA		NA	Perm		Prot	NA	
Protected Phases	3	3		4	4		2			1	6	
Permitted Phases							2					
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.41		c0.25	0.25	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.87	0.01	0.71	0.30	
Uniform Delay, d1					60.6			34.4	20.4	41.3	2.4	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			4.2	0.0	4.0	0.3	
Delay (s)					60.6			16.8	20.4	45.3	2.6	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			16.8			16.6	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.2			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		79.5%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2020 Alt 1/2/3

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	31	50	14	1	65	129	137	1150	5	291	319	312
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3228	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3228	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	48	77	22	1	74	147	152	1278	6	334	367	359
RTOR Reduction (vph)	0	0	20	0	0	124	0	0	3	0	122	0
Lane Group Flow (vph)	48	77	2	0	75	23	152	1278	3	334	604	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1059	
v/s Ratio Prot	0.03	c0.04			c0.04		0.09	c0.36		c0.19	0.19	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.39	0.60	0.02		0.25	0.10	0.28	0.81	0.00	0.98	0.57	
Uniform Delay, d1	64.6	65.6	62.9		53.5	52.1	37.7	34.9	22.3	58.2	40.2	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.92	
Incremental Delay, d2	2.1	7.7	0.1		0.5	0.2	0.3	4.6	0.0	42.2	2.2	
Delay (s)	66.7	73.3	63.0		53.9	52.3	38.0	39.5	22.3	98.0	39.2	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		69.6			52.9			39.3			57.7	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		48.7			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		85.4%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (veh/h)	35	199	4	88	326	9
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	41	234	5	110	354	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)			915		600	
pX, platoon unblocked						
vC, conflicting volume	778	60			115	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	778	60			115	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	85	77			76	
cM capacity (veh/h)	277	1005			1474	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	275	115	364			
Volume Left	41	0	354			
Volume Right	234	110	0			
cSH	1182	1700	1474			
Volume to Capacity	0.23	0.07	0.24			
Queue Length 95th (ft)	23	0	24			
Control Delay (s)	11.2	0.0	8.0			
Lane LOS	B		A			
Approach Delay (s)	11.2	0.0	8.0			
Approach LOS	B					
Intersection Summary						
Average Delay		8.0				
Intersection Capacity Utilization		35.2%	ICU Level of Service	A		
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (vph)	39	3	1304	410	0	294
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1746		3539	1521		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1746		3539	1521		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	52	4	1373	432	0	459
RTOR Reduction (vph)	4	0	0	122	0	0
Lane Group Flow (vph)	52	0	1373	310	0	459
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	2.0		30.1	30.1		30.1
Effective Green, g (s)	2.0		30.1	30.1		30.1
Actuated g/C Ratio	0.05		0.72	0.72		0.72
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	83		2536	1090		2536
v/s Ratio Prot	c0.03		c0.39			0.13
v/s Ratio Perm				0.20		
v/c Ratio	0.63		0.54	0.28		0.18
Uniform Delay, d1	19.6		2.8	2.1		1.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	14.0		0.2	0.1		0.0
Delay (s)	33.6		3.0	2.3		2.0
Level of Service	C		A	A		A
Approach Delay (s)	33.6		2.8			2.0
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.4	HCM 2000 Level of Service	A		
HCM 2000 Volume to Capacity ratio		0.55				
Actuated Cycle Length (s)		42.0	Sum of lost time (s)	9.9		
Intersection Capacity Utilization		48.5%	ICU Level of Service	A		
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2020 Alt 1/2/3

Timing Plan: AM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↕	↕
Volume (veh/h)	0	15	2128	5	5	335
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2288	5	7	493
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2552	1147			2294	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2552	1147			2294	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	87			97	
cM capacity (veh/h)	21	193			217	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1525	768	7	246	246
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	193	1700	1700	217	1700	1700
Volume to Capacity	0.13	0.90	0.45	0.03	0.14	0.14
Queue Length 95th (ft)	11	0	0	3	0	0
Control Delay (s)	26.6	0.0	0.0	22.2	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	26.6	0.0		0.3		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			69.0%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2020 Alt 1/2/3

Timing Plan: AM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↕	↕
Volume (vph)	17	86	2042	12	37	296
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	106	2196	13	54	429
RTOR Reduction (vph)	0	4	0	1	0	0
Lane Group Flow (vph)	21	102	2196	12	54	429
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.7	25.8	68.3	68.3	5.0	82.1
Effective Green, g (s)	15.7	20.7	68.3	68.3	5.0	82.1
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	259	305	2256	1009	82	2712
v/s Ratio Prot	0.01	c0.06	c0.62		c0.03	0.12
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.33	0.97	0.01	0.66	0.16
Uniform Delay, d1	39.5	37.3	18.5	7.1	50.2	3.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	13.2	0.0	17.5	0.0
Delay (s)	39.6	37.9	31.7	7.1	67.7	3.3
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.2		31.6			10.5
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay			28.3		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.84			
Actuated Cycle Length (s)			107.1		Sum of lost time (s)	18.1
Intersection Capacity Utilization			72.6%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↑↑			↑↑
Volume (veh/h)	0	32	2020	26	0	312
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	52	2126	27	0	422
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2351	1077			2154	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2351	1077			2154	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	76			100	
cM capacity (veh/h)	30	215			246	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	52	1418	736	211	211	
Volume Left	0	0	0	0	0	
Volume Right	52	0	27	0	0	
cSH	215	1700	1700	1700	1700	
Volume to Capacity	0.24	0.83	0.43	0.12	0.12	
Queue Length 95th (ft)	23	0	0	0	0	
Control Delay (s)	27.0	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	27.0	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			66.7%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑↑	↑	↑	↑↑
Volume (vph)	10	6	2045	32	15	289
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	16	10	2130	33	19	357
RTOR Reduction (vph)	0	5	0	7	0	0
Lane Group Flow (vph)	16	5	2130	26	19	357
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.7	59.7	2.0	69.2
Effective Green, g (s)	1.4	3.4	59.7	59.7	2.0	69.2
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2736	1224	45	3172
v/s Ratio Prot	c0.01	0.00	c0.60		c0.01	0.10
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.50	0.08	0.78	0.02	0.42	0.11
Uniform Delay, d1	37.6	35.4	5.0	2.0	37.0	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.8	0.5	1.5	0.0	6.3	0.0
Delay (s)	49.3	35.9	6.4	2.0	43.3	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	44.1		6.4			2.6
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay			6.2		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.76			
Actuated Cycle Length (s)			77.2		Sum of lost time (s)	14.1
Intersection Capacity Utilization			69.4%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2020 Alt 1/2/3

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	45	1	0	44	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	83	2	0	70	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	85	70	3					
Volume Left (vph)	0	0	83	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	833	1121	815	841	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.2%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2020 Alt 1/2/3

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	36	0	0	32	224	3	1851	50	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1357	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	48	0	0	44	311	3	1969	53	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	22	0	0	0	0
Lane Group Flow (vph)	3	48	0	0	44	255	3	1969	31	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.4	16.4			16.4	16.4	47.7	43.6	43.6			
Effective Green, g (s)	16.4	16.4			16.4	16.4	47.7	43.6	43.6			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	303	416			416	353	1150	2102	940			
v/s Ratio Prot		0.03			0.02		0.00	c0.56				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.12			0.11	0.72	0.00	0.94	0.03			
Uniform Delay, d1	22.2	22.7			22.7	26.4	4.5	13.6	6.2			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	7.1	0.0	8.6	0.0			
Delay (s)	22.2	22.8			22.8	33.5	4.5	22.3	6.2			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.8			32.2			21.8			0.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay		23.4						HCM 2000 Level of Service		C		
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		73.4				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		84.6%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2020 Alt 1/2/3

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: AM PEAK






















							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	564	1652	0	258	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	588	1721	0	327	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None		None		
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2362	163	327		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2362	163	327		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	52		0		
cM capacity (veh/h)	15	853	1230		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	588	860	860	218	109	0
Volume Left	0	588	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1230	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.48	0.51	0.51	0.13	0.06	0.00
Queue Length 95th (ft)	0	66	0	0	0	0	0
Control Delay (s)	0.0	10.6	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	B					
Approach Delay (s)	0.0	2.7			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay		2.4					
Intersection Capacity Utilization		55.7%		ICU Level of Service		B	
Analysis Period (min)		15					

NBC Coastal Campus

MILCON Year 2020 Alt 1/2/3

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	399	0	38	2	1	2	26	2088	0	0	132	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3282	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3282	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	453	0	43	6	3	6	27	2198	0	0	191	180
RTOR Reduction (vph)	0	30	0	0	6	0	0	0	0	0	102	0
Lane Group Flow (vph)	453	13	0	6	3	0	27	2198	0	0	269	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	25.9	25.9		1.7	1.7		1.9	43.5			37.4	
Effective Green, g (s)	25.9	25.9		1.7	1.7		1.9	43.5			37.4	
Actuated g/C Ratio	0.30	0.30		0.02	0.02		0.02	0.51			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	534	477		35	33		39	1794			1430	
v/s Ratio Prot	c0.26	0.01		c0.00	0.00		0.02	c0.62			0.08	
v/s Ratio Perm												
v/c Ratio	0.85	0.03		0.17	0.09		0.69	1.23			0.19	
Uniform Delay, d1	28.1	21.1		41.4	41.3		41.7	21.1			14.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	11.9	0.0		2.3	1.2		41.8	106.5			0.1	
Delay (s)	40.0	21.1		43.7	42.5		83.5	127.7			14.9	
Level of Service	D	C		D	D		F	F			B	
Approach Delay (s)		38.4			43.0			127.1			14.9	
Approach LOS		D			D			F			B	
Intersection Summary												
HCM 2000 Control Delay		99.2						HCM 2000 Level of Service		F		
HCM 2000 Volume to Capacity ratio		1.13										
Actuated Cycle Length (s)		85.8						Sum of lost time (s)		18.9		
Intersection Capacity Utilization		94.9%						ICU Level of Service		F		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	7	181	14	0	1946	17	37	22	1	19	40	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5030			5079		1770	1852			1732	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.19	
Satd. Flow (perm)	1770	5030			5079		1240	1852			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	
Adj. Flow (vph)	8	203	16	0	2138	19	44	26	1	25	52	66
RTOR Reduction (vph)	0	5	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	8	214	0	0	2156	0	44	26	0	0	126	0
Turn Type	Prot	NA			NA	Perm	NA		Perm	NA		
Protected Phases	1	6			2		4			3		
Permitted Phases						4				3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2062		241	360			53	
v/s Ratio Prot	c0.00	0.04			c0.42			0.01				
v/s Ratio Perm							c0.04				c0.39	
v/c Ratio	0.04	0.11			1.05		0.18	0.07			2.37	
Uniform Delay, d1	71.4	36.3			53.5		60.6	59.2			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			31.4		0.4	0.1			669.6	
Delay (s)	71.5	36.4			84.9		60.9	59.3			744.6	
Level of Service	E	D			F		E	E			F	
Approach Delay (s)		37.7			84.9			60.3			744.6	
Approach LOS		D			F			E			F	
Intersection Summary												
HCM 2000 Control Delay		116.4			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.97										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		76.4%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	199	0	625	1955	9	0	0	0	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3537							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3537							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	243	0	665	2080	10	0	0	0	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	243	0	665	2090	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3214							609
v/s Ratio Prot		0.05		0.19	c0.59							
v/s Ratio Perm												0.00
v/c Ratio		0.13		0.39	0.65							0.01
Uniform Delay, d1		36.5		27.9	1.8							34.9
Progression Factor		0.43		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.1	0.5							0.0
Delay (s)		15.9		28.1	2.3							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.9			8.5		0.0				35.0	
Approach LOS		B			A		A				C	
Intersection Summary												
HCM 2000 Control Delay		9.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		76.0%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

MILCON Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	12	233	0	0	128	422	0	0	0	83	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	14	277	0	0	138	454	0	0	0	91	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	591			277			675	897	277	670	670	365
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	591			277			675	897	277	670	670	365
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	75	100	99
cM capacity (veh/h)	984			1285			361	275	761	366	372	680
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	292	591	0	96								
Volume Left	14	0	0	91								
Volume Right	0	454	0	4								
cSH	984	1285	1700	374								
Volume to Capacity	0.01	0.00	0.00	0.26								
Queue Length 95th (ft)	1	0	0	25								
Control Delay (s)	0.6	0.0	0.0	17.9								
Lane LOS	A			A								
Approach Delay (s)	0.6	0.0	0.0	17.9								
Approach LOS				A								
Intersection Summary												
Average Delay				1.9								
Intersection Capacity Utilization				44.2%								
Analysis Period (min)				15								

NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	307	4	26	527	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	357	5	28	567	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	362	28	592	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.02	0.53	0.00	-0.45	-0.14						
Departure Headway (s)	6.6	6.1	6.3	5.8	6.1	6.9						
Degree Utilization, x	0.01	0.61	0.05	0.95	0.32	0.08						
Capacity (veh/h)	536	570	553	618	556	467						
Control Delay (s)	8.5	17.1	8.4	47.7	12.0	10.6						
Approach Delay (s)	16.9		45.9		12.0	10.6						
Approach LOS	C		E		B	B						
Intersection Summary												
Delay				30.7								
Level of Service				D								
Intersection Capacity Utilization				45.4%								
Analysis Period (min)				15								




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑	↗	↗	↰	↰
Volume (veh/h)	234	453	571	152	17	149
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	296	573	696	185	24	210
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked	0.96				0.96	0.96
vC, conflicting volume	882				1955	441
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	804				1916	346
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	62				33	67
cM capacity (veh/h)	787				36	627
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	296	573	464	417	234	
Volume Left	296	0	0	0	24	
Volume Right	0	0	0	185	210	
cSH	787	1700	1700	1700	233	
Volume to Capacity	0.38	0.34	0.27	0.25	1.01	
Queue Length 95th (ft)	44	0	0	0	236	
Control Delay (s)	12.3	0.0	0.0	0.0	105.4	
Lane LOS	B				F	
Approach Delay (s)	4.2		0.0		105.4	
Approach LOS					F	
Intersection Summary						
Average Delay			14.2			
Intersection Capacity Utilization			53.7%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	445	15	26	568	0	69	35	81	1	21	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	1.00		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3522		1770	3539			1721			1858	1583
Flt Permitted	0.33	1.00		0.42	1.00			0.87			0.98	1.00
Satd. Flow (perm)	618	3522		780	3539			1523			1831	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	578	19	34	738	0	105	53	123	2	36	47
RTOR Reduction (vph)	0	3	0	0	0	0	0	34	0	0	0	30
Lane Group Flow (vph)	21	594	0	34	738	0	0	247	0	0	38	17
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	16.4	16.4		16.4	16.4			13.9			13.9	13.9
Effective Green, g (s)	16.4	16.4		16.4	16.4			13.9			13.9	13.9
Actuated g/C Ratio	0.42	0.42		0.42	0.42			0.35			0.35	0.35
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	256	1462		323	1469			535			644	557
v/s Ratio Prot		0.17			c0.21							
v/s Ratio Perm	0.03			0.04				c0.16			0.02	0.01
v/c Ratio	0.08	0.41		0.11	0.50			0.46			0.06	0.03
Uniform Delay, d1	7.0	8.1		7.1	8.5			9.9			8.5	8.4
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.1	0.3			0.6			0.0	0.0
Delay (s)	7.1	8.3		7.2	8.8			10.5			8.5	8.4
Level of Service	A	A		A	A			B			A	A
Approach Delay (s)		8.3			8.7			10.5			8.5	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM 2000 Control Delay			8.8		HCM 2000 Level of Service				A			
HCM 2000 Volume to Capacity ratio			0.48									
Actuated Cycle Length (s)			39.5		Sum of lost time (s)				9.2			
Intersection Capacity Utilization			46.6%		ICU Level of Service				A			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	529	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	575	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)			767			
pX, platoon unblocked						
vC, conflicting volume			579		575	575
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			579		575	575
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			994		480	518
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	575	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	506			
Volume to Capacity	0.34	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.2			
Lane LOS			B			
Approach Delay (s)	0.0		12.2			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			37.8%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑↑↑	↑	↑	↑	↑	↑	↑	↑
Volume (vph)	21	676	35	23	2332	43	165	37	51	90	45	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5047		1770	5072			3325			3364	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5047		1770	5072			3325			3364	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	805	42	25	2563	47	199	45	61	110	55	29
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	844	0	25	2609	0	0	293	0	0	186	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2234		118	2161			646			654	
v/s Ratio Prot	0.01	c0.17		c0.01	c0.51			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.17	0.38		0.21	1.21			0.45			0.28	
Uniform Delay, d1	76.7	33.6		79.5	51.6			64.0			61.8	
Progression Factor	1.00	1.00		1.14	0.94			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.6	96.3			0.5			0.2	
Delay (s)	77.3	34.0		91.2	145.0			64.6			62.1	
Level of Service	E	C		F	F			E			E	
Approach Delay (s)		35.3			144.5			64.6			62.1	
Approach LOS		D			F			E			E	
Intersection Summary												
HCM 2000 Control Delay		110.6						HCM 2000 Level of Service		F		
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		180.0						Sum of lost time (s)		18.3		
Intersection Capacity Utilization		83.1%						ICU Level of Service		E		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	
Volume (vph)	2	906	35	20	2506	12	18	4	31	55	11	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5082			1687		1770	1704	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5057		1770	5082			1542		1231	1704	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	1018	39	23	2848	14	25	5	42	79	16	21
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	18	0
Lane Group Flow (vph)	2	1055	0	23	2862	0	0	44	0	79	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3718			257		205	284	
v/s Ratio Prot	0.00	0.21		c0.01	c0.56						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.30		0.19	0.77			0.17		0.39	0.07	
Uniform Delay, d1	86.1	11.1		79.4	14.8			64.3		66.8	63.2	
Progression Factor	1.70	0.27		1.42	0.37			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.2	0.4			0.3		1.2	0.1	
Delay (s)	146.8	3.2		113.1	5.9			64.6		68.0	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.4			6.8			64.6			66.5	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.6			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		82.1%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰	↰↰	
Volume (vph)	3	977	63	96	2359	52	147	19	91	169	36	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.91	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1098	71	116	2842	63	165	21	102	225	48	20
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	84	0	3	0
Lane Group Flow (vph)	3	1165	0	116	2842	33	0	186	18	0	290	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.23		c0.07	c0.56			c0.10			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.52		0.59	1.05	0.04		0.61	0.06		0.50	
Uniform Delay, d1	86.2	36.4		76.1	42.1	20.2		68.9	62.4		67.5	
Progression Factor	1.22	0.62		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.9		4.7	32.8	0.1		3.4	0.1		0.7	
Delay (s)	105.9	23.5		80.8	74.9	20.3		72.2	62.5		68.2	
Level of Service	F	C		F	E	C		E	E		E	
Approach Delay (s)		23.7			74.0			68.8			68.2	
Approach LOS		C			E			E			E	
Intersection Summary												
HCM 2000 Control Delay		61.0			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		99.5%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰	↰	↰	↰	↰
Volume (vph)	14	1243	25	43	2488	12	16	6	48	38	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5082			1671			1723	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.78	
Satd. Flow (perm)	1770	5070		1770	5082			1561			1378	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	15	1351	27	50	2893	14	19	7	57	50	3	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	45	0	0	22	0
Lane Group Flow (vph)	15	1377	0	50	2907	0	0	38	0	0	59	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.5		2.9	39.7			15.1			15.1	
Effective Green, g (s)	0.7	37.5		2.9	39.7			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2670		72	2833			331			292	
v/s Ratio Prot	0.01	0.27		c0.03	c0.57							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.88	0.52		0.69	1.03			0.12			0.20	
Uniform Delay, d1	35.2	10.9		33.7	15.8			22.7			23.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	159.7	0.2		25.2	23.9			0.2			0.3	
Delay (s)	194.9	11.1		58.9	39.7			22.8			23.4	
Level of Service	F	B		E	D			C			C	
Approach Delay (s)		13.1			40.0			22.8			23.4	
Approach LOS		B			D			C			C	
Intersection Summary												
HCM 2000 Control Delay		31.1			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		71.2			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		65.2%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰	↰	↰
Volume (vph)	92	1256	29	245	2426	216	77	73	775	236	93	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	107	1460	34	261	2581	230	86	81	861	281	111	92
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	183	0	3	60
Lane Group Flow (vph)	107	1492	0	261	2581	163	86	324	282	281	117	23
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.3	30.0	30.0	10.4	32.1	32.1
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.3	30.0	30.0	10.4	32.1	32.1
Actuated g/C Ratio	0.05	0.31		0.16	0.41	0.41	0.07	0.26	0.26	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	178	1545		274	2075	646	127	402	390	309	486	418
v/s Ratio Prot	0.03	0.29		c0.15	c0.51		0.05	c0.21		c0.08	0.07	
v/s Ratio Perm						0.10			0.19			0.02
v/c Ratio	0.60	0.97		0.95	1.24	0.25	0.68	0.81	0.72	0.91	0.24	0.06
Uniform Delay, d1	53.5	39.5		48.3	34.1	22.5	52.2	40.0	38.9	52.0	32.2	30.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.6	15.4		41.3	114.0	0.2	13.4	11.2	6.5	28.8	0.3	0.1
Delay (s)	59.1	54.9		89.7	148.1	22.7	65.6	51.2	45.4	80.8	32.5	30.6
Level of Service	E	D		F	F	C	E	D	D	F	C	C
Approach Delay (s)		55.2			133.8			49.8			60.2	
Approach LOS		E			F			D			E	
Intersection Summary												
HCM 2000 Control Delay		93.7			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.07										
Actuated Cycle Length (s)		115.4			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		95.8%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2020 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↘	↗
Volume (vph)	0	286	1240	0	156	1650
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	321	1333	0	173	1833
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	321	1333	0	173	1830
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.38		0.10	c0.66
v/s Ratio Perm						
v/c Ratio		0.12	1.14		0.84	1.19
Uniform Delay, d1		2.5	26.8		34.5	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	74.6		24.3	94.2
Delay (s)		2.5	101.4		58.8	112.2
Level of Service		A	F		E	F
Approach Delay (s)		2.5	101.4		107.6	
Approach LOS		A	F		F	
Intersection Summary						
HCM 2000 Control Delay			96.1		HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio			1.26			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			80.3%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2020 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↘	↗				
Volume (vph)	0	443	0	0	429	527	913	1	144	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.96				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3246		1681	1637				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3246		1681	1637				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	509	0	0	466	573	992	1	157	0	0	0
RTOR Reduction (vph)	0	0	0	0	366	0	0	24	0	0	0	0
Lane Group Flow (vph)	0	509	0	0	673	0	585	541	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.8			16.8		21.8	21.8				
Effective Green, g (s)		16.8			16.8		21.8	21.8				
Actuated g/C Ratio		0.36			0.36		0.47	0.47				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1275			1170		786	765				
v/s Ratio Prot		0.14			c0.21							
v/s Ratio Perm							c0.35	0.33				
v/c Ratio		0.40			0.57		0.74	0.71				
Uniform Delay, d1		11.1			12.0		10.1	9.9				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		3.8	3.0				
Delay (s)		11.3			12.7		14.0	12.8				
Level of Service		B			B		B	B				
Approach Delay (s)		11.3			12.7		13.4				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					12.8					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.67							
Actuated Cycle Length (s)					46.6					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					71.8%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰		↰	↰	↰	↰
Volume (veh/h)	0	3	4	387	49	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	538	120	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	668	120	120			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	668	120	120			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	422	932	1468			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	543	120			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	932	1468	1700			
Volume to Capacity	0.01	0.00	0.07			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.9	0.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.9	0.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			33.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰
Volume (veh/h)	0	4094	17	0	1812	244	0	0	909	0	0	55
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%	0%		0%	0%		0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4265	18	0	1868	252	0	0	1010	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2140			4302			5019	6433	1470	3455	6316	788
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2140			4302			5019	6433	1470	3455	6316	788
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	245			32			0	0	1839	1	0	323
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1706	1706	871	747	747	625	1010	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	252	1010	83				
cSH	1700	1700	1700	1700	1700	1700	1839	323				
Volume to Capacity	1.00	1.00	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	88	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3	20.0				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.3	20.0				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				144.4%								H
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3859	130	0	1849	0	201	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3978	134	0	1926	0	245	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4132		4727	1433	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4132		4727	1433	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			38		1	119	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1591	1591	930	642	642	642	245
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	245
cSH	1700	1700	1700	1700	1700	1700	119
Volume to Capacity	0.94	0.94	0.55	0.38	0.38	0.38	2.06
Queue Length 95th (ft)	0	0	0	0	0	0	507
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	562.9
Lane LOS							F
Approach Delay (s)	0.0			0.0			562.9
Approach LOS							F
Intersection Summary							
Average Delay			22.0				
Intersection Capacity Utilization			98.6%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑↑			↑↑↑	
Volume (vph)	0	0	0	976	635	109	102	252		0	0	861
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4636		1770	3539				3528
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4636		1770	3539				3528
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1027	668	115	105	260	0	0	0	888
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	0	2
Lane Group Flow (vph)	0	0	0	513	1285	0	105	260	0	0	0	902
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA				NA
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1432		98	1989				1568
v/s Ratio Prot				c0.34	0.28		c0.06	0.07				c0.26
v/s Ratio Perm												
v/c Ratio				1.09	0.97dl		1.07	0.13				0.58
Uniform Delay, d1				31.1	29.7		42.5	9.3				18.7
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				68.6	7.8		111.5	0.0				0.5
Delay (s)				99.7	37.5		154.0	9.3				19.2
Level of Service				F	D		F	A				B
Approach Delay (s)		0.0			55.1			51.0				19.2
Approach LOS		A			E			D				B
Intersection Summary												
HCM 2000 Control Delay			44.1			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			0.81									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			17.2			
Intersection Capacity Utilization		135.7%				ICU Level of Service			H			
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔	
Volume (vph)	7	2111	110	0	0	0	0	354	478	761	1099	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3118	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3118	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2320	121	0	0	0	0	412	556	793	1145	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2328	92	0	0	0	0	662	271	793	1145	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					946	409	865	2022	
v/s Ratio Prot		c0.46						c0.21		c0.23	0.32	
v/s Ratio Perm			0.06						0.20			
v/c Ratio		1.26	0.16					0.70	0.66	0.92	0.57	
Uniform Delay, d1		55.8	37.8					53.9	53.1	63.7	23.8	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		123.5	0.1					2.4	4.0	14.2	0.4	
Delay (s)		179.3	37.9					56.3	57.1	77.9	24.1	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		172.4			0.0			56.5			46.1	
Approach LOS		F			A			E			D	
Intersection Summary												
HCM 2000 Control Delay		105.7									F	
HCM 2000 Volume to Capacity ratio		0.98										
Actuated Cycle Length (s)		175.0							14.4			
Intersection Capacity Utilization		135.7%							H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2020 Alt 1/2/3
Timing Plan: PM PEAK













Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔		↔↔			↔↔
Volume (vph)	173	12	939	689	0	1233
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3268			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3268			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	222	15	1055	774	0	1326
RTOR Reduction (vph)	2	0	63	0	0	0
Lane Group Flow (vph)	235	0	1766	0	0	1326
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	296		2469			2540
v/s Ratio Prot	c0.15		c0.54			0.39
v/s Ratio Perm						
v/c Ratio	0.80		0.72			0.52
Uniform Delay, d1	62.1		10.4			7.9
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	13.7		1.8			0.8
Delay (s)	75.8		12.2			8.7
Level of Service	E		B			A
Approach Delay (s)	75.8		12.2			8.7
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay		15.3				B
HCM 2000 Volume to Capacity ratio		0.75				
Actuated Cycle Length (s)		160.0				12.1
Intersection Capacity Utilization		81.5%				D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON Year 2020 Alt 1/2/3

Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	144	10	29	26	10	24	22	1547	49	67	1458	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1725		1770	3523		1770	3489	
Flt Permitted	0.68	0.68	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1205	1207	1583		1458		1770	3523		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	185	13	37	41	16	38	24	1663	53	73	1585	165
RTOR Reduction (vph)	0	0	31	0	22	0	0	1	0	0	2	0
Lane Group Flow (vph)	98	100	6	0	73	0	24	1715	0	73	1748	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	19.1	19.1	19.1		19.1		3.1	72.0		8.0	76.9	
Effective Green, g (s)	19.1	19.1	19.1		19.1		3.1	72.0		8.0	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	202	265		244		48	2227		124	2355	
v/s Ratio Prot							0.01	c0.49		c0.04	0.50	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.49	0.50	0.02		0.30		0.50	0.77		0.59	0.74	
Uniform Delay, d1	42.9	43.0	39.6		41.5		54.6	15.0		51.4	12.0	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.8	1.9	0.0		0.7		8.0	1.7		7.0	1.3	
Delay (s)	44.8	44.9	39.6		42.2		62.6	16.7		58.3	13.3	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		44.0			42.2			17.4			15.1	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		18.5			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		113.9			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		75.1%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON Year 2020 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	7	0	145	0	1352	0	32	1597	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1619			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1619			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	10	0	210	0	1438	0	34	1717	0
RTOR Reduction (vph)	0	0	0	0	171	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	49	0	0	1438	0	34	1717	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			45.3		1.7	51.2	
Effective Green, g (s)					14.1			45.3		1.7	51.2	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					302			2126		39	2403	
v/s Ratio Prot					c0.03			0.41		0.02	c0.49	
v/s Ratio Perm												
v/c Ratio					0.16			0.68		0.87	0.71	
Uniform Delay, d1					25.7			10.1		36.7	7.5	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			0.9		94.3	1.0	
Delay (s)					26.0			11.0		131.1	8.6	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			26.0			11.0			11.0	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					11.9			HCM 2000 Level of Service			B	
HCM 2000 Volume to Capacity ratio					0.69							
Actuated Cycle Length (s)					75.4			Sum of lost time (s)			18.9	
Intersection Capacity Utilization					61.9%			ICU Level of Service			B	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON Year 2020 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	292	50	119	6	69	422	28	648	2	139	1420	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1515		1855	1510	1770	3539	1345	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1515		1855	1510	1770	3539	1345	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	384	66	157	7	75	459	31	712	2	148	1511	70
RTOR Reduction (vph)	0	0	127	0	0	210	0	0	1	0	2	0
Lane Group Flow (vph)	384	66	30	0	82	249	31	712	1	148	1579	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.7	27.7	27.7		25.8	25.8	4.0	56.5	56.5	17.2	69.7	
Effective Green, g (s)	27.7	27.7	27.7		25.8	25.8	4.0	56.5	56.5	17.2	69.7	
Actuated g/C Ratio	0.19	0.19	0.19		0.18	0.18	0.03	0.39	0.39	0.12	0.48	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	334	352	286		326	265	48	1363	518	207	1669	
v/s Ratio Prot	c0.22	0.04			0.04		0.02	0.20		c0.08	c0.45	
v/s Ratio Perm			0.02			c0.16		0.00				
v/c Ratio	1.15	0.19	0.10		0.25	0.94	0.65	0.52	0.00	0.71	0.95	
Uniform Delay, d1	59.4	50.0	49.2		52.1	59.6	70.6	34.7	27.7	62.3	36.7	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	96.3	0.3	0.2		0.4	38.6	26.1	1.4	0.0	11.1	12.5	
Delay (s)	155.8	50.2	49.3		52.5	98.2	96.7	36.1	27.7	73.5	49.1	
Level of Service	F	D	D		D	F	F	D	C	E	D	
Approach Delay (s)		116.8			91.3			38.6			51.2	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay		65.6								E		
HCM 2000 Volume to Capacity ratio		0.99										
Actuated Cycle Length (s)		146.6				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		80.8%				ICU Level of Service		D				
Analysis Period (min)		15										

c Critical Lane Group

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON Year 2020 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	318	496	3	49	180	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	353	551	4	69	205	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	451	39			73	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	451	39			73	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	28	47			87	
cM capacity (veh/h)	490	1033			1527	
Direction, Lane #						
Volume Total	904	73	208			
Volume Left	353	0	205			
Volume Right	551	69	0			
cSH	988	1700	1527			
Volume to Capacity	0.92	0.04	0.13			
Queue Length 95th (ft)	348	0	12			
Control Delay (s)	32.8	0.0	7.6			
Lane LOS	D		A			
Approach Delay (s)	32.8	0.0	7.6			
Approach LOS	D					
Intersection Summary						
Average Delay		26.4				
Intersection Capacity Utilization		41.1%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2020 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	321	6	684	52	0	1547
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	406	8	760	58	0	1738
RTOR Reduction (vph)	1	0	0	33	0	0
Lane Group Flow (vph)	413	0	760	25	0	1738
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases			2			
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.23		0.21			c0.49
v/s Ratio Perm				0.02		
v/c Ratio	0.49		0.50	0.04		1.14
Uniform Delay, d1	18.8		21.8	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.5		0.3	0.0		72.9
Delay (s)	19.3		22.0	17.4		102.8
Level of Service	B		C	B		F
Approach Delay (s)	19.3		21.7			102.8
Approach LOS	B		C			F

Intersection Summary

HCM 2000 Control Delay	68.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	9.9
Intersection Capacity Utilization	92.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2020 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Volume (veh/h)	4	6	547	3	15	1485
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	636	3	16	1632
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1487	320			640	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1487	320			640	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	98			98	
cM capacity (veh/h)	113	676			941	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	20	424	216	16	816	816
Volume Left	8	0	0	16	0	0
Volume Right	12	0	3	0	0	0
cSH	226	1700	1700	941	1700	1700
Volume to Capacity	0.09	0.25	0.13	0.02	0.48	0.48
Queue Length 95th (ft)	7	0	0	1	0	0
Control Delay (s)	22.5	0.0	0.0	8.9	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	22.5	0.0		0.1		
Approach LOS	C					

Intersection Summary

Average Delay	0.3		
Intersection Capacity Utilization	51.0%	ICU Level of Service	A
Analysis Period (min)	15		

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2020 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	30	56	493	12	102	1387
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	33	61	560	14	112	1524
RTOR Reduction (vph)	0	45	0	8	0	0
Lane Group Flow (vph)	33	16	560	6	112	1524
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.3	21.5	27.9	27.9	7.1	43.8
Effective Green, g (s)	9.3	16.4	27.9	27.9	7.1	43.8
Actuated g/C Ratio	0.15	0.26	0.45	0.45	0.11	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	263	416	1582	707	201	2484
v/s Ratio Prot	c0.02	0.01	0.16		0.06	c0.43
v/s Ratio Perm				0.00		
v/c Ratio	0.13	0.04	0.35	0.01	0.56	0.61
Uniform Delay, d1	23.0	17.1	11.3	9.6	26.2	4.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.0	3.3	0.5
Delay (s)	23.2	17.2	11.5	9.6	29.5	5.3
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.3		11.4			7.0
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			8.6		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.63			
Actuated Cycle Length (s)			62.4		Sum of lost time (s)	18.1
Intersection Capacity Utilization			50.3%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2020 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↩	↕	↕		↕
Volume (veh/h)	0	22	484	18	0	1417
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	29	556	21	0	1540
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1337	289			577	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1337	289			577	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	145	708			993	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	29	371	206	770	770	
Volume Left	0	0	0	0	0	
Volume Right	29	0	21	0	0	
cSH	708	1700	1700	1700	1700	
Volume to Capacity	0.04	0.22	0.12	0.45	0.45	
Queue Length 95th (ft)	3	0	0	0	0	
Control Delay (s)	10.3	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.3	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			42.5%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2020 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↕	↕	↖	↗
Lane Configurations	↖	↗	↕	↕	↖	↗
Volume (vph)	30	26	477	18	22	1393
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	42	36	507	19	24	1531
RTOR Reduction (vph)	0	33	0	8	0	0
Lane Group Flow (vph)	42	3	507	11	24	1531
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	27.6	27.6	1.7	36.8
Effective Green, g (s)	2.6	4.3	27.6	27.6	1.7	36.8
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	147	2123	949	65	2831
v/s Ratio Prot	c0.02	0.00	0.14		0.01	c0.43
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.42	0.02	0.24	0.01	0.37	0.54
Uniform Delay, d1	21.0	18.9	4.3	3.7	21.6	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.8	0.1	0.1	0.0	3.5	0.2
Delay (s)	23.8	19.0	4.4	3.7	25.1	1.8
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.6		4.3			2.2
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.4		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.66			
Actuated Cycle Length (s)			46.0		Sum of lost time (s)	14.1
Intersection Capacity Utilization			49.4%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON Year 2020 Alt 1/2/3

Timing Plan: PM PEAK









	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Movement	↖	→	↗	↖	→	↗	↖	→	↗	↖
Lane Configurations	↖	↗	↗	↖	↗	↗	↖	↗	↖	↗
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	11	14	84	7	0	178	13	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	11	15	109	9	0	200	15	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	11	15	118	215						
Volume Left (vph)	0	0	109	0						
Volume Right (vph)	0	15	0	15						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.19						
Capacity (veh/h)	872	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2020 Alt 1/2/3

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	184	0	0	81	137	12	399	68	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1298	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	11	209	0	0	93	157	13	438	75	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	124	0	41	0	0	0	0
Lane Group Flow (vph)	11	209	0	0	93	33	13	438	34	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.4	18.4	18.4			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.4	18.4	18.4			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	271	389			389	330	810	1619	724			
v/s Ratio Prot		c0.11			0.05		0.01	c0.12				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.54			0.24	0.10	0.02	0.27	0.05			
Uniform Delay, d1	12.7	14.2			13.2	12.8	6.0	6.7	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.4			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.7	15.6			13.6	13.0	6.0	6.8	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.5			13.2		6.7			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.3			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.35										
Actuated Cycle Length (s)		40.2			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		40.6%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2020 Alt 1/2/3

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: PM PEAK











							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	564	0	542	0	1560	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	2256	0	616	0	1733	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2041	867	1733		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2041	867	1733		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	0	100		0		
cM capacity (veh/h)	49	296	360		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	2256	0	308	308	1156	578	0
Volume Left	0	0	0	0	0	0	0
Volume Right	2256	0	0	0	0	0	0
cSH	296	1700	1700	1700	1700	1700	1700
Volume to Capacity	7.62	0.00	0.18	0.18	0.68	0.34	0.00
Queue Length 95th (ft)	Err	0	0	0	0	0	0
Control Delay (s)	Err	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F						
Approach Delay (s)	Err	0.0			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			4898.3				
Intersection Capacity Utilization			84.7%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON Year 2020 Alt 1/2/3

Timing Plan: PM PEAK











Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	165	0	67	1	1	0	72	320	12	1	1662	211
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3520		1770	3480	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3520		1770	3480	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	220	0	89	2	2	0	79	352	13	1	1847	234
RTOR Reduction (vph)	0	69	0	0	0	0	0	2	0	0	8	0
Lane Group Flow (vph)	220	20	0	2	2	0	79	363	0	1	2073	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	20.3	20.3		0.8	0.8		5.8	49.3		0.8	44.3	
Effective Green, g (s)	20.3	20.3		0.8	0.8		5.8	49.3		0.8	44.3	
Actuated g/C Ratio	0.23	0.23		0.01	0.01		0.06	0.55		0.01	0.49	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	398	356		15	16		113	1926		15	1711	
v/s Ratio Prot	c0.12	0.01		c0.00	0.00		c0.04	0.10		0.00	c0.60	
v/s Ratio Perm												
v/c Ratio	0.55	0.06		0.13	0.12		0.70	0.19		0.07	1.21	
Uniform Delay, d1	30.9	27.4		44.3	44.3		41.3	10.3		44.3	22.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	0.1		4.0	3.5		17.2	0.0		1.9	101.0	
Delay (s)	32.5	27.5		48.3	47.8		58.5	10.3		46.2	123.9	
Level of Service	C	C		D	D		E	B		D	F	
Approach Delay (s)		31.1			48.1			18.9			123.8	
Approach LOS		C			D			B			F	
Intersection Summary												
HCM 2000 Control Delay		97.2										
HCM 2000 Volume to Capacity ratio		0.97										
Actuated Cycle Length (s)		90.1										
Intersection Capacity Utilization		84.1%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2020 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	56	1618	57	0	357	34	13	39	4	23	26	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.99			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5059			5019		1770	1836			1760	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.17	
Satd. Flow (perm)	1770	5059			5019		1311	1836			299	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	64	1839	65	0	380	36	19	56	6	27	31	24
RTOR Reduction (vph)	0	2	0	0	6	0	0	2	0	0	8	0
Lane Group Flow (vph)	64	1902	0	0	410	0	19	60	0	0	74	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1913			2038		254	357			49	
v/s Ratio Prot	c0.04	c0.38			c0.08			c0.03				
v/s Ratio Perm							0.01				c0.25	
v/c Ratio	0.33	0.99			0.20		0.07	0.17			1.50	
Uniform Delay, d1	73.8	55.8			34.6		59.3	60.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	19.3			0.2		0.1	0.2			307.4	
Delay (s)	74.8	75.0			34.8		59.4	60.6			382.4	
Level of Service	E	E			C		E	E			F	
Approach Delay (s)		75.0			34.8			60.3			382.4	
Approach LOS		E			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		77.9										
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		70.9%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2020 Alt 1/2/3

20: SR-75 (Silver Strand Blvd) & Delaware St

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑
Volume (vph)	0	1648	0	555	394	37	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3494							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3494							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1852	0	590	419	39	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1852	0	590	458	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3175							609
v/s Ratio Prot		c0.36		c0.17	c0.13							
v/s Ratio Perm												0.00
v/c Ratio		0.96		0.31	0.14							0.00
Uniform Delay, d1		54.7		21.0	0.9							34.8
Progression Factor		0.30		1.00	1.00							1.00
Incremental Delay, d2		4.4		0.1	0.0							0.0
Delay (s)		21.1		21.1	0.9							34.9
Level of Service		C		C	A							C
Approach Delay (s)		21.1			12.3		0.0				34.9	
Approach LOS		C			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		18.0										B
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		180.0						22.3				
Intersection Capacity Utilization		56.8%										B
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2020 Alt 1/2/3




















21: Dwy/Silver Strand Blvd & Palm Ave

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	4	213	0	0	306	118	0	0	0	418	0	11
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	5	248	0	0	348	134	0	0	0	633	0	17
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	482			248			688	739	248	672	672	415
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	482			248			688	739	248	672	672	415
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	0	100	97
cM capacity (veh/h)	1081			1318			350	344	791	368	376	638
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	252	482	0	650								
Volume Left	5	0	0	633								
Volume Right	0	134	0	17								
cSH	1081	1318	1700	372								
Volume to Capacity	0.00	0.00	0.00	1.75								
Queue Length 95th (ft)	0	0	0	1017								
Control Delay (s)	0.2	0.0	0.0	371.3								
Lane LOS	A		A	F								
Approach Delay (s)	0.2	0.0	0.0	371.3								
Approach LOS			A	F								
Intersection Summary												
Average Delay		174.4										
Intersection Capacity Utilization		53.8%								A		
Analysis Period (min)		15										












NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop			Stop			Stop			Stop		
Volume (vph)	7	608	12	85	398	24	14	38	68	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	779	15	96	447	27	25	67	119	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	795	96	474	211	161						
Volume Left (vph)	9	0	96	0	25	61						
Volume Right (vph)	0	15	0	27	119	28						
Hadj (s)	0.53	0.02	0.53	-0.01	-0.28	0.00						
Departure Headway (s)	7.6	7.1	7.5	7.0	7.4	7.9						
Degree Utilization, x	0.02	1.57	0.20	0.92	0.43	0.35						
Capacity (veh/h)	455	509	472	505	455	429						
Control Delay (s)	9.6	283.5	11.2	46.7	15.9	15.1						
Approach Delay (s)	280.5		40.8		15.9	15.1						
Approach LOS	F		E		C	C						
Intersection Summary												
Delay			145.8									
Level of Service			F									
Intersection Capacity Utilization			57.2%		ICU Level of Service		B					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			 			
Volume (veh/h)	152	658	514	39	52	160
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	157	678	598	45	61	188
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	643				1612	322
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	643				1612	322
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	83				23	72
cM capacity (veh/h)	938				79	674
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	157	678	398	245	249	
Volume Left	157	0	0	0	61	
Volume Right	0	0	0	45	188	
cSH	938	1700	1700	1700	237	
Volume to Capacity	0.17	0.40	0.23	0.14	1.05	
Queue Length 95th (ft)	15	0	0	0	262	
Control Delay (s)	9.6	0.0	0.0	0.0	117.6	
Lane LOS	A				F	
Approach Delay (s)	1.8		0.0		117.6	
Approach LOS					F	
Intersection Summary						
Average Delay			17.8			
Intersection Capacity Utilization			54.0%		ICU Level of Service	
Analysis Period (min)			15		A	

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↲	↰	↱	↲	↰	↱	↲	↰	↱	↲
Volume (vph)	28	663	32	31	516	3	55	19	22	12	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3515		1770	3536			1754			1841	1583
Flt Permitted	0.44	1.00		0.33	1.00			0.78			0.89	1.00
Satd. Flow (perm)	815	3515		620	3536			1415			1663	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	789	38	34	567	3	67	23	27	16	53	39
RTOR Reduction (vph)	0	5	0	0	0	0	0	22	0	0	0	32
Lane Group Flow (vph)	33	822	0	34	570	0	0	95	0	0	69	7
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	18.4	18.4		18.4	18.4			6.5			6.5	6.5
Effective Green, g (s)	18.4	18.4		18.4	18.4			6.5			6.5	6.5
Actuated g/C Ratio	0.54	0.54		0.54	0.54			0.19			0.19	0.19
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	439	1896		334	1907			269			316	301
v/s Ratio Prot		c0.23			0.16							
v/s Ratio Perm	0.04			0.05			c0.07			0.04	0.00	
v/c Ratio	0.08	0.43		0.10	0.30		0.35			0.22	0.02	
Uniform Delay, d1	3.8	4.7		3.8	4.3		12.0			11.7	11.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00			1.00	1.00	
Incremental Delay, d2	0.1	0.2		0.1	0.1		0.8			0.3	0.0	
Delay (s)	3.8	4.9		4.0	4.4		12.8			12.0	11.3	
Level of Service	A	A		A	A		B			B	B	
Approach Delay (s)		4.8			4.4		12.8			11.7		
Approach LOS		A			A		B			B		
Intersection Summary												
HCM 2000 Control Delay		5.7			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.41										
Actuated Cycle Length (s)		34.1			Sum of lost time (s)		9.2					
Intersection Capacity Utilization		45.5%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↱	↲	↰	↱	↲
Volume (veh/h)	1274	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1554	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			1563		1554	1554
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1563		1554	1554
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		93	98
cM capacity (veh/h)			422		125	139
Direction, Lane #						
Volume Total	1554	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	128			
Volume to Capacity	0.91	0.01	0.09			
Queue Length 95th (ft)	0	0	8			
Control Delay (s)	0.0	0.0	36.0			
Lane LOS			E			
Approach Delay (s)	0.0		36.0			
Approach LOS			E			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			77.1%		ICU Level of Service	D
Analysis Period (min)			15			









NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	41	2172	126	58	835	131	98	90	62	173	79	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Flt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5043		1770	4982			3342			3386	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5043		1770	4982			3342			3386	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	44	2311	134	59	843	132	108	99	68	194	89	28
RTOR Reduction (vph)	0	3	0	0	11	0	0	18	0	0	4	0
Lane Group Flow (vph)	44	2442	0	59	964	0	0	257	0	0	307	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2120		157	1984			649			658	
v/s Ratio Prot	0.02	c0.48		c0.03	0.19			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.22	1.15		0.38	0.49			0.40			0.47	
Uniform Delay, d1	72.9	52.1		77.3	40.4			63.3			64.2	
Progression Factor	1.00	1.00		1.23	0.77			1.00			1.00	
Incremental Delay, d2	0.6	74.2		1.4	0.8			0.4			0.5	
Delay (s)	73.5	126.3		96.8	32.0			63.7			64.8	
Level of Service	E	F		F	C			E			E	
Approach Delay (s)		125.4			35.7			63.7			64.8	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		94.1			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		118.3%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	2455	57	48	1241	55	21	11	35	63	13	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5068		1770	5053			1704		1770	1719	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.62	1.00	
Satd. Flow (perm)	1770	5068		1770	5053			1554		1155	1719	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2505	58	49	1279	57	25	13	42	74	15	16
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	14	0
Lane Group Flow (vph)	20	2562	0	49	1334	0	0	57	0	74	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Effective Green, g (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3567		157	3669			190		141	211	
v/s Ratio Prot	0.01	c0.51		c0.03	c0.26						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.72		0.31	0.36			0.30		0.52	0.08	
Uniform Delay, d1	79.3	16.0		76.8	9.2			71.9		74.0	69.9	
Progression Factor	1.47	0.32		1.56	0.29			1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		0.9	0.2			0.9		3.5	0.2	
Delay (s)	116.4	5.2		120.6	2.9			72.8		77.5	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		6.1			7.1			72.8			75.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		9.5			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		68.4%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	2173	200	157	1314	81	130	40	127	154	44	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5021		1770	5085	1583		1794	1583		3371	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5021		1770	5085	1583		1794	1583		3371	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	28	2312	213	162	1355	84	141	43	138	208	59	27
RTOR Reduction (vph)	0	6	0	0	0	37	0	0	114	0	4	0
Lane Group Flow (vph)	28	2519	0	162	1355	47	0	184	24	0	290	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2223		192	2364	736		305	269		574	
v/s Ratio Prot	0.02	c0.50		c0.09	c0.27			c0.10			c0.09	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.18	1.13		0.84	0.57	0.06		0.60	0.09		0.50	
Uniform Delay, d1	75.9	50.1		78.7	35.1	26.6		69.0	62.9		67.8	
Progression Factor	0.95	1.01		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.4	64.4		27.2	1.0	0.2		8.6	0.6		3.2	
Delay (s)	72.5	114.8		105.9	36.1	26.7		77.6	63.5		70.9	
Level of Service	E	F		F	D	C		E	E		E	
Approach Delay (s)		114.4			42.7			71.5			70.9	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		84.7			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		110.4%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												












NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	2464	50	171	1614	16	39	8	81	23	11	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1770	5070		1770	5078			1678			1756	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.84	
Satd. Flow (perm)	1770	5070		1770	5078			1510			1516	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	10	2738	56	180	1699	17	46	9	95	28	14	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	76	0	0	11	0
Lane Group Flow (vph)	10	2792	0	180	1715	0	0	74	0	0	45	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.4		11.2	50.8			17.3			17.3	
Effective Green, g (s)	0.8	40.4		11.2	50.8			17.3			17.3	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2421		234	3049			308			310	
v/s Ratio Prot	0.01	c0.55		c0.10	0.34							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.62	1.15		0.77	0.56			0.24			0.14	
Uniform Delay, d1	41.8	22.1		35.5	10.2			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	57.6	74.2		14.1	0.2			0.4			0.2	
Delay (s)	99.3	96.3		49.5	10.4			28.6			27.8	
Level of Service	F	F		D	B			C			C	
Approach Delay (s)		96.3			14.1			28.6			27.8	
Approach LOS		F			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		61.7			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.86										
Actuated Cycle Length (s)		84.6			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		79.5%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	190	2403	27	330	1621	558	66	178	536	591	240	229
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5077		1770	5085	1583	1770	1631	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5077		1770	5085	1583	1770	1631	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	200	2529	28	355	1743	600	70	189	570	642	261	249
RTOR Reduction (vph)	0	1	0	0	0	86	0	26	275	0	2	129
Lane Group Flow (vph)	200	2556	0	355	1743	514	70	368	90	642	284	95
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.4	36.4		45.0	70.0	70.0	8.6	37.5	37.5	11.8	40.7	40.7
Effective Green, g (s)	11.4	36.4		45.0	70.0	70.0	8.6	37.5	37.5	11.8	40.7	40.7
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	256	1211		521	2332	726	99	400	369	265	465	401
v/s Ratio Prot	0.06	c0.50		c0.20	c0.34		0.04	c0.23		c0.19	c0.16	
v/s Ratio Perm						0.32			0.06			0.06
v/c Ratio	0.78	2.11		0.68	0.75	0.71	0.71	0.92	0.24	2.42	0.61	0.24
Uniform Delay, d1	69.4	58.1		47.5	34.0	33.1	70.8	56.1	46.2	70.4	49.0	43.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.3	502.7		3.7	1.3	3.2	20.5	26.3	0.3	651.6	2.4	0.3
Delay (s)	83.7	560.8		51.1	35.4	36.3	91.3	82.4	46.5	722.0	51.4	44.1
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		526.2			37.6			67.3			423.7	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		281.9			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.32										
Actuated Cycle Length (s)		152.6			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		134.3%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	↑↑
Volume (vph)	0	511	864	0	442	1652
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	574	919	0	486	1815
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	0	574	919	0	486	1811
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.16	c0.26		0.27	c0.65
v/s Ratio Perm						
v/c Ratio		0.32	1.07		0.73	1.02
Uniform Delay, d1		11.7	30.3		21.5	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	51.6		4.2	26.5
Delay (s)		11.8	81.9		25.7	41.0
Level of Service		B	F		C	D
Approach Delay (s)		11.8	81.9		37.8	
Approach LOS		B	F		D	
Intersection Summary						
HCM 2000 Control Delay		44.5		HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio		1.11				
Actuated Cycle Length (s)		80.0		Sum of lost time (s)		14.2
Intersection Capacity Utilization		86.6%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	947	0	0	531	252	441	2	107	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1616				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1616				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.25	0.25	0.25	
Adj. Flow (vph)	0	986	0	0	597	283	474	2	115	0	0	0
RTOR Reduction (vph)	0	0	0	0	99	0	0	35	0	0	0	0
Lane Group Flow (vph)	0	986	0	0	781	0	303	253	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.3			19.3		14.6	14.6				
Effective Green, g (s)		19.3			19.3		14.6	14.6				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1630			1551		585	563				
v/s Ratio Prot		0.28			0.23							
v/s Ratio Perm							0.18	0.16				
v/c Ratio		0.60			0.50		0.52	0.45				
Uniform Delay, d1		8.4			7.9		10.9	10.5				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.6			0.3		0.8	0.6				
Delay (s)		9.1			8.2		11.6	11.1				
Level of Service		A			A		B	B				
Approach Delay (s)		9.1			8.2		11.4			0.0		
Approach LOS		A			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		9.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		41.9			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		48.4%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	82	353	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	89	512	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	618	512	512			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	618	512	512			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	97	99			
cM capacity (veh/h)	449	562	1054			
Direction, Lane #						
Volume Total	16	98	512			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	562	1054	1700			
Volume to Capacity	0.03	0.01	0.30			
Queue Length 95th (ft)	2	1	0			
Control Delay (s)	11.6	0.8	0.0			
Lane LOS	B	A				
Approach Delay (s)	11.6	0.8	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		28.6%		ICU Level of Service		
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1407	34	0	3860	553	0	0	477	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1695	41	0	4196	601	0	0	596	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4817			1756			3166	6552	626	5101	6272	1739
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4817			1756			3166	6552	626	5101	6272	1739
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	84
cM capacity (veh/h)	20			347			3	0	1356	0	0	74
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	678	678	380	1678	1678	1440	596	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	601	596	12				
cSH	1700	1700	1700	1700	1700	1700	1356	74				
Volume to Capacity	0.40	0.40	0.22	0.99	0.99	0.85	0.44	0.16				
Queue Length 95th (ft)	0	0	0	0	0	0	57	14				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	63.2				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	63.2				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				102.0%			ICU Level of Service		G			
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

	→	↘	↙	←	↖	↗	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑↘			↑↑↑↑		↗	
Volume (veh/h)	1268	202	0	3760	0	232	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1441	230	0	4178	0	252	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1690		2988	635	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1690		2988	635	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	38	
cM capacity (veh/h)			367		10	407	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	576	576	518	1393	1393	1393	252
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	230	0	0	0	252
cSH	1700	1700	1700	1700	1700	1700	407
Volume to Capacity	0.34	0.34	0.30	0.82	0.82	0.82	0.62
Queue Length 95th (ft)	0	0	0	0	0	0	101
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.2
Lane LOS							D
Approach Delay (s)	0.0				0.0	27.2	
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			87.5%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1622	1946	343	107	102	0	0	278	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4639		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4639		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1744	2092	369	145	138	0	0	320	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1029	3168	0	145	138	0	0	332	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3211		186	872			397	
v/s Ratio Prot				0.68	c0.68		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.98	0.99		0.78	0.16			0.84	
Uniform Delay, d1				27.7	28.3		82.6	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				22.1	12.8		18.4	0.1			14.2	
Delay (s)				49.8	41.1		101.0	56.1			96.5	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			43.2			79.1			96.5	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		49.0					HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio		0.94										
Actuated Cycle Length (s)		189.5					Sum of lost time (s)			16.8		
Intersection Capacity Utilization		201.0%					ICU Level of Service			H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2021 Alt 1/2/3
Timing Plan: AM PEAK







Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	584	86	0	0	0	0	199	206	451	1505	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3256	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3256	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	635	93	0	0	0	0	231	224	490	1568	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	19	48	0	0	0
Lane Group Flow (vph)	0	636	64	0	0	0	0	295	93	490	1568	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.4	62.4	35.2	100.4	
Effective Green, g (s)		60.0	60.0					62.4	62.4	35.2	100.4	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.20	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1773	552					1181	522	702	2065	
v/s Ratio Prot								0.09		0.14	c0.44	
v/s Ratio Perm		0.13	0.04						0.06			
v/c Ratio		0.36	0.12					0.25	0.18	0.70	0.76	
Uniform Delay, d1		41.7	38.0					38.4	37.3	63.5	26.8	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.7	
Delay (s)		41.8	38.1					38.5	37.5	66.5	28.4	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.3			0.0			38.2			37.5	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.5					HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		172.0					Sum of lost time (s)			14.4		
Intersection Capacity Utilization		201.0%					ICU Level of Service			H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2021 Alt 1/2/3

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Timing Plan: AM PEAK













Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	219	6	1164	608	0	1210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3316			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3316			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	255	7	1252	654	0	1274
RTOR Reduction (vph)	2	0	52	0	0	0
Lane Group Flow (vph)	260	0	1854	0	0	1274
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	16.9		43.5			43.5
Effective Green, g (s)	16.9		43.5			43.5
Actuated g/C Ratio	0.24		0.63			0.63
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	387		2075			2104
v/s Ratio Prot	c0.16		c0.56			0.38
v/s Ratio Perm						
v/c Ratio	0.67		0.89			0.61
Uniform Delay, d1	23.8		11.0			7.8
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	4.6		5.4			0.5
Delay (s)	28.4		16.4			8.3
Level of Service	C		B			A
Approach Delay (s)	28.4		16.4			8.3
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			14.3		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.87			
Actuated Cycle Length (s)			69.5		Sum of lost time (s)	12.1
Intersection Capacity Utilization			78.1%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2021 Alt 1/2/3

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	2	10	8	0	5	19	1380	26	40	1353	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1713		1770	3529		1770	3526	
Frt Permitted	0.74	0.78	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1310	1378	1583		1513		1770	3529		1770	3526	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	55	2	12	16	0	10	23	1643	31	43	1471	39
RTOR Reduction (vph)	0	0	10	0	22	0	0	1	0	0	1	0
Lane Group Flow (vph)	29	28	2	0	4	0	23	1673	0	43	1509	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.4	15.4	15.4		15.4		2.7	64.3		4.0	65.6	
Effective Green, g (s)	15.4	15.4	15.4		15.4		2.7	64.3		4.0	65.6	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	206	216	249		238		48	2320		72	2365	
v/s Ratio Prot							0.01	c0.47		c0.02	0.43	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.14	0.13	0.01		0.02		0.48	0.72		0.60	0.64	
Uniform Delay, d1	35.5	35.4	34.8		34.8		46.9	10.9		46.1	9.3	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		7.4	1.1		12.6	0.6	
Delay (s)	35.8	35.7	34.8		34.8		54.2	12.0		58.7	9.8	
Level of Service	D	D	C		C		D	B		E	A	
Approach Delay (s)		35.6			34.8			12.6			11.2	
Approach LOS		D			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.6		HCM 2000 Level of Service					B		
HCM 2000 Volume to Capacity ratio			0.61									
Actuated Cycle Length (s)			97.8		Sum of lost time (s)					14.1		
Intersection Capacity Utilization			59.0%		ICU Level of Service					B		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2021 Alt 1/2/3

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	23	0	1324	8	431	913	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	35	0	1455	9	440	932	0
RTOR Reduction (vph)	0	0	0	0	32	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1455	4	440	932	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.41		c0.25	0.26	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.88	0.01	0.72	0.31	
Uniform Delay, d1					60.6			34.6	20.4	41.4	2.4	
Progression Factor					1.00			0.36	1.00	1.00	1.00	
Incremental Delay, d2					0.1			4.4	0.0	4.2	0.3	
Delay (s)					60.6			17.0	20.5	45.6	2.7	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			17.0			16.5	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.3			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		80.7%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2021 Alt 1/2/3

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	31	50	14	1	65	130	138	1160	5	294	345	314
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3240	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3240	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	48	77	22	1	74	148	153	1289	6	338	397	361
RTOR Reduction (vph)	0	0	20	0	0	125	0	0	3	0	114	0
Lane Group Flow (vph)	48	77	2	0	75	23	153	1289	3	338	644	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1063	
v/s Ratio Prot	0.03	c0.04			c0.04		0.09	c0.36		c0.19	0.20	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.39	0.60	0.02		0.25	0.10	0.28	0.82	0.00	0.99	0.61	
Uniform Delay, d1	64.6	65.6	62.9		53.5	52.1	37.7	35.1	22.3	58.4	40.8	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.92	
Incremental Delay, d2	2.1	7.7	0.1		0.5	0.2	0.3	4.8	0.0	45.7	2.5	
Delay (s)	66.7	73.3	63.0		53.9	52.3	38.0	39.9	22.3	101.6	40.2	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		69.6			52.9			39.6			59.1	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		49.5			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		86.4%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰	↱	↰	↱
Volume (veh/h)	41	200	4	90	329	9
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	48	235	5	112	358	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	786	61			118	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	786	61			118	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	82	77			76	
cM capacity (veh/h)	273	1004			1471	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	284	118	367			
Volume Left	48	0	358			
Volume Right	235	112	0			
cSH	1210	1700	1471			
Volume to Capacity	0.23	0.07	0.24			
Queue Length 95th (ft)	23	0	24			
Control Delay (s)	11.6	0.0	8.1			
Lane LOS	B		A			
Approach Delay (s)	11.6	0.0	8.1			
Approach LOS	B					
Intersection Summary						
Average Delay			8.1			
Intersection Capacity Utilization			35.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰	↱	↰	↱
Volume (vph)	44	3	1316	415	0	321
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1753		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1753		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	59	4	1385	437	0	502
RTOR Reduction (vph)	4	0	0	132	0	0
Lane Group Flow (vph)	59	0	1385	305	0	502
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		29.7	29.7		29.7
Effective Green, g (s)	3.0		29.7	29.7		29.7
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	123		2467	1059		2467
v/s Ratio Prot	c0.03		c0.39			0.14
v/s Ratio Perm				0.20		
v/c Ratio	0.48		0.56	0.29		0.20
Uniform Delay, d1	19.1		3.2	2.4		2.3
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	3.0		0.3	0.2		0.0
Delay (s)	22.0		3.5	2.6		2.3
Level of Service	C		A	A		A
Approach Delay (s)	22.0		3.3			2.3
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.6		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.55			
Actuated Cycle Length (s)			42.6		Sum of lost time (s)	9.9
Intersection Capacity Utilization			48.8%		ICU Level of Service	A
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2021 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↑↑
Volume (veh/h)	0	15	2147	5	5	367
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2309	5	7	540
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2596	1157			2314	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2596	1157			2314	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			97	
cM capacity (veh/h)	20	190			213	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1539	775	7	270	270
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	190	1700	1700	213	1700	1700
Volume to Capacity	0.14	0.91	0.46	0.03	0.16	0.16
Queue Length 95th (ft)	12	0	0	3	0	0
Control Delay (s)	27.0	0.0	0.0	22.5	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	27.0	0.0		0.3		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			69.5%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2021 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	17	87	2060	12	38	328
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	107	2215	13	55	475
RTOR Reduction (vph)	0	4	0	1	0	0
Lane Group Flow (vph)	21	103	2215	12	55	475
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.8	25.9	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.8	20.8	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	261	307	2253	1008	82	2709
v/s Ratio Prot	0.01	c0.07	c0.63		c0.03	0.13
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.34	0.98	0.01	0.67	0.18
Uniform Delay, d1	39.4	37.2	18.9	7.1	50.2	3.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	15.1	0.0	19.4	0.0
Delay (s)	39.5	37.8	34.0	7.1	69.7	3.4
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.1		33.8			10.3
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay			29.7		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.85			
Actuated Cycle Length (s)			107.1		Sum of lost time (s)	18.1
Intersection Capacity Utilization			73.2%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↑↑			↑↑
Volume (veh/h)	0	32	2038	26	0	344
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	52	2145	27	0	465
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2391	1086			2173	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2391	1086			2173	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	76			100	
cM capacity (veh/h)	28	211			242	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	52	1430	742	232	232	
Volume Left	0	0	0	0	0	
Volume Right	52	0	27	0	0	
cSH	211	1700	1700	1700	1700	
Volume to Capacity	0.24	0.84	0.44	0.14	0.14	
Queue Length 95th (ft)	23	0	0	0	0	
Control Delay (s)	27.4	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	27.4	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			67.2%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑	↑↑	↑	↑	↑↑
Volume (vph)	10	6	2064	32	15	321
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	16	10	2150	33	19	396
RTOR Reduction (vph)	0	4	0	7	0	0
Lane Group Flow (vph)	16	6	2150	26	19	396
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.7	59.7	2.0	69.2
Effective Green, g (s)	1.4	3.4	59.7	59.7	2.0	69.2
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2736	1224	45	3172
v/s Ratio Prot	c0.01	0.00	c0.61		c0.01	0.11
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.50	0.09	0.79	0.02	0.42	0.12
Uniform Delay, d1	37.6	35.4	5.1	2.0	37.0	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.8	0.6	1.5	0.0	6.3	0.0
Delay (s)	49.3	36.0	6.6	2.0	43.3	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	44.2		6.5			2.4
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay			6.3		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.77			
Actuated Cycle Length (s)			77.2		Sum of lost time (s)	14.1
Intersection Capacity Utilization			69.9%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2021 Alt 1/2/3

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	45	1	0	44	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	83	2	0	70	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	85	70	3					
Volume Left (vph)	0	0	83	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	833	1121	815	841	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.2%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2021 Alt 1/2/3

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	36	0	0	32	226	3	1868	50	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1357	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	48	0	0	44	314	3	1987	53	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	22	0	0	0	0
Lane Group Flow (vph)	3	48	0	0	44	258	3	1987	31	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.5	16.5			16.5	16.5	47.7	43.6	43.6			
Effective Green, g (s)	16.5	16.5			16.5	16.5	47.7	43.6	43.6			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	304	418			418	355	1148	2099	939			
v/s Ratio Prot		0.03			0.02		0.00	c0.56				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.11			0.11	0.73	0.00	0.95	0.03			
Uniform Delay, d1	22.2	22.7			22.6	26.4	4.5	13.9	6.2			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	7.2	0.0	9.8	0.0			
Delay (s)	22.2	22.8			22.7	33.7	4.5	23.6	6.2			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.8			32.3			23.2			0.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay		24.5						HCM 2000 Level of Service		C		
HCM 2000 Volume to Capacity ratio		0.89										
Actuated Cycle Length (s)		73.5				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		85.2%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON Year 2021 Alt 1/2/3

Timing Plan: AM PEAK






















							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	450	1667	0	290	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	469	1736	0	367	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None		None		
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2173	184	367		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2173	184	367		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	61		0		
cM capacity (veh/h)	24	827	1188		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	469	868	868	245	122	0
Volume Left	0	469	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1188	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.39	0.51	0.51	0.14	0.07	0.00
Queue Length 95th (ft)	0	48	0	0	0	0	0
Control Delay (s)	0.0	10.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	A					
Approach Delay (s)	0.0	2.1			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay		1.8					
Intersection Capacity Utilization		56.1%		ICU Level of Service		B	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON Year 2021 Alt 1/2/3

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	405	0	39	2	1	2	26	1985	0	0	133	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3255	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3255	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	460	0	44	6	3	6	27	2089	0	0	193	223
RTOR Reduction (vph)	0	31	0	0	6	0	0	0	0	0	126	0
Lane Group Flow (vph)	460	13	0	6	3	0	27	2089	0	0	290	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	26.2	26.2		1.7	1.7		1.9	43.4			37.3	
Effective Green, g (s)	26.2	26.2		1.7	1.7		1.9	43.4			37.3	
Actuated g/C Ratio	0.30	0.30		0.02	0.02		0.02	0.50			0.43	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	539	482		34	33		39	1785			1411	
v/s Ratio Prot	c0.26	0.01		c0.00	0.00		0.02	c0.59			0.09	
v/s Ratio Perm												
v/c Ratio	0.85	0.03		0.18	0.09		0.69	1.17			0.21	
Uniform Delay, d1	28.1	21.0		41.5	41.4		41.8	21.3			15.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	12.4	0.0		2.5	1.2		41.8	83.0			0.1	
Delay (s)	40.5	21.0		43.9	42.6		83.6	104.3			15.2	
Level of Service	D	C		D	D		F	F			B	
Approach Delay (s)		38.8			43.2			104.1			15.2	
Approach LOS		D			D			F			B	
Intersection Summary												
HCM 2000 Control Delay		80.9						HCM 2000 Level of Service		F		
HCM 2000 Volume to Capacity ratio		1.09										
Actuated Cycle Length (s)		86.0					Sum of lost time (s)		18.9			
Intersection Capacity Utilization		92.4%					ICU Level of Service		F			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	8	183	14	0	1843	17	38	23	1	19	41	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5030			5078		1770	1853			1732	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.19	
Satd. Flow (perm)	1770	5030			5078		1239	1853			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	9	206	16	0	2025	19	45	27	1	25	53	66
RTOR Reduction (vph)	0	5	0	0	1	0	0	1	0	0	17	0
Lane Group Flow (vph)	9	217	0	0	2043	0	45	27	0	0	127	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2062		240	360			53	
v/s Ratio Prot	c0.01	0.04			c0.40			0.01				
v/s Ratio Perm							c0.04				c0.39	
v/c Ratio	0.05	0.11			0.99		0.19	0.08			2.40	
Uniform Delay, d1	71.5	36.4			53.1		60.6	59.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			16.3		0.4	0.1			684.8	
Delay (s)	71.6	36.5			69.4		61.0	59.4			759.8	
Level of Service	E	D			E		E	E			F	
Approach Delay (s)		37.8			69.4			60.4			759.8	
Approach LOS		D			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		106.1			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.95										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		74.4%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	201	0	714	1851	9	0	0	0	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3537							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3537							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	245	0	760	1969	10	0	0	0	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	245	0	760	1979	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3214							609
v/s Ratio Prot		0.05		0.22	c0.56							
v/s Ratio Perm												0.00
v/c Ratio		0.13		0.44	0.62							0.01
Uniform Delay, d1		36.5		28.9	1.7							34.9
Progression Factor		0.43		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.2	0.4							0.0
Delay (s)		15.7		29.1	2.1							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.7			9.6		0.0				35.0	
Approach LOS		B			A		A				C	
Intersection Summary												
HCM 2000 Control Delay		10.2			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		73.1%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

MILCON Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	13	233	0	0	128	538	0	0	0	96	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	15	277	0	0	138	578	0	0	0	105	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	716			277			740	1024	277	735	735	427
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	716			277			740	1024	277	735	735	427
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			100			100	100	100	68	100	99
cM capacity (veh/h)	885			1285			326	231	761	331	341	628
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	293	716	0	110								
Volume Left	15	0	0	105								
Volume Right	0	578	0	4								
cSH	885	1285	1700	337								
Volume to Capacity	0.02	0.00	0.00	0.33								
Queue Length 95th (ft)	1	0	0	35								
Control Delay (s)	0.7	0.0	0.0	20.8								
Lane LOS	A			A								
Approach Delay (s)	0.7	0.0	0.0	20.8								
Approach LOS				A								
Intersection Summary												
Average Delay				2.2								
Intersection Capacity Utilization				52.1%								A
Analysis Period (min)				15								

NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	321	4	26	643	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	373	5	28	691	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	378	28	717	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.03	0.53	0.01	-0.45	-0.14						
Departure Headway (s)	6.6	6.1	6.4	5.8	6.2	7.0						
Degree Utilization, x	0.01	0.64	0.05	1.16	0.32	0.09						
Capacity (veh/h)	536	572	551	623	551	462						
Control Delay (s)	8.5	18.0	8.5	109.2	12.1	10.6						
Approach Delay (s)	17.8		105.4		12.1	10.6						
Approach LOS	C		F		B	B						
Intersection Summary												
Delay				64.8								
Level of Service				F								
Intersection Capacity Utilization				51.5%								A
Analysis Period (min)				15								

MILCON Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

HCM Unsignalized Intersection Capacity Analysis

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	540	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	587	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			591		587	587
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			591		587	587
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			984		472	510
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	587	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	498			
Volume to Capacity	0.35	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.3			
Lane LOS			B			
Approach Delay (s)	0.0		12.3			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			38.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑↑↑	↑	↑	↑	↑	↑	↑	↑
Volume (vph)	21	689	35	23	2312	43	167	37	51	90	46	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5048		1770	5071			3325			3365	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5048		1770	5071			3325			3365	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	820	42	25	2541	47	201	45	61	110	56	29
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	859	0	25	2587	0	0	295	0	0	187	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2235		118	2160			646			654	
v/s Ratio Prot	0.01	c0.17		c0.01	c0.51			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.17	0.38		0.21	1.20			0.46			0.29	
Uniform Delay, d1	76.7	33.7		79.5	51.6			64.1			61.8	
Progression Factor	1.00	1.00		1.13	0.94			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.6	92.2			0.5			0.2	
Delay (s)	77.3	34.2		90.8	140.5			64.6			62.1	
Level of Service	E	C		F	F			E			E	
Approach Delay (s)		35.4			140.0			64.6			62.1	
Approach LOS		D			F			E			E	
Intersection Summary												
HCM 2000 Control Delay			107.3					HCM 2000 Level of Service			F	
HCM 2000 Volume to Capacity ratio			0.75									
Actuated Cycle Length (s)			180.0					Sum of lost time (s)			18.3	
Intersection Capacity Utilization			82.7%					ICU Level of Service			E	
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	
Volume (vph)	2	921	35	20	2487	12	18	4	31	55	11	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5058		1770	5082			1687		1770	1704	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5058		1770	5082			1542		1231	1704	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	1035	39	23	2826	14	25	5	42	79	16	21
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	18	0
Lane Group Flow (vph)	2	1072	0	23	2840	0	0	44	0	79	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3718			257		205	284	
v/s Ratio Prot	0.00	0.21		c0.01	c0.56						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.31		0.19	0.76			0.17		0.39	0.07	
Uniform Delay, d1	86.1	11.2		79.4	14.7			64.3		66.8	63.2	
Progression Factor	1.70	0.26		1.43	0.37			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.2	0.4			0.3		1.2	0.1	
Delay (s)	146.8	3.1		113.9	5.9			64.6		68.0	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.4			6.7			64.6			66.5	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.6			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		81.7%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰	↰	↰
Volume (vph)	3	992	64	96	2338	52	149	19	91	170	36	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.91	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1115	72	116	2817	63	167	21	102	227	48	20
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	84	0	3	0
Lane Group Flow (vph)	3	1183	0	116	2817	33	0	188	18	0	292	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.23		c0.07	c0.55			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.53		0.59	1.04	0.04		0.61	0.06		0.50	
Uniform Delay, d1	86.2	36.5		76.1	42.1	20.2		68.9	62.4		67.5	
Progression Factor	1.22	0.62		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.9		4.7	29.5	0.1		3.6	0.1		0.7	
Delay (s)	105.9	23.5		80.8	71.7	20.3		72.5	62.5		68.2	
Level of Service	F	C		F	E	C		E	E		E	
Approach Delay (s)		23.7			71.0			69.0			68.2	
Approach LOS		C			E			E			E	
Intersection Summary												
HCM 2000 Control Delay		58.9			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		99.1%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	↰
Volume (vph)	14	1260	25	43	2468	12	16	6	49	38	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5071		1770	5082			1670			1723	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.78	
Satd. Flow (perm)	1770	5071		1770	5082			1562			1377	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	15	1370	27	50	2870	14	19	7	58	50	3	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	46	0	0	22	0
Lane Group Flow (vph)	15	1396	0	50	2884	0	0	38	0	0	59	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.8		2.8	39.9			15.1			15.1	
Effective Green, g (s)	0.7	37.8		2.8	39.9			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2684		69	2839			330			291	
v/s Ratio Prot	0.01	0.28		c0.03	c0.57							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.88	0.52		0.72	1.02			0.12			0.20	
Uniform Delay, d1	35.3	10.9		33.9	15.8			22.8			23.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	159.7	0.2		31.2	20.9			0.2			0.3	
Delay (s)	195.0	11.1		65.1	36.7			22.9			23.5	
Level of Service	F	B		E	D			C			C	
Approach Delay (s)		13.0			37.2			22.9			23.5	
Approach LOS		B			D			C			C	
Intersection Summary												
HCM 2000 Control Delay		29.1			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		71.4			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		64.9%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰↰	↰	↰
Volume (vph)	92	1273	30	247	2405	217	78	73	780	238	93	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	107	1480	35	263	2559	231	87	81	867	283	111	92
RTOR Reduction (vph)	0	2	0	0	0	67	0	155	182	0	3	60
Lane Group Flow (vph)	107	1513	0	263	2559	164	87	325	286	283	117	23
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.4	30.1	30.1	10.4	32.1	32.1
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.4	30.1	30.1	10.4	32.1	32.1
Actuated g/C Ratio	0.05	0.30		0.15	0.41	0.41	0.07	0.26	0.26	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	178	1544		274	2073	645	128	403	391	309	486	417
v/s Ratio Prot	0.03	0.30		c0.15	c0.50		0.05	c0.21		c0.08	0.07	
v/s Ratio Perm						0.10			0.19			0.02
v/c Ratio	0.60	0.98		0.96	1.23	0.25	0.68	0.81	0.73	0.92	0.24	0.06
Uniform Delay, d1	53.6	39.8		48.4	34.2	22.6	52.2	40.0	39.0	52.1	32.3	30.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.6	18.1		42.9	109.9	0.2	13.4	11.3	6.9	30.2	0.3	0.1
Delay (s)	59.2	57.8		91.3	144.1	22.8	65.7	51.3	45.9	82.3	32.5	30.6
Level of Service	E	E		F	F	C	E	D	D	F	C	C
Approach Delay (s)		57.9			130.4			50.1			61.2	
Approach LOS		E			F			D			E	
Intersection Summary												
HCM 2000 Control Delay		92.6			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.07										
Actuated Cycle Length (s)		115.5			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		95.5%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2021 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	288	1244	0	157	1628
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	324	1338	0	174	1809
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	324	1338	0	174	1806
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.38		0.10	c0.65
v/s Ratio Perm						
v/c Ratio		0.12	1.15		0.84	1.18
Uniform Delay, d1		2.5	26.8		34.6	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	76.4		25.2	87.6
Delay (s)		2.5	103.2		59.8	105.6
Level of Service		A	F		E	F
Approach Delay (s)		2.5	103.2		101.5	
Approach LOS		A	F		F	
Intersection Summary						
HCM 2000 Control Delay			93.3		HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio			1.25			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			79.6%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)







MILCON Year 2021 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	446	0	0	435	530	912	1	145	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.96				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3248		1681	1637				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3248		1681	1637				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	513	0	0	473	576	991	1	158	0	0	0
RTOR Reduction (vph)	0	0	0	0	368	0	0	25	0	0	0	0
Lane Group Flow (vph)	0	513	0	0	681	0	585	540	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.9			16.9		21.8	21.8				
Effective Green, g (s)		16.9			16.9		21.8	21.8				
Actuated g/C Ratio		0.36			0.36		0.47	0.47				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1280			1175		784	764				
v/s Ratio Prot		0.14			c0.21							
v/s Ratio Perm							c0.35	0.33				
v/c Ratio		0.40			0.58		0.75	0.71				
Uniform Delay, d1		11.1			12.0		10.2	9.9				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		3.9	3.0				
Delay (s)		11.3			12.7		14.1	12.9				
Level of Service		B			B		B	B				
Approach Delay (s)		11.3			12.7		13.5				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					12.8					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.67							
Actuated Cycle Length (s)					46.7					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					72.1%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												













NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	3	4	504	62	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	700	151	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	862	151	151			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	862	151	151			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	324	895	1430			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	706	151			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	895	1430	1700			
Volume to Capacity	0.01	0.00	0.09			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	9.1	0.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.1	0.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			39.7%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	4112	17	0	1816	244	0	0	909	0	0	55
Sign Control	Free	Free			Free			Stop			Stop	
Grade	0%				0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4283	18	0	1872	252	0	0	1010	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2144			4321			5040	6456	1477	3466	6339	790
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2144			4321			5040	6456	1477	3466	6339	790
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	244			32			0	0	1842	1	0	322
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1713	1713	874	749	749	626	1010	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	252	1010	83				
cSH	1700	1700	1700	1700	1700	1700	1842	322				
Volume to Capacity	1.01	1.01	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	88	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3	20.0				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.3	20.0				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				144.7%			ICU Level of Service	H				
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3878	130	0	1853	0	201	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3998	134	0	1930	0	245	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4152		4748	1440	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4152		4748	1440	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			37		1	118	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1599	1599	934	643	643	643	245
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	245
cSH	1700	1700	1700	1700	1700	1700	118
Volume to Capacity	0.94	0.94	0.55	0.38	0.38	0.38	2.08
Queue Length 95th (ft)	0	0	0	0	0	0	510
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	572.8
Lane LOS							F
Approach Delay (s)	0.0			0.0			572.8
Approach LOS							F
Intersection Summary							
Average Delay			22.3				
Intersection Capacity Utilization			98.9%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↖	↑↑↑			↑↑	↗
Volume (vph)	0	0	0	980	635	109	108	252	0	0	861	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3528	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3528	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1032	668	115	111	260	0	0	888	16
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	516	1287	0	111	260	0	0	902	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1432		98	1989			1568	
v/s Ratio Prot				c0.34	0.28		c0.06	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.10	0.98dl		1.13	0.13			0.58	
Uniform Delay, d1				31.1	29.8		42.5	9.3			18.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				70.8	7.9		131.1	0.0			0.5	
Delay (s)				101.9	37.6		173.6	9.3			19.2	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			55.9			58.5			19.2	
Approach LOS		A			E			E			B	
Intersection Summary												
HCM 2000 Control Delay			45.5			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			0.81									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			17.2			
Intersection Capacity Utilization		135.7%				ICU Level of Service			H			
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔↔	
Volume (vph)	7	2111	111	0	0	0	0	360	495	761	1103	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3115	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3115	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2320	122	0	0	0	0	419	576	793	1149	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2328	93	0	0	0	0	678	282	793	1149	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					945	409	865	2022	
v/s Ratio Prot		c0.46						c0.22		c0.23	0.32	
v/s Ratio Perm			0.06						0.21			
v/c Ratio		1.26	0.16					0.72	0.69	0.92	0.57	
Uniform Delay, d1		55.8	37.8					54.3	53.7	63.7	23.8	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		123.5	0.1					2.6	4.8	14.2	0.4	
Delay (s)		179.3	37.9					56.9	58.5	77.9	24.2	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		172.3			0.0			57.4			46.1	
Approach LOS		F			A			E			D	
Intersection Summary												
HCM 2000 Control Delay		105.6									F	
HCM 2000 Volume to Capacity ratio		0.99										
Actuated Cycle Length (s)		175.0							14.4			
Intersection Capacity Utilization		135.7%							H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2021 Alt 1/2/3
Timing Plan: PM PEAK













Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔
Volume (vph)	175	12	970	694	0	1249
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3272			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3272			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	224	15	1090	780	0	1343
RTOR Reduction (vph)	2	0	62	0	0	0
Lane Group Flow (vph)	237	0	1808	0	0	1343
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	296		2472			2540
v/s Ratio Prot	c0.15		c0.55			0.40
v/s Ratio Perm						
v/c Ratio	0.80		0.73			0.53
Uniform Delay, d1	62.2		10.7			8.0
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	14.4		2.0			0.8
Delay (s)	76.6		12.6			8.7
Level of Service	E		B			A
Approach Delay (s)	76.6		12.6			8.7
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay		15.5				B
HCM 2000 Volume to Capacity ratio		0.76				
Actuated Cycle Length (s)		160.0				12.1
Intersection Capacity Utilization		82.5%				E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON Year 2021 Alt 1/2/3

Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	145	10	29	26	10	25	23	1582	49	68	1475	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1724		1770	3523		1770	3489	
Flt Permitted	0.68	0.68	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1201	1203	1583		1460		1770	3523		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	186	13	37	41	16	39	25	1701	53	74	1603	166
RTOR Reduction (vph)	0	0	31	0	22	0	0	1	0	0	2	0
Lane Group Flow (vph)	99	100	6	0	74	0	25	1753	0	74	1767	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4		4							
Actuated Green, G (s)	19.1	19.1	19.1		19.1		3.1	71.9		8.1	76.9	
Effective Green, g (s)	19.1	19.1	19.1		19.1		3.1	71.9		8.1	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	201	201	265		244		48	2223		125	2355	
v/s Ratio Prot							0.01	c0.50		c0.04	0.51	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.49	0.50	0.02		0.30		0.52	0.79		0.59	0.75	
Uniform Delay, d1	43.0	43.0	39.6		41.6		54.7	15.4		51.3	12.2	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.9	1.9	0.0		0.7		9.8	1.9		7.3	1.4	
Delay (s)	44.9	45.0	39.6		42.2		64.5	17.4		58.6	13.6	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		44.1			42.2			18.0			15.4	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		18.9			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		113.9			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		75.6%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON Year 2021 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	8	0	146	0	1386	0	32	1615	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	12	0	212	0	1474	0	34	1737	0
RTOR Reduction (vph)	0	0	0	0	172	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	52	0	0	1474	0	34	1737	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			45.1		1.7	51.0	
Effective Green, g (s)					14.1			45.1		1.7	51.0	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					303			2122		40	2400	
v/s Ratio Prot					c0.03			0.42		0.02	c0.49	
v/s Ratio Perm												
v/c Ratio					0.17			0.69		0.85	0.72	
Uniform Delay, d1					25.6			10.3		36.6	7.6	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			1.0		84.3	1.1	
Delay (s)					25.9			11.3		121.0	8.8	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			25.9			11.3			10.9	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay		12.1			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		75.2			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		62.5%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON Year 2021 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	295	50	120	6	70	425	28	677	2	140	1436	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1515		1855	1510	1770	3539	1344	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1515		1855	1510	1770	3539	1344	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	388	66	158	7	76	462	31	744	2	149	1528	70
RTOR Reduction (vph)	0	0	128	0	0	205	0	0	1	0	2	0
Lane Group Flow (vph)	388	66	30	0	83	257	31	744	1	149	1596	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.7	27.7	27.7		26.2	26.2	4.0	56.3	56.3	17.3	69.6	
Effective Green, g (s)	27.7	27.7	27.7		26.2	26.2	4.0	56.3	56.3	17.3	69.6	
Actuated g/C Ratio	0.19	0.19	0.19		0.18	0.18	0.03	0.38	0.38	0.12	0.47	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	333	351	285		330	269	48	1356	515	208	1663	
v/s Ratio Prot	c0.22	0.04			0.04		0.02	0.21		c0.08	c0.45	
v/s Ratio Perm			0.02			c0.17		0.00				
v/c Ratio	1.17	0.19	0.10		0.25	0.95	0.65	0.55	0.00	0.72	0.96	
Uniform Delay, d1	59.6	50.1	49.3		51.9	59.8	70.7	35.4	28.0	62.4	37.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	102.1	0.3	0.2		0.4	42.1	26.1	1.6	0.0	11.1	14.4	
Delay (s)	161.7	50.4	49.5		52.3	101.8	96.8	37.0	28.0	73.6	51.7	
Level of Service	F	D	D		D	F	F	D	C	E	D	
Approach Delay (s)		120.7			94.3			39.3			53.5	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay		67.7								E		
HCM 2000 Volume to Capacity ratio		1.00										
Actuated Cycle Length (s)		146.9				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		81.4%				ICU Level of Service		D				
Analysis Period (min)		15										

c Critical Lane Group

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON Year 2021 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	321	499	3	53	181	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	357	554	4	75	206	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	456	42			79	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	456	42			79	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	27	46			86	
cM capacity (veh/h)	486	1029			1519	
Direction, Lane #						
Volume Total	911	79	209			
Volume Left	357	0	206			
Volume Right	554	75	0			
cSH	979	1700	1519			
Volume to Capacity	0.93	0.05	0.14			
Queue Length 95th (ft)	368	0	12			
Control Delay (s)	35.3	0.0	7.6			
Lane LOS	E		A			
Approach Delay (s)	35.3	0.0	7.6			
Approach LOS	E					
Intersection Summary						
Average Delay		28.2				
Intersection Capacity Utilization		41.3%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2021 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	324	6	713	57	0	1565
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	410	8	792	63	0	1758
RTOR Reduction (vph)	1	0	0	36	0	0
Lane Group Flow (vph)	417	0	792	27	0	1758
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.24		0.22			c0.50
v/s Ratio Perm				0.02		
v/c Ratio	0.50		0.52	0.04		1.16
Uniform Delay, d1	18.9		22.0	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.5		0.3	0.0		78.3
Delay (s)	19.3		22.3	17.4		108.3
Level of Service	B		C	B		F
Approach Delay (s)	19.3		22.0			108.3
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay			71.7		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			0.81			
Actuated Cycle Length (s)			105.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			93.2%		ICU Level of Service	F
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2021 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Volume (veh/h)	4	6	580	3	15	1503
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	674	3	16	1652
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1535	339			678	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1535	339			678	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	98			98	
cM capacity (veh/h)	105	657			910	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	20	450	228	16	826	826
Volume Left	8	0	0	16	0	0
Volume Right	12	0	3	0	0	0
cSH	212	1700	1700	910	1700	1700
Volume to Capacity	0.09	0.26	0.13	0.02	0.49	0.49
Queue Length 95th (ft)	8	0	0	1	0	0
Control Delay (s)	23.8	0.0	0.0	9.0	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	23.8	0.0		0.1		
Approach LOS	C					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			51.5%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	30	57	525	12	103	1405
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	33	62	597	14	113	1544
RTOR Reduction (vph)	0	46	0	8	0	0
Lane Group Flow (vph)	33	16	597	6	113	1544
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.3	21.6	27.9	27.9	7.2	43.9
Effective Green, g (s)	9.3	16.5	27.9	27.9	7.2	43.9
Actuated g/C Ratio	0.15	0.26	0.45	0.45	0.12	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	263	417	1579	706	203	2485
v/s Ratio Prot	c0.02	0.01	0.17		0.06	c0.44
v/s Ratio Perm				0.00		
v/c Ratio	0.13	0.04	0.38	0.01	0.56	0.62
Uniform Delay, d1	23.1	17.1	11.5	9.6	26.1	4.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.2	0.0	3.3	0.5
Delay (s)	23.3	17.1	11.7	9.6	29.4	5.4
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.3		11.6			7.0
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			8.7		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.64			
Actuated Cycle Length (s)			62.5		Sum of lost time (s)	18.1
Intersection Capacity Utilization			50.8%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↩	↕	↕		↕
Volume (veh/h)	0	23	516	18	0	1435
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	31	593	21	0	1560
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1383	307			614	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1383	307			614	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	135	689			962	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	31	395	218	780	780	
Volume Left	0	0	0	0	0	
Volume Right	31	0	21	0	0	
cSH	689	1700	1700	1700	1700	
Volume to Capacity	0.04	0.23	0.13	0.46	0.46	
Queue Length 95th (ft)	3	0	0	0	0	
Control Delay (s)	10.5	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.5	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			43.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

MILCON Year 2021 Alt 1/2/3

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↕	↖	↗	↕
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	30	26	509	18	23	1410
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	42	36	541	19	25	1549
RTOR Reduction (vph)	0	33	0	8	0	0
Lane Group Flow (vph)	42	3	541	11	25	1549
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	27.6	27.6	1.7	36.8
Effective Green, g (s)	2.6	4.3	27.6	27.6	1.7	36.8
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	147	2123	949	65	2831
v/s Ratio Prot	c0.02	0.00	0.15		0.01	c0.44
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.42	0.02	0.25	0.01	0.38	0.55
Uniform Delay, d1	21.0	18.9	4.3	3.7	21.6	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.8	0.1	0.1	0.0	3.8	0.2
Delay (s)	23.8	19.0	4.4	3.7	25.4	1.9
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.6		4.4			2.2
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.5		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.67			
Actuated Cycle Length (s)			46.0		Sum of lost time (s)	14.1
Intersection Capacity Utilization			49.9%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2021 Alt 1/2/3

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Movement	↖	→	↗	↖	→	↗	↖	→	↗	↖
Lane Configurations	↖	↗	↗	↖	↗	↗	↖	↗	↖	↗
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	11	14	85	8	0	179	13	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	11	15	110	10	0	201	15	0	0
Direction, Lane #										
Volume Total (vph)	11	15	121	216						
Volume Left (vph)	0	0	110	0						
Volume Right (vph)	0	15	0	15						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.19						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2021 Alt 1/2/3

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	185	0	0	81	138	12	430	69	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1298	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	11	210	0	0	93	159	13	473	76	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	126	0	41	0	0	0	0
Lane Group Flow (vph)	11	210	0	0	93	33	13	473	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.3	18.3	18.3			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.3	18.3	18.3			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	271	390			390	331	807	1615	722			
v/s Ratio Prot		c0.11			0.05		0.01	c0.13				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.54			0.24	0.10	0.02	0.29	0.05			
Uniform Delay, d1	12.6	14.1			13.2	12.8	6.0	6.8	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.4			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.7	15.6			13.5	12.9	6.0	6.9	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.1			6.8			0.0	
Approach LOS		B			B			A			A	
Intersection Summary												
HCM 2000 Control Delay		10.2			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.37										
Actuated Cycle Length (s)		40.1			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		40.6%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2021 Alt 1/2/3

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: PM PEAK





















							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	450	0	575	0	1578	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	1800	0	653	0	1753	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2080	877	1753		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2080	877	1753		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	0	100		0		
cM capacity (veh/h)	46	292	353		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	1800	0	327	327	1169	584	0
Volume Left	0	0	0	0	0	0	0
Volume Right	1800	0	0	0	0	0	0
cSH	292	1700	1700	1700	1700	1700	1700
Volume to Capacity	6.17	0.00	0.19	0.19	0.69	0.34	0.00
Queue Length 95th (ft)	Err	0	0	0	0	0	0
Control Delay (s)	Err	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F						
Approach Delay (s)	Err	0.0			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay	4278.4						
Intersection Capacity Utilization	78.2%			ICU Level of Service			D
Analysis Period (min)	15						

NBC Coastal Campus

MILCON Year 2021 Alt 1/2/3

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Timing Plan: PM PEAK























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	195	0	68	1	1	0	73	322	12	1	1557	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.85		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3520		1770	3474	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3520		1770	3474	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	260	0	91	2	2	0	80	354	13	1	1730	244
RTOR Reduction (vph)	0	70	0	0	0	0	0	2	0	0	9	0
Lane Group Flow (vph)	260	21	0	2	2	0	80	365	0	1	1965	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	21.4	21.4		0.8	0.8		5.7	49.1		0.8	44.2	
Effective Green, g (s)	21.4	21.4		0.8	0.8		5.7	49.1		0.8	44.2	
Actuated g/C Ratio	0.24	0.24		0.01	0.01		0.06	0.54		0.01	0.49	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	416	372		15	16		110	1899		15	1687	
v/s Ratio Prot	c0.15	0.01		c0.00	0.00		c0.05	0.10		0.00	c0.57	
v/s Ratio Perm												
v/c Ratio	0.62	0.06		0.13	0.12		0.73	0.19		0.07	1.16	
Uniform Delay, d1	31.2	27.0		44.8	44.8		41.9	10.8		44.7	23.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.9	0.1		4.0	3.5		21.1	0.0		1.9	81.1	
Delay (s)	34.1	27.0		48.8	48.3		63.0	10.8		46.6	104.5	
Level of Service	C	C		D	D		E	B		D	F	
Approach Delay (s)		32.3			48.5			20.2			104.5	
Approach LOS		C			D			C			F	
Intersection Summary												
HCM 2000 Control Delay	81.7			HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio	0.96											
Actuated Cycle Length (s)	91.0			Sum of lost time (s)				18.9				
Intersection Capacity Utilization	83.6%			ICU Level of Service				E				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2021 Alt 1/2/3

19: 7th St & SR-75 (Silver Strand Blvd)

Timing Plan: PM PEAK

															
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR			
Lane Configurations															
Volume (vph)	57	1512	58	0	359	34	13	40	4	24	26	20			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6				
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00				
Frt	1.00	0.99			0.99		1.00	0.99			0.96				
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98				
Satd. Flow (prot)	1770	5057			5020		1770	1836			1760				
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.16				
Satd. Flow (perm)	1770	5057			5020		1310	1836			284				
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85			
Adj. Flow (vph)	65	1718	66	0	382	36	19	57	6	28	31	24			
RTOR Reduction (vph)	0	2	0	0	6	0	0	2	0	0	8	0			
Lane Group Flow (vph)	65	1782	0	0	412	0	19	61	0	0	75	0			
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA				
Protected Phases	1	6			2		4				3				
Permitted Phases							4			3					
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0				
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0				
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17				
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6				
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0				
Lane Grp Cap (vph)	196	1913			2038		254	357			47				
v/s Ratio Prot	c0.04	c0.35			c0.08			c0.03							
v/s Ratio Perm							0.01				c0.26				
v/c Ratio	0.33	0.93			0.20		0.07	0.17			1.59				
Uniform Delay, d1	73.8	53.7			34.6		59.3	60.4			75.0				
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00				
Incremental Delay, d2	1.0	9.7			0.2		0.1	0.2			344.4				
Delay (s)	74.8	63.4			34.8		59.4	60.6			419.4				
Level of Service	E	E			C		E	E			F				
Approach Delay (s)		63.8			34.8			60.3			419.4				
Approach LOS		E			C			E			F				
Intersection Summary															
HCM 2000 Control Delay	70.8			HCM 2000 Level of Service				E							
HCM 2000 Volume to Capacity ratio	0.78														
Actuated Cycle Length (s)	180.0			Sum of lost time (s)				22.3							
Intersection Capacity Utilization	68.9%			ICU Level of Service				C							
Analysis Period (min)	15														
c Critical Lane Group															

NBC Coastal Campus

MILCON Year 2021 Alt 1/2/3

20: SR-75 (Silver Strand Blvd) & Delaware St

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑
Volume (vph)	0	1542	0	579	397	38	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3493							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3493							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1733	0	616	422	40	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1733	0	616	462	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3174							609
v/s Ratio Prot		c0.34		c0.18	c0.13							
v/s Ratio Perm												0.00
v/c Ratio		0.90		0.32	0.15							0.00
Uniform Delay, d1		52.8		21.2	0.9							34.8
Progression Factor		0.26		1.00	1.00							1.00
Incremental Delay, d2		2.8		0.1	0.0							0.0
Delay (s)		16.7		21.3	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		16.7			12.6		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		15.2										B
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		180.0						22.3				
Intersection Capacity Utilization		55.5%										B
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2021 Alt 1/2/3



















21: Dwy/Silver Strand Blvd & Palm Ave

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	4	213	0	0	306	147	0	0	0	533	0	12
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	5	248	0	0	348	167	0	0	0	808	0	18
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	515			248			706	772	248	688	688	431
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	515			248			706	772	248	688	688	431
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	0	100	97
cM capacity (veh/h)	1051			1318			339	329	791	359	367	624
Direction, Lane #												
Volume Total	252	515	0	826								
Volume Left	5	0	0	808								
Volume Right	0	167	0	18								
cSH	1051	1318	1700	363								
Volume to Capacity	0.00	0.00	0.00	2.28								
Queue Length 95th (ft)	0	0	0	1571								
Control Delay (s)	0.2	0.0	0.0	607.1								
Lane LOS	A			F								
Approach Delay (s)	0.2	0.0	0.0	607.1								
Approach LOS				F								
Intersection Summary												
Average Delay		314.7										
Intersection Capacity Utilization		62.0%										B
Analysis Period (min)		15										












NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop			Stop				Stop			Stop	
Volume (vph)	7	724	12	85	427	24	14	38	68	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	928	15	96	480	27	25	67	119	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	944	96	507	211	161						
Volume Left (vph)	9	0	96	0	25	61						
Volume Right (vph)	0	15	0	27	119	28						
Hadj (s)	0.53	0.02	0.53	0.00	-0.28	0.00						
Departure Headway (s)	7.7	7.2	7.5	7.0	7.5	8.0						
Degree Utilization, x	0.02	1.89	0.20	0.98	0.44	0.36						
Capacity (veh/h)	460	507	472	507	454	429						
Control Delay (s)	9.7	423.6	11.2	60.8	16.2	15.4						
Approach Delay (s)	419.7		53.0		16.2	15.4						
Approach LOS	F		F		C	C						
Intersection Summary												
Delay			227.2									
Level of Service			F									
Intersection Capacity Utilization			63.3%		ICU Level of Service		B					
Analysis Period (min)			15									









NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			 			
Volume (veh/h)	181	743	536	39	52	167
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	187	766	623	45	61	196
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	669				1785	334
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	669				1785	334
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	80				0	70
cM capacity (veh/h)	917				58	661
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	187	766	416	253	258	
Volume Left	187	0	0	0	61	
Volume Right	0	0	0	45	196	
cSH	917	1700	1700	1700	191	
Volume to Capacity	0.20	0.45	0.24	0.15	1.35	
Queue Length 95th (ft)	19	0	0	0	372	
Control Delay (s)	9.9	0.0	0.0	0.0	236.5	
Lane LOS	A				F	
Approach Delay (s)	1.9		0.0		236.5	
Approach LOS					F	
Intersection Summary						
Average Delay			33.4			
Intersection Capacity Utilization			58.9%		ICU Level of Service	B
Analysis Period (min)			15			





NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	748	33	31	537	1900	56	19	22	12	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3517		1770	3537			1755			1841	1583
Flt Permitted	0.43	1.00		0.29	1.00			0.78			0.89	1.00
Satd. Flow (perm)	797	3517		536	3537			1414			1661	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	890	39	34	590	3	68	23	27	16	53	39
RTOR Reduction (vph)	0	4	0	0	0	0	0	22	0	0	0	32
Lane Group Flow (vph)	33	925	0	34	593	0	0	96	0	0	69	7
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	19.7	19.7		19.7	19.7			6.5			6.5	6.5
Effective Green, g (s)	19.7	19.7		19.7	19.7			6.5			6.5	6.5
Actuated g/C Ratio	0.56	0.56		0.56	0.56			0.18			0.18	0.18
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	443	1957		298	1968			259			304	290
v/s Ratio Prot		c0.26			0.17							
v/s Ratio Perm	0.04			0.06				c0.07			0.04	0.00
v/c Ratio	0.07	0.47		0.11	0.30			0.37			0.23	0.02
Uniform Delay, d1	3.6	4.7		3.7	4.2			12.7			12.3	11.9
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.1			0.9			0.4	0.0
Delay (s)	3.7	4.9		3.9	4.3			13.6			12.7	11.9
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)		4.9			4.2			13.6			12.4	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay		5.7			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.45										
Actuated Cycle Length (s)		35.4			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		45.5%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	1246	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1520	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			1529		1520	1520
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1529		1520	1520
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		93	98
cM capacity (veh/h)			435		131	146
Direction, Lane #						
Volume Total	1520	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	134			
Volume to Capacity	0.89	0.01	0.09			
Queue Length 95th (ft)	0	0	7			
Control Delay (s)	0.0	0.0	34.4			
Lane LOS			D			
Approach Delay (s)	0.0		34.4			
Approach LOS			D			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			75.6%		ICU Level of Service	D
Analysis Period (min)			15			









NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	41	2151	128	58	861	131	99	90	63	174	80	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5042		1770	4985			3341			3386	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5042		1770	4985			3341			3386	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	44	2288	136	59	870	132	109	99	69	196	90	28
RTOR Reduction (vph)	0	3	0	0	11	0	0	18	0	0	4	0
Lane Group Flow (vph)	44	2421	0	59	991	0	0	259	0	0	310	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2120		157	1985			649			658	
v/s Ratio Prot	0.02	c0.48		c0.03	0.20			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.22	1.14		0.38	0.50			0.40			0.47	
Uniform Delay, d1	72.9	52.1		77.3	40.7			63.3			64.3	
Progression Factor	1.00	1.00		1.23	0.80			1.00			1.00	
Incremental Delay, d2	0.6	70.0		1.4	0.9			0.4			0.5	
Delay (s)	73.5	122.2		96.6	33.3			63.7			64.8	
Level of Service	E	F		F	C			E			E	
Approach Delay (s)		121.3			36.8			63.7			64.8	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		91.4			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		118.3%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	2435	57	49	1269	55	21	11	35	64	13	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5068		1770	5053			1704		1770	1719	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.62	1.00	
Satd. Flow (perm)	1770	5068		1770	5053			1554		1156	1719	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2485	58	51	1308	57	25	13	42	75	15	16
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	14	0
Lane Group Flow (vph)	20	2542	0	51	1363	0	0	57	0	75	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3564		157	3666			191		142	212	
v/s Ratio Prot	0.01	c0.50		c0.03	c0.27						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.71		0.32	0.37			0.30		0.53	0.08	
Uniform Delay, d1	79.3	15.9		76.9	9.3			71.8		74.0	69.9	
Progression Factor	1.46	0.31		1.55	0.28			1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		1.0	0.2			0.9		3.5	0.2	
Delay (s)	115.6	5.0		119.9	2.9			72.7		77.5	70.0	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		5.8			7.1			72.7			75.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		9.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		68.0%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	2185	202	158	1344	82	130	40	128	155	45	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5021		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5021		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	29	2324	215	163	1386	85	141	43	139	209	61	27
RTOR Reduction (vph)	0	6	0	0	0	37	0	0	115	0	4	0
Lane Group Flow (vph)	29	2533	0	163	1386	48	0	184	24	0	293	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2223		192	2364	736		305	269		575	
v/s Ratio Prot	0.02	c0.50		c0.09	c0.27			c0.10			c0.09	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.18	1.14		0.85	0.59	0.07		0.60	0.09		0.51	
Uniform Delay, d1	76.0	50.1		78.7	35.4	26.6		69.0	62.9		67.8	
Progression Factor	0.95	1.00		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.4	67.1		27.8	1.1	0.2		8.6	0.6		3.2	
Delay (s)	72.7	117.1		106.6	36.5	26.7		77.6	63.5		71.0	
Level of Service	E	F		F	D	C		E	E		E	
Approach Delay (s)		116.6			43.0			71.5			71.0	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		85.8			HCM 2000 Level of Service					F		
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)					19.3		
Intersection Capacity Utilization		110.6%			ICU Level of Service					H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2021 Alt 1/2/3
Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	2443	50	172	1645	16	39	8	82	23	11	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1770	5070		1770	5078			1677			1756	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.84	
Satd. Flow (perm)	1770	5070		1770	5078			1511			1515	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	11	2714	56	181	1732	17	46	9	96	28	14	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	76	0	0	11	0
Lane Group Flow (vph)	11	2768	0	181	1748	0	0	75	0	0	45	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.4		11.2	50.8			17.3			17.3	
Effective Green, g (s)	0.8	40.4		11.2	50.8			17.3			17.3	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2421		234	3049			308			309	
v/s Ratio Prot	0.01	c0.55		c0.10	0.34							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.69	1.14		0.77	0.57			0.24			0.15	
Uniform Delay, d1	41.8	22.1		35.5	10.3			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	80.1	70.0		14.7	0.3			0.4			0.2	
Delay (s)	121.9	92.1		50.1	10.6			28.6			27.8	
Level of Service	F	F		D	B			C			C	
Approach Delay (s)		92.3			14.3			28.6			27.8	
Approach LOS		F			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		59.0			HCM 2000 Level of Service					E		
HCM 2000 Volume to Capacity ratio		0.86										
Actuated Cycle Length (s)		84.6			Sum of lost time (s)					15.7		
Intersection Capacity Utilization		79.2%			ICU Level of Service					D		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2021 Alt 1/2/3

Timing Plan: PM PEAK















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	191	2381	28	332	1652	562	67	179	540	595	242	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5077		1770	5085	1583	1770	1631	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5077		1770	5085	1583	1770	1631	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	201	2506	29	357	1776	604	71	190	574	647	263	250
RTOR Reduction (vph)	0	1	0	0	0	85	0	26	276	0	2	128
Lane Group Flow (vph)	201	2534	0	357	1776	519	71	371	91	647	286	97
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.4	36.4		45.0	70.0	70.0	8.7	37.8	37.8	11.8	40.9	40.9
Effective Green, g (s)	11.4	36.4		45.0	70.0	70.0	8.7	37.8	37.8	11.8	40.9	40.9
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1208		520	2327	724	100	403	371	264	467	402
v/s Ratio Prot	0.06	c0.50		c0.20	c0.35		0.04	c0.23		c0.19	c0.16	
v/s Ratio Perm					0.33			0.06				0.06
v/c Ratio	0.79	2.10		0.69	0.76	0.72	0.71	0.92	0.24	2.45	0.61	0.24
Uniform Delay, d1	69.6	58.3		47.7	34.5	33.4	70.9	56.1	46.1	70.5	49.1	43.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.8	496.9		3.8	1.5	3.4	20.6	26.3	0.3	664.2	2.4	0.3
Delay (s)	84.4	555.1		51.5	36.1	36.8	91.4	82.4	46.5	734.7	51.4	44.2
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		520.5			38.3			67.3			431.1	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		279.2			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.32										
Actuated Cycle Length (s)		152.9			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		134.8%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2021 Alt 1/2/3

Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		 	 		 	 
Volume (vph)	0	517	873	0	445	1678
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	581	929	0	489	1844
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	581	929	0	489	1841
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.16	c0.26		0.28	c0.66
v/s Ratio Perm						
v/c Ratio		0.33	1.08		0.74	1.04
Uniform Delay, d1		11.7	30.3		21.6	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	55.6		4.3	31.4
Delay (s)		11.8	85.9		25.9	45.9
Level of Service		B	F		C	D
Approach Delay (s)		11.8	85.9		41.7	
Approach LOS		B	F		D	
Intersection Summary						
HCM 2000 Control Delay		47.9		HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio		1.12				
Actuated Cycle Length (s)		80.0		Sum of lost time (s)		14.2
Intersection Capacity Utilization		87.7%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑				
Volume (vph)	0	956	0	0	534	253	448	2	108	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3369		1681	1616				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3369		1681	1616				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	996	0	0	600	284	482	2	116	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	33	0	0	0	0
Lane Group Flow (vph)	0	996	0	0	786	0	308	259	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.4			19.4		14.6	14.6				
Effective Green, g (s)		19.4			19.4		14.6	14.6				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1634			1556		584	561				
v/s Ratio Prot		0.28			0.23							
v/s Ratio Perm							0.18	0.16				
v/c Ratio		0.61			0.51		0.53	0.46				
Uniform Delay, d1		8.5			7.9		10.9	10.6				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.7			0.3		0.9	0.6				
Delay (s)		9.1			8.2		11.8	11.2				
Level of Service		A			A		B	B				
Approach Delay (s)		9.1			8.2		11.5				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		9.4					HCM 2000 Level of Service	A				
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		42.0					Sum of lost time (s)	8.0				
Intersection Capacity Utilization		48.8%					ICU Level of Service	A				
Analysis Period (min)		15										
c Critical Lane Group												
















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	111	469	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	121	680	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	818	680	680			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	818	680	680			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	96	99			
cM capacity (veh/h)	342	451	913			
Direction, Lane #						
Volume Total	16	129	680			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	451	913	1700			
Volume to Capacity	0.04	0.01	0.40			
Queue Length 95th (ft)	3	1	0			
Control Delay (s)	13.3	0.7	0.0			
Lane LOS	B	A				
Approach Delay (s)	13.3	0.7	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		34.7%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St









MILCON Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1410	34	0	3885	553	0	0	477	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1699	41	0	4223	601	0	0	596	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4844			1760			3179	6583	627	5130	6303	1748
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4844			1760			3179	6583	627	5130	6303	1748
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	83
cM capacity (veh/h)	19			345			3	0	1357	0	0	73
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	680	680	381	1689	1689	1446	596	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	601	596	12				
cSH	1700	1700	1700	1700	1700	1700	1357	73				
Volume to Capacity	0.40	0.40	0.22	0.99	0.99	0.85	0.44	0.17				
Queue Length 95th (ft)	0	0	0	0	0	0	57	14				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	64.2				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	64.2				
Approach LOS							A	F				
Intersection Summary												
Average Delay	0.9											
Intersection Capacity Utilization	102.5%			ICU Level of Service					G			
Analysis Period (min)	15											

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1270	202	0	3784	0	232	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1443	230	0	4204	0	252	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1693			2999	636
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1693			2999	636
tC, single (s)			4.1			6.8	6.9
tC, 2 stage (s)							
tF (s)			2.2			3.5	3.3
p0 queue free %			100			100	38
cM capacity (veh/h)			367			10	407
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	577	577	518	1401	1401	1401	252
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	230	0	0	0	252
cSH	1700	1700	1700	1700	1700	1700	407
Volume to Capacity	0.34	0.34	0.30	0.82	0.82	0.82	0.62
Queue Length 95th (ft)	0	0	0	0	0	0	101
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.2
Lane LOS							D
Approach Delay (s)	0.0			0.0			27.2
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			88.0%	ICU Level of Service		E	
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1645	1946	343	108	102	0	0	278	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4639		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4639		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1769	2092	369	146	138	0	0	320	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1044	3178	0	146	138	0	0	332	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3211		186	872			397	
v/s Ratio Prot				c0.69	0.69		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.99	0.99		0.78	0.16			0.84	
Uniform Delay, d1				28.6	28.5		82.7	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				25.5	13.4		19.2	0.1			14.2	
Delay (s)				54.1	41.9		101.9	56.1			96.5	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			44.9			79.6			96.5	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay				50.5			HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio				0.95								
Actuated Cycle Length (s)				189.5			Sum of lost time (s)			16.8		
Intersection Capacity Utilization				201.0%			ICU Level of Service			H		
Analysis Period (min)				15								
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	584	94	0	0	0	0	200	208	452	1528	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3255	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3255	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	635	102	0	0	0	0	233	226	491	1592	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	19	48	0	0	0
Lane Group Flow (vph)	0	636	73	0	0	0	0	298	94	491	1592	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.6	62.6	35.2	100.6	
Effective Green, g (s)		60.0	60.0					62.6	62.6	35.2	100.6	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.20	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1771	551					1183	523	701	2067	
v/s Ratio Prot								0.09		0.14	c0.45	
v/s Ratio Perm		0.13	0.05						0.06			
v/c Ratio		0.36	0.13					0.25	0.18	0.70	0.77	
Uniform Delay, d1		41.8	38.3					38.4	37.3	63.6	27.1	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.2	1.8	
Delay (s)		41.9	38.4					38.5	37.5	66.8	28.9	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.4			0.0			38.2			37.8	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.7					HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		172.2					Sum of lost time (s)			14.4		
Intersection Capacity Utilization		201.0%					ICU Level of Service			H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2022 Alt 1/2/3

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	220	6	1176	612	0	1253
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Flt	1.00		0.95			1.00
Flt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3316			3362
Flt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3316			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	256	7	1265	658	0	1319
RTOR Reduction (vph)	1	0	54	0	0	0
Lane Group Flow (vph)	262	0	1869	0	0	1319
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	18.8		44.5			44.5
Effective Green, g (s)	18.8		44.5			44.5
Actuated g/C Ratio	0.26		0.61			0.61
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	413		2038			2066
v/s Ratio Prot	c0.16		c0.56			0.39
v/s Ratio Perm						
v/c Ratio	0.63		0.92			0.64
Uniform Delay, d1	23.7		12.3			8.8
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	3.2		7.0			0.7
Delay (s)	26.9		19.4			9.5
Level of Service	C		B			A
Approach Delay (s)	26.9		19.4			9.5
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			16.2		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.87			
Actuated Cycle Length (s)			72.4		Sum of lost time (s)	12.1
Intersection Capacity Utilization			78.6%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2022 Alt 1/2/3

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↕	↕	↕	↔	↔	↔
Volume (vph)	48	2	10	8	0	5	19	1394	26	40	1396	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	1.00	
Flt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1713		1770	3529		1770	3526	
Flt Permitted	0.74	0.78	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1310	1372	1583		1512		1770	3529		1770	3526	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	56	2	12	16	0	10	23	1660	31	43	1517	40
RTOR Reduction (vph)	0	0	10	0	22	0	0	1	0	0	1	0
Lane Group Flow (vph)	29	29	2	0	4	0	23	1690	0	43	1556	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.4	15.4	15.4		15.4		2.7	65.1		4.0	66.4	
Effective Green, g (s)	15.4	15.4	15.4		15.4		2.7	65.1		4.0	66.4	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	204	214	247		236		48	2329		71	2374	
v/s Ratio Prot							0.01	c0.48		c0.02	0.44	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.14	0.14	0.01		0.02		0.48	0.73		0.61	0.66	
Uniform Delay, d1	35.9	35.9	35.1		35.2		47.3	10.9		46.5	9.4	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		7.4	1.2		13.7	0.7	
Delay (s)	36.2	36.2	35.2		35.2		54.6	12.1		60.3	10.1	
Level of Service	D	D	D		D		D	B		E	B	
Approach Delay (s)		36.0			35.2			12.6			11.4	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.7							B		
HCM 2000 Volume to Capacity ratio			0.61									
Actuated Cycle Length (s)			98.6							14.1		
Intersection Capacity Utilization			60.2%							B		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2022 Alt 1/2/3

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	23	0	1338	8	434	954	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	35	0	1470	9	443	973	0
RTOR Reduction (vph)	0	0	0	0	32	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1470	4	443	973	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.42		c0.25	0.27	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.88	0.01	0.73	0.33	
Uniform Delay, d1					60.6			34.9	20.4	41.5	2.5	
Progression Factor					1.00			0.36	1.00	1.00	1.00	
Incremental Delay, d2					0.1			4.7	0.0	4.3	0.3	
Delay (s)					60.6			17.4	20.5	45.8	2.7	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			17.4			16.2	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.3			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		82.2%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2022 Alt 1/2/3







8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	31	51	14	1	66	131	139	1173	5	296	381	316
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3254	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3254	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	48	78	22	1	75	149	154	1303	6	340	438	363
RTOR Reduction (vph)	0	0	20	0	0	125	0	0	3	0	103	0
Lane Group Flow (vph)	48	78	2	0	76	24	154	1303	3	340	698	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1068	
v/s Ratio Prot	0.03	c0.04			c0.04		0.09	c0.37		c0.19	0.21	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.39	0.61	0.02		0.26	0.10	0.28	0.83	0.00	1.00	0.65	
Uniform Delay, d1	64.6	65.6	62.9		53.5	52.1	37.8	35.3	22.3	58.5	41.6	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.93	
Incremental Delay, d2	2.1	8.0	0.1		0.5	0.2	0.3	5.1	0.0	47.0	3.0	
Delay (s)	66.7	73.6	63.0		54.0	52.3	38.1	40.4	22.3	103.0	41.6	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		69.8			52.9			40.1			59.9	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		50.1			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		87.8%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												







NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	47	202	4	92	332	9
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	55	238	5	115	361	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	794	62			120	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	794	62			120	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	79	76			75	
cM capacity (veh/h)	269	1002			1468	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	293	120	371			
Volume Left	55	0	361			
Volume Right	238	115	0			
cSH	1235	1700	1468			
Volume to Capacity	0.24	0.07	0.25			
Queue Length 95th (ft)	23	0	24			
Control Delay (s)	12.0	0.0	8.1			
Lane LOS	B		A			
Approach Delay (s)	12.0	0.0	8.1			
Approach LOS	B					
Intersection Summary						
Average Delay			8.3			
Intersection Capacity Utilization			35.5%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	50	3	1330	419	0	357
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1756		3539	1520		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1756		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	67	4	1400	441	0	558
RTOR Reduction (vph)	4	0	0	132	0	0
Lane Group Flow (vph)	67	0	1400	309	0	558
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		30.1	30.1		30.1
Effective Green, g (s)	3.0		30.1	30.1		30.1
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	122		2477	1064		2477
v/s Ratio Prot	c0.04		c0.40			0.16
v/s Ratio Perm				0.20		
v/c Ratio	0.55		0.57	0.29		0.23
Uniform Delay, d1	19.3		3.2	2.4		2.3
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	5.3		0.3	0.2		0.0
Delay (s)	24.7		3.5	2.6		2.3
Level of Service	C		A	A		A
Approach Delay (s)	24.7		3.3			2.3
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.7		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.56			
Actuated Cycle Length (s)			43.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			49.2%		ICU Level of Service	A
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↑↑
Volume (veh/h)	0	15	2168	5	5	409
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2331	5	7	601
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2649	1168			2337	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2649	1168			2337	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			96	
cM capacity (veh/h)	18	186			208	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1554	782	7	301	301
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	186	1700	1700	208	1700	1700
Volume to Capacity	0.14	0.91	0.46	0.04	0.18	0.18
Queue Length 95th (ft)	12	0	0	3	0	0
Control Delay (s)	27.4	0.0	0.0	22.9	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	27.4	0.0		0.3		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			70.1%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	17	87	2081	12	38	370
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	107	2238	13	55	536
RTOR Reduction (vph)	0	3	0	1	0	0
Lane Group Flow (vph)	21	104	2238	12	55	536
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.8	25.9	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.8	20.8	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	261	307	2253	1008	82	2709
v/s Ratio Prot	0.01	c0.07	c0.63		c0.03	0.15
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.34	0.99	0.01	0.67	0.20
Uniform Delay, d1	39.4	37.2	19.2	7.1	50.2	3.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	17.3	0.0	19.4	0.0
Delay (s)	39.5	37.9	36.5	7.1	69.7	3.5
Level of Service	D	D	D	A	E	A
Approach Delay (s)	38.1		36.4			9.7
Approach LOS	D		D			A
Intersection Summary						
HCM 2000 Control Delay			31.1		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.86			
Actuated Cycle Length (s)			107.1		Sum of lost time (s)	18.1
Intersection Capacity Utilization			73.7%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement						
Lane Configurations		↑↑	↑↑↑			↑↑↑
Volume (veh/h)	0	32	2058	26	0	386
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	52	2166	27	0	522
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2441	1097			2194	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2441	1097			2194	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	75			100	
cM capacity (veh/h)	26	208			237	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	52	1444	749	261	261	
Volume Left	0	0	0	0	0	
Volume Right	52	0	27	0	0	
cSH	208	1700	1700	1700	1700	
Volume to Capacity	0.25	0.85	0.44	0.15	0.15	
Queue Length 95th (ft)	24	0	0	0	0	
Control Delay (s)	27.9	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	27.9	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			67.7%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement						
Lane Configurations		↑↑	↑↑↑	↑↑	↑↑	↑↑↑
Volume (vph)	10	6	2084	32	15	362
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	16	10	2171	33	19	447
RTOR Reduction (vph)	0	4	0	7	0	0
Lane Group Flow (vph)	16	6	2171	26	19	447
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.7	59.7	2.0	69.2
Effective Green, g (s)	1.4	3.4	59.7	59.7	2.0	69.2
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2736	1224	45	3172
v/s Ratio Prot	c0.01	0.00	c0.61		c0.01	0.13
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.50	0.09	0.79	0.02	0.42	0.14
Uniform Delay, d1	37.6	35.4	5.1	2.0	37.0	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.8	0.6	1.7	0.0	6.3	0.0
Delay (s)	49.3	36.0	6.8	2.0	43.3	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	44.2		6.7			2.2
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay			6.3		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.77			
Actuated Cycle Length (s)			77.2		Sum of lost time (s)	14.1
Intersection Capacity Utilization			70.4%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2022 Alt 1/2/3

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	45	1	0	44	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	83	2	0	70	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	85	70	3					
Volume Left (vph)	0	0	83	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	833	1121	815	841	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.2%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2022 Alt 1/2/3

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK








Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑			↑	↑	↑	↑	↑			
Volume (vph)	2	37	0	0	32	228	3	1887	51	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1357	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	49	0	0	44	317	3	2007	54	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	2	22	0	0	0
Lane Group Flow (vph)	3	49	0	0	44	261	3	2007	32	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.6	16.6			16.6	16.6	47.7	43.6	43.6			
Effective Green, g (s)	16.6	16.6			16.6	16.6	47.7	43.6	43.6			
Actuated g/C Ratio	0.23	0.23			0.23	0.23	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	306	420			420	357	1147	2096	937			
v/s Ratio Prot		0.03			0.02		0.00	c0.57				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.12			0.10	0.73	0.00	0.96	0.03			
Uniform Delay, d1	22.1	22.7			22.6	26.4	4.6	14.1	6.2			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	7.5	0.0	11.2	0.0			
Delay (s)	22.1	22.8			22.7	34.0	4.6	25.4	6.3			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.8			32.6			24.8			0.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay		25.9						HCM 2000 Level of Service			C	
HCM 2000 Volume to Capacity ratio		0.90										
Actuated Cycle Length (s)		73.6						Sum of lost time (s)			13.4	
Intersection Capacity Utilization		85.9%						ICU Level of Service			E	
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2022 Alt 1/2/3

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: AM PEAK













Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	134	1685	0	331	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	140	1755	0	419	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None			None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1576	209	419		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1576	209	419		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	88		0		
cM capacity (veh/h)	88	796	1137		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	140	878	878	279	140	0
Volume Left	0	140	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1137	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.12	0.52	0.52	0.16	0.08	0.00
Queue Length 95th (ft)	0	10	0	0	0	0	0
Control Delay (s)	0.0	8.6	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	A					
Approach Delay (s)	0.0	0.6			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay		0.5					
Intersection Capacity Utilization		56.6%		ICU Level of Service		B	
Analysis Period (min)		15					

NBC Coastal Campus

MILCON Year 2022 Alt 1/2/3

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	413	0	39	2	1	2	26	1681	0	0	134	194
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3225	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3225	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	469	0	44	6	3	6	27	1769	0	0	194	281
RTOR Reduction (vph)	0	30	0	0	6	0	0	0	0	0	160	0
Lane Group Flow (vph)	469	14	0	6	3	0	27	1769	0	0	315	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	26.6	26.6		1.7	1.7		1.9	43.3			37.2	
Effective Green, g (s)	26.6	26.6		1.7	1.7		1.9	43.3			37.2	
Actuated g/C Ratio	0.31	0.31		0.02	0.02		0.02	0.50			0.43	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	545	487		34	33		38	1775			1390	
v/s Ratio Prot	c0.27	0.01		c0.00	0.00		0.02	c0.50			0.10	
v/s Ratio Perm												
v/c Ratio	0.86	0.03		0.18	0.09		0.71	1.00			0.23	
Uniform Delay, d1	28.1	20.8		41.6	41.5		41.9	21.4			15.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	13.1	0.0		2.5	1.2		47.3	20.4			0.1	
Delay (s)	41.2	20.9		44.1	42.8		89.2	41.8			15.6	
Level of Service	D	C		D	D		F	D			B	
Approach Delay (s)		39.4			43.3			42.5			15.6	
Approach LOS		D			D			D			B	
Intersection Summary												
HCM 2000 Control Delay		37.4						HCM 2000 Level of Service		D		
HCM 2000 Volume to Capacity ratio		0.98										
Actuated Cycle Length (s)		86.3						Sum of lost time (s)		18.9		
Intersection Capacity Utilization		84.4%						ICU Level of Service		E		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	8	184	14	0	1537	17	38	23	1	19	41	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5031			5077		1770	1853			1731	
Flt Permitted	0.95	1.00			1.00		0.66	1.00			0.19	
Satd. Flow (perm)	1770	5031			5077		1237	1853			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	0.77
Adj. Flow (vph)	9	207	16	0	1689	19	45	27	1	25	53	68
RTOR Reduction (vph)	0	5	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	9	218	0	0	1707	0	45	27	0	0	129	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2061		240	360			53	
v/s Ratio Prot	c0.01	0.04			c0.34			0.01				
v/s Ratio Perm							c0.04				c0.40	
v/c Ratio	0.05	0.11			0.83		0.19	0.08			2.42	
Uniform Delay, d1	71.5	36.4			47.8		60.6	59.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			3.7		0.4	0.1			694.4	
Delay (s)	71.6	36.5			51.5		61.0	59.4			769.4	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		37.8			51.5		60.4				769.4	
Approach LOS		D			D		E				F	
Intersection Summary												
HCM 2000 Control Delay		98.9			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		68.5%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	202	0	834	1546	9	0	0	0	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	246	0	887	1645	10	0	0	0	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	246	0	887	1655	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.05		c0.26	c0.47							
v/s Ratio Perm												0.00
v/c Ratio		0.13		0.52	0.52							0.01
Uniform Delay, d1		36.6		30.3	1.4							34.9
Progression Factor		0.42		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.3	0.1							0.0
Delay (s)		15.6		30.6	1.5							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.6			11.7			0.0				35.0
Approach LOS		B			B			A				C
Intersection Summary												
HCM 2000 Control Delay		12.2			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.54										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		64.7%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	15	233	0	0	128	697	0	0	0	113	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	18	277	0	0	138	749	0	0	0	124	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	887			277			831	1200	277	825	825	512
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	887			277			831	1200	277	825	825	512
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			100			100	100	100	57	100	99
cM capacity (veh/h)	763			1285			281	181	761	286	300	562
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	295	887	0	130								
Volume Left	18	0	0	124								
Volume Right	0	749	0	5								
cSH	763	1285	1700	292								
Volume to Capacity	0.02	0.00	0.00	0.44								
Queue Length 95th (ft)	2	0	0	54								
Control Delay (s)	0.9	0.0	0.0	26.8								
Lane LOS	A			D								
Approach Delay (s)	0.9	0.0	0.0	26.8								
Approach LOS				D								
Intersection Summary												
Average Delay		2.8										
Intersection Capacity Utilization		63.0%			ICU Level of Service				B			
Analysis Period (min)		15										

NBC Coastal Campus

22: 3rd St & Palm Ave

MILCON Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	338	4	26	802	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	393	5	28	862	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	398	28	888	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.03	0.53	0.01	-0.45	-0.14						
Departure Headway (s)	6.6	6.1	6.4	5.9	6.3	7.1						
Degree Utilization, x	0.01	0.67	0.05	1.45	0.32	0.09						
Capacity (veh/h)	535	573	548	618	547	457						
Control Delay (s)	8.5	19.5	8.5	225.7	12.2	10.7						
Approach Delay (s)	19.3		219.1		12.2	10.7						
Approach LOS	C		F		B	B						
Intersection Summary												
Delay				136.1								
Level of Service				F								
Intersection Capacity Utilization			59.8%		ICU Level of Service				B			
Analysis Period (min)			15									



















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑	↗	↗	↰	↰
Volume (veh/h)	242	476	777	153	17	219
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	306	603	948	187	24	308
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked	0.84				0.84	0.84
vC, conflicting volume	1134				2256	567
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	790				2119	118
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	56				0	60
cM capacity (veh/h)	697				20	769
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	306	603	632	502	332	
Volume Left	306	0	0	0	24	
Volume Right	0	0	0	187	308	
cSH	697	1700	1700	1700	212	
Volume to Capacity	0.44	0.35	0.37	0.30	1.57	
Queue Length 95th (ft)	56	0	0	0	525	
Control Delay (s)	14.1	0.0	0.0	0.0	319.0	
Lane LOS	B				F	
Approach Delay (s)	4.8		0.0		319.0	
Approach LOS					F	
Intersection Summary						
Average Delay			46.5			
Intersection Capacity Utilization			64.2%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	468	16	26	772	0	72	35	81	1	21	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1721			1858	1583
Flt Permitted	0.22	1.00		0.40	1.00			0.86			0.98	1.00
Satd. Flow (perm)	408	3521		741	3539			1514			1832	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	608	21	34	1003	0	109	53	123	2	36	47
RTOR Reduction (vph)	0	3	0	0	0	0	0	35	0	0	0	32
Lane Group Flow (vph)	21	626	0	34	1003	0	0	250	0	0	38	15
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	23.5	23.5		23.5	23.5			15.1			15.1	15.1
Effective Green, g (s)	23.5	23.5		23.5	23.5			15.1			15.1	15.1
Actuated g/C Ratio	0.49	0.49		0.49	0.49			0.32			0.32	0.32
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	200	1731		364	1739			478			578	500
v/s Ratio Prot		0.18			c0.28							
v/s Ratio Perm	0.05			0.05				c0.17			0.02	0.01
v/c Ratio	0.10	0.36		0.09	0.58			0.52			0.07	0.03
Uniform Delay, d1	6.5	7.5		6.5	8.6			13.4			11.4	11.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.2	0.1		0.1	0.5			1.0			0.0	0.0
Delay (s)	6.7	7.6		6.6	9.1			14.4			11.5	11.3
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)		7.6			9.0			14.4			11.4	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay			9.4	HCM 2000 Level of Service				A				
HCM 2000 Volume to Capacity ratio			0.56									
Actuated Cycle Length (s)			47.8	Sum of lost time (s)				9.2				
Intersection Capacity Utilization			52.0%	ICU Level of Service				A				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	553	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	601	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)			767			
pX, platoon unblocked						
vC, conflicting volume			605		601	601
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			605		601	601
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			973		463	500
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	601	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	489			
Volume to Capacity	0.35	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.5			
Lane LOS			B			
Approach Delay (s)	0.0		12.5			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			39.1%		ICU Level of Service	A
Analysis Period (min)			15			









NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↙
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑	↘	↗	↑↑↑		↗	↑↑	↘	↗	↑↑	↘
Volume (vph)	21	706	36	23	2122	44	170	37	51	91	46	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5048		1770	5070			3325			3364	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5048		1770	5070			3325			3364	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	840	43	25	2332	48	205	45	61	111	56	30
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	880	0	25	2379	0	0	299	0	0	189	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2235		118	2160			646			654	
v/s Ratio Prot	0.01	c0.17		c0.01	c0.47			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.17	0.39		0.21	1.10			0.46			0.29	
Uniform Delay, d1	76.7	33.8		79.5	51.6			64.2			61.9	
Progression Factor	1.00	1.00		1.19	0.87			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.7	51.4			0.5			0.2	
Delay (s)	77.3	34.4		95.5	96.5			64.7			62.1	
Level of Service	E	C		F	F			E			E	
Approach Delay (s)		35.6			96.5			64.7			62.1	
Approach LOS		D			F			E			E	
Intersection Summary												
HCM 2000 Control Delay		77.6			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		79.1%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	940	35	20	2298	12	18	4	31	55	11	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5058		1770	5081			1687		1770	1704	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5058		1770	5081			1542		1231	1704	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	1056	39	23	2611	14	25	5	42	79	16	21
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	18	0
Lane Group Flow (vph)	2	1093	0	23	2625	0	0	44	0	79	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			257		205	284	
v/s Ratio Prot	0.00	0.22		c0.01	c0.52						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.31		0.19	0.71			0.17		0.39	0.07	
Uniform Delay, d1	86.1	11.2		79.4	13.4			64.3		66.8	63.2	
Progression Factor	1.69	0.25		1.42	0.36			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.3	0.5			0.3		1.2	0.1	
Delay (s)	146.5	3.1		113.1	5.4			64.6		68.0	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.4			6.3			64.6			66.5	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		78.1%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	1011	65	97	2146	52	152	19	92	171	36	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1783	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1783	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1136	73	117	2586	63	171	21	103	228	48	20
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	85	0	3	0
Lane Group Flow (vph)	3	1205	0	117	2586	33	0	192	18	0	293	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.24		c0.07	c0.51			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.54		0.60	0.96	0.04		0.63	0.07		0.50	
Uniform Delay, d1	86.2	36.7		76.2	40.2	20.2		69.1	62.4		67.5	
Progression Factor	1.22	0.62		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.9		4.8	9.8	0.1		3.9	0.1		0.7	
Delay (s)	106.2	23.5		81.0	50.0	20.3		73.1	62.5		68.2	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.7			50.6			69.4			68.2	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		45.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.80										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		95.4%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰	↰	↰	↰	↰
Volume (vph)	14	1281	26	44	2277	12	16	6	49	38	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1670			1723	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.78	
Satd. Flow (perm)	1770	5070		1770	5081			1562			1377	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	15	1392	28	51	2648	14	19	7	58	50	3	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	46	0	0	22	0
Lane Group Flow (vph)	15	1419	0	51	2662	0	0	38	0	0	59	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.9		2.8	40.0			15.1			15.1	
Effective Green, g (s)	0.7	37.9		2.8	40.0			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2687		69	2842			329			290	
v/s Ratio Prot	0.01	0.28		c0.03	c0.52							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.88	0.53		0.74	0.94			0.12			0.20	
Uniform Delay, d1	35.4	11.0		34.0	14.6			22.8			23.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	159.7	0.2		33.5	6.7			0.2			0.3	
Delay (s)	195.1	11.2		67.5	21.3			23.0			23.6	
Level of Service	F	B		E	C			C			C	
Approach Delay (s)		13.1			22.2			23.0			23.6	
Approach LOS		B			C			C			C	
Intersection Summary												
HCM 2000 Control Delay		19.2			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		71.5			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		61.2%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	93	1294	31	249	2211	219	81	74	786	239	94	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1750	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1750	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.90	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	108	1505	36	265	2352	233	90	82	873	285	112	93
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	181	0	2	60
Lane Group Flow (vph)	108	1539	0	265	2352	166	90	331	290	285	119	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.4	30.6	30.6	10.4	32.6	32.6
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.4	30.6	30.6	10.4	32.6	32.6
Actuated g/C Ratio	0.05	0.30		0.15	0.41	0.41	0.07	0.26	0.26	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	177	1537		273	2064	642	128	408	396	307	491	422
v/s Ratio Prot	0.03	0.30		c0.15	c0.46		0.05	c0.21		c0.08	0.07	
v/s Ratio Perm						0.10			0.19			0.02
v/c Ratio	0.61	1.00		0.97	1.14	0.26	0.70	0.81	0.73	0.93	0.24	0.06
Uniform Delay, d1	53.9	40.4		48.8	34.5	22.9	52.6	40.0	39.0	52.4	32.2	30.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.1	23.3		46.2	69.2	0.2	16.1	11.6	6.8	32.8	0.3	0.1
Delay (s)	59.9	63.7		95.0	103.7	23.1	68.6	51.6	45.8	85.3	32.4	30.5
Level of Service	E	E		F	F	C	E	D	D	F	C	C
Approach Delay (s)		63.4			96.3			50.4			62.8	
Approach LOS		E			F			D			E	
Intersection Summary												
HCM 2000 Control Delay		76.6			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		1.03										
Actuated Cycle Length (s)		116.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		92.0%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	290	1214	0	158	1467
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	326	1305	0	176	1630
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	0	326	1305	0	176	1626
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.37		0.10	c0.58
v/s Ratio Perm						
v/c Ratio		0.12	1.12		0.85	1.06
Uniform Delay, d1		2.5	26.8		34.6	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	65.1		26.8	41.3
Delay (s)		2.5	91.9		61.4	59.3
Level of Service		A	F		E	E
Approach Delay (s)		2.5	91.9		59.5	
Approach LOS		A	F		E	
Intersection Summary						
HCM 2000 Control Delay		66.4		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		1.16				
Actuated Cycle Length (s)		80.0		Sum of lost time (s)		14.2
Intersection Capacity Utilization		74.0%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	449	0	0	441	534	876	1	146	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.96				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3248		1681	1635				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3248		1681	1635				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	516	0	0	479	580	952	1	159	0	0	0
RTOR Reduction (vph)	0	0	0	0	365	0	0	27	0	0	0	0
Lane Group Flow (vph)	0	516	0	0	694	0	562	523	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		17.2			17.2		21.3	21.3				
Effective Green, g (s)		17.2			17.2		21.3	21.3				
Actuated g/C Ratio		0.37			0.37		0.46	0.46				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1309			1201		770	748				
v/s Ratio Prot		0.15			c0.21							
v/s Ratio Perm							c0.33	0.32				
v/c Ratio		0.39			0.58		0.73	0.70				
Uniform Delay, d1		10.8			11.7		10.3	10.0				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		3.5	2.9				
Delay (s)		11.0			12.4		13.7	12.9				
Level of Service		B			B		B	B				
Approach Delay (s)		11.0			12.4		13.3				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay		12.5							HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		46.5							Sum of lost time (s)		8.0	
Intersection Capacity Utilization		71.4%							ICU Level of Service		C	
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰			↱	↰	↱
Volume (veh/h)	0	3	4	665	80	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	924	195	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1130	195	195			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1130	195	195			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	224	846	1378			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	929	195			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	846	1378	1700			
Volume to Capacity	0.01	0.00	0.11			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	9.3	0.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.3	0.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			48.2%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↱			↰↱				↰			↱
Volume (veh/h)	0	4136	17	0	1823	244	0	0	909	0	0	55
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4308	18	0	1879	252	0	0	1010	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2151			4346			5067	6488	1485	3481	6371	792
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2151			4346			5067	6488	1485	3481	6371	792
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	243			31			0	0	1848	1	0	321
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1723	1723	879	752	752	627	1010	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	252	1010	83				
cSH	1700	1700	1700	1700	1700	1700	1848	321				
Volume to Capacity	1.01	1.01	0.52	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	88	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3	20.1				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.3	20.1				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				145.2%								
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3901	130	0	1860	0	201	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	4022	134	0	1938	0	245	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4176		4774	1448	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4176		4774	1448	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			37		1	117	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1609	1609	938	646	646	646	245
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	245
cSH	1700	1700	1700	1700	1700	1700	117
Volume to Capacity	0.95	0.95	0.55	0.38	0.38	0.38	2.10
Queue Length 95th (ft)	0	0	0	0	0	0	513
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	585.0
Lane LOS							F
Approach Delay (s)	0.0			0.0			585.0
Approach LOS							F
Intersection Summary							
Average Delay			22.6				
Intersection Capacity Utilization			99.4%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↖	↑↑↑			↑↑↑	
Volume (vph)	0	0	0	986	635	109	116	252		0	0	862
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4636		1770	3539				3528
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4636		1770	3539				3528
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1038	668	115	120	260	0	0	0	889
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	0	2
Lane Group Flow (vph)	0	0	0	519	1290	0	120	260	0	0	0	903
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA				NA
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1432		98	1989				1568
v/s Ratio Prot				c0.34	0.28		c0.07	0.07				c0.26
v/s Ratio Perm												
v/c Ratio				1.10	0.98dl		1.22	0.13				0.58
Uniform Delay, d1				31.1	29.8		42.5	9.3				18.7
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				73.0	8.1		163.1	0.0				0.5
Delay (s)				104.1	37.9		205.6	9.3				19.2
Level of Service				F	D		F	A				B
Approach Delay (s)		0.0			56.8			71.3				19.2
Approach LOS		A			E			E				B
Intersection Summary												
HCM 2000 Control Delay			47.6			HCM 2000 Level of Service		D				
HCM 2000 Volume to Capacity ratio			0.82									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)		17.2				
Intersection Capacity Utilization		135.8%				ICU Level of Service		H				
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔↔	
Volume (vph)	7	2112	113	0	0	0	0	368	517	761	1110	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3111	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3111	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2321	124	0	0	0	0	428	601	793	1156	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2329	95	0	0	0	0	698	296	793	1156	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					943	409	865	2022	
v/s Ratio Prot		c0.46						c0.22		c0.23	0.33	
v/s Ratio Perm			0.06						0.22			
v/c Ratio		1.27	0.17					0.74	0.72	0.92	0.57	
Uniform Delay, d1		55.8	37.9					54.8	54.4	63.7	23.9	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		123.8	0.1					3.2	6.2	14.2	0.4	
Delay (s)		179.6	38.0					57.9	60.6	77.9	24.3	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		172.4			0.0			58.8			46.1	
Approach LOS		F			A			E			D	
Intersection Summary												
HCM 2000 Control Delay			105.5								F	
HCM 2000 Volume to Capacity ratio			1.00									
Actuated Cycle Length (s)			175.0							14.4		
Intersection Capacity Utilization			135.8%							H		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2022 Alt 1/2/3
Timing Plan: PM PEAK













Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔		↔↔			↔↔
Volume (vph)	176	12	1010	700	0	1266
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1584		3277			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1584		3277			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	226	15	1135	787	0	1361
RTOR Reduction (vph)	2	0	60	0	0	0
Lane Group Flow (vph)	239	0	1862	0	0	1361
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	297		2476			2540
v/s Ratio Prot	c0.15		c0.57			0.40
v/s Ratio Perm						
v/c Ratio	0.81		0.75			0.54
Uniform Delay, d1	62.2		11.1			8.0
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	14.7		2.2			0.8
Delay (s)	76.9		13.2			8.8
Level of Service	E		B			A
Approach Delay (s)	76.9		13.2			8.8
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay			15.9			B
HCM 2000 Volume to Capacity ratio			0.78			
Actuated Cycle Length (s)			160.0			12.1
Intersection Capacity Utilization			83.7%			E
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON Year 2022 Alt 1/2/3

Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	146	10	29	26	10	25	23	1626	50	68	1494	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1724		1770	3523		1770	3490	
Flt Permitted	0.68	0.68	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1201	1202	1583		1459		1770	3523		1770	3490	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	187	13	37	41	16	39	25	1748	54	74	1624	167
RTOR Reduction (vph)	0	0	31	0	22	0	0	1	0	0	2	0
Lane Group Flow (vph)	99	101	6	0	74	0	25	1801	0	74	1789	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4		4							
Actuated Green, G (s)	19.1	19.1	19.1		19.1		3.1	71.9		8.1	76.9	
Effective Green, g (s)	19.1	19.1	19.1		19.1		3.1	71.9		8.1	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	201	201	265		244		48	2223		125	2356	
v/s Ratio Prot							0.01	c0.51		c0.04	0.51	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.49	0.50	0.02		0.30		0.52	0.81		0.59	0.76	
Uniform Delay, d1	43.0	43.1	39.6		41.6		54.7	15.9		51.3	12.3	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.9	2.0	0.0		0.7		9.8	2.3		7.3	1.5	
Delay (s)	44.9	45.1	39.6		42.2		64.5	18.2		58.6	13.8	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		44.1			42.2			18.8			15.6	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		19.4			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		113.9			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		76.1%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	8	0	147	0	1429	0	32	1635	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	12	0	213	0	1520	0	34	1758	0
RTOR Reduction (vph)	0	0	0	0	173	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	52	0	0	1520	0	34	1758	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.0			45.1		1.7	51.0	
Effective Green, g (s)					14.0			45.1		1.7	51.0	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					301			2125		40	2403	
v/s Ratio Prot					c0.03			0.43		0.02	c0.50	
v/s Ratio Perm												
v/c Ratio					0.17			0.72		0.85	0.73	
Uniform Delay, d1					25.7			10.5		36.6	7.7	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			1.2		84.3	1.2	
Delay (s)					25.9			11.7		120.9	8.9	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			25.9			11.7			11.0	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					12.2			HCM 2000 Level of Service			B	
HCM 2000 Volume to Capacity ratio					0.71							
Actuated Cycle Length (s)					75.1			Sum of lost time (s)			18.9	
Intersection Capacity Utilization					63.1%			ICU Level of Service			B	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	297	51	121	6	70	429	28	714	2	141	1455	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1515		1855	1509	1770	3539	1344	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1515		1855	1509	1770	3539	1344	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	391	67	159	7	76	466	31	785	2	150	1548	71
RTOR Reduction (vph)	0	0	129	0	0	201	0	0	1	0	2	0
Lane Group Flow (vph)	391	67	30	0	83	265	31	785	1	150	1617	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.6	27.6	27.6		26.9	26.9	4.0	56.2	56.2	17.4	69.6	
Effective Green, g (s)	27.6	27.6	27.6		26.9	26.9	4.0	56.2	56.2	17.4	69.6	
Actuated g/C Ratio	0.19	0.19	0.19		0.18	0.18	0.03	0.38	0.38	0.12	0.47	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	331	348	283		338	275	48	1348	512	208	1657	
v/s Ratio Prot	c0.22	0.04			0.04		0.02	0.22		c0.08	c0.46	
v/s Ratio Perm			0.02			c0.18		0.00				
v/c Ratio	1.18	0.19	0.11		0.25	0.96	0.65	0.58	0.00	0.72	0.98	
Uniform Delay, d1	60.0	50.6	49.7		51.6	59.8	71.0	36.3	28.3	62.7	38.1	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	108.3	0.3	0.2		0.4	43.9	26.1	1.8	0.0	11.6	17.1	
Delay (s)	168.2	50.8	49.9		52.0	103.7	97.1	38.2	28.3	74.3	55.2	
Level of Service	F	D	D		D	F	F	D	C	E	E	
Approach Delay (s)		125.0			95.9			40.4			56.8	
Approach LOS		F			F			D			E	
Intersection Summary												
HCM 2000 Control Delay			70.2			HCM 2000 Level of Service				E		
HCM 2000 Volume to Capacity ratio			1.02									
Actuated Cycle Length (s)			147.5			Sum of lost time (s)				19.4		
Intersection Capacity Utilization			82.1%			ICU Level of Service				E		
Analysis Period (min)			15									

c Critical Lane Group

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	326	503	3	61	182	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	362	559	4	86	207	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	464	47			90	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	464	47			90	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	25	45			86	
cM capacity (veh/h)	480	1022			1505	
Direction, Lane #						
Volume Total	921	90	210			
Volume Left	362	0	207			
Volume Right	559	86	0			
cSH	964	1700	1505			
Volume to Capacity	0.96	0.05	0.14			
Queue Length 95th (ft)	403	0	12			
Control Delay (s)	40.1	0.0	7.7			
Lane LOS	E		A			
Approach Delay (s)	40.1	0.0	7.7			
Approach LOS	E					
Intersection Summary						
Average Delay			31.5			
Intersection Capacity Utilization			41.7%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↑↑	↑	↔	↑↑
Volume (vph)	329	6	751	64	0	1584
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	416	8	834	71	0	1780
RTOR Reduction (vph)	1	0	0	41	0	0
Lane Group Flow (vph)	423	0	834	30	0	1780
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.24		0.24			c0.50
v/s Ratio Perm				0.02		
v/c Ratio	0.50		0.55	0.05		1.17
Uniform Delay, d1	18.9		22.4	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.5		0.4	0.0		84.4
Delay (s)	19.4		22.8	17.5		114.3
Level of Service	B		C	B		F
Approach Delay (s)	19.4		22.3			114.3
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay			74.6		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			0.82			
Actuated Cycle Length (s)			105.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			93.7%		ICU Level of Service	F
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↑↑	↑	↔	↑↑
Volume (veh/h)	4	6	623	3	15	1524
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	724	3	16	1675
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1596	364			728	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1596	364			728	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	98			98	
cM capacity (veh/h)	95	633			871	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	20	483	245	16	837	837
Volume Left	8	0	0	16	0	0
Volume Right	12	0	3	0	0	0
cSH	195	1700	1700	871	1700	1700
Volume to Capacity	0.10	0.28	0.14	0.02	0.49	0.49
Queue Length 95th (ft)	8	0	0	1	0	0
Control Delay (s)	25.6	0.0	0.0	9.2	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	25.6	0.0		0.1		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			52.1%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	30	57	568	12	104	1425
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	33	62	645	14	114	1566
RTOR Reduction (vph)	0	46	0	8	0	0
Lane Group Flow (vph)	33	16	645	6	114	1566
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.4	21.7	27.9	27.9	7.2	43.9
Effective Green, g (s)	9.4	16.6	27.9	27.9	7.2	43.9
Actuated g/C Ratio	0.15	0.27	0.45	0.45	0.12	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	265	419	1577	705	203	2481
v/s Ratio Prot	c0.02	0.01	0.18		0.06	c0.44
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.04	0.41	0.01	0.56	0.63
Uniform Delay, d1	23.0	17.1	11.8	9.7	26.2	5.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.2	0.0	3.5	0.5
Delay (s)	23.2	17.1	11.9	9.7	29.7	5.5
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.2		11.9			7.2
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			8.9		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.65			
Actuated Cycle Length (s)			62.6		Sum of lost time (s)	18.1
Intersection Capacity Utilization			51.3%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↕	↕			↕
Volume (veh/h)	0	23	559	18	0	1455
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	31	643	21	0	1582
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1444	332			663	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1444	332			663	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	123	664			922	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	31	428	235	791	791	
Volume Left	0	0	0	0	0	
Volume Right	31	0	21	0	0	
cSH	664	1700	1700	1700	1700	
Volume to Capacity	0.05	0.25	0.14	0.47	0.47	
Queue Length 95th (ft)	4	0	0	0	0	
Control Delay (s)	10.7	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.7	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			43.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↕	↕	↖	↗
Lane Configurations	↖	↗	↕	↕	↖	↗
Volume (vph)	30	26	552	18	23	1431
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	42	36	587	19	25	1573
RTOR Reduction (vph)	0	33	0	8	0	0
Lane Group Flow (vph)	42	3	587	11	25	1573
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	28.1	28.1	1.7	37.3
Effective Green, g (s)	2.6	4.3	28.1	28.1	1.7	37.3
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	98	146	2138	956	64	2838
v/s Ratio Prot	c0.02	0.00	0.17		0.01	c0.44
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.43	0.02	0.27	0.01	0.39	0.55
Uniform Delay, d1	21.2	19.2	4.4	3.7	21.9	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.1	0.1	0.0	3.9	0.2
Delay (s)	24.2	19.3	4.4	3.7	25.8	1.9
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.9		4.4			2.2
Approach LOS	C		A			A

Intersection Summary

HCM 2000 Control Delay	3.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	46.5	Sum of lost time (s)	14.1
Intersection Capacity Utilization	50.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Movement	↖	→	↗	↖	→	↗	↖	→	↗	↖
Lane Configurations	↖	→	↗	↖	→	↗	↖	→	↗	↖
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	11	14	85	8	0	180	13	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	11	15	110	10	0	202	15	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	11	15	121	217						
Volume Left (vph)	0	0	110	0						
Volume Right (vph)	0	15	0	15						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.19						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						

Intersection Summary

Delay	7.2		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

NBC Coastal Campus

MILCON Year 2022 Alt 1/2/3

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑		↰	↑	↰	↰	↑	↰			
Volume (vph)	10	187	0	0	82	139	12	472	69	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1297	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	11	212	0	0	94	160	13	519	76	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	126	0	41	0	0	0	0
Lane Group Flow (vph)	11	212	0	0	94	34	13	519	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.3	18.3	18.3			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.3	18.3	18.3			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	271	390			390	331	807	1615	722			
v/s Ratio Prot		c0.11			0.05		0.01	c0.15				
v/s Ratio Perm	0.01					0.02		0.02				
v/c Ratio	0.04	0.54			0.24	0.10	0.02	0.32	0.05			
Uniform Delay, d1	12.6	14.1			13.2	12.8	6.0	6.9	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.5			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.7	15.7			13.5	12.9	6.0	7.1	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.5			13.2		6.9			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.1			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.39										
Actuated Cycle Length (s)		40.1			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		41.2%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2022 Alt 1/2/3

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: PM PEAK











Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰		↰	↑	↰	↑	↰
Volume (veh/h)	0	134	0	618	0	1600	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	536	0	702	0	1778	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2129	889	1778		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2129	889	1778		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	0	100		0		
cM capacity (veh/h)	43	286	346		0		
Direction, Lane #							
Volume Total	536	0	351	351	1185	593	0
Volume Left	0	0	0	0	0	0	0
Volume Right	536	0	0	0	0	0	0
cSH	286	1700	1700	1700	1700	1700	1700
Volume to Capacity	1.87	0.00	0.21	0.21	0.70	0.35	0.00
Queue Length 95th (ft)	917	0	0	0	0	0	0
Control Delay (s)	435.3	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F						
Approach Delay (s)	435.3	0.0			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			77.4				
Intersection Capacity Utilization			59.2%		ICU Level of Service		
Analysis Period (min)			15				B

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON Year 2022 Alt 1/2/3

Timing Plan: PM PEAK











Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	235	0	68	1	1	0	73	324	12	1	1249	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3521		1770	3456	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3521		1770	3456	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	313	0	91	2	2	0	80	356	13	1	1388	257
RTOR Reduction (vph)	0	68	0	0	0	0	0	2	0	0	12	0
Lane Group Flow (vph)	313	23	0	2	2	0	80	367	0	1	1633	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	22.9	22.9		0.8	0.8		5.7	48.9		0.8	44.0	
Effective Green, g (s)	22.9	22.9		0.8	0.8		5.7	48.9		0.8	44.0	
Actuated g/C Ratio	0.25	0.25		0.01	0.01		0.06	0.53		0.01	0.48	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	439	392		15	16		109	1865		15	1647	
v/s Ratio Prot	c0.18	0.01		c0.00	0.00		c0.05	0.10		0.00	c0.47	
v/s Ratio Perm												
v/c Ratio	0.71	0.06		0.13	0.12		0.73	0.20		0.07	0.99	
Uniform Delay, d1	31.7	26.5		45.4	45.4		42.6	11.4		45.4	24.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.4	0.1		4.0	3.5		22.3	0.1		1.9	20.1	
Delay (s)	37.1	26.5		49.4	48.9		64.9	11.4		47.3	44.0	
Level of Service	D	C		D	D		E	B		D	D	
Approach Delay (s)		34.7			49.2			21.0			44.0	
Approach LOS		C			D			C			D	
Intersection Summary												
HCM 2000 Control Delay		38.4										
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		92.3										
Intersection Capacity Utilization		77.7%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	57	1204	58	0	362	35	13	40		4	24	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6				5.6
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00				1.00
Flt	1.00	0.99			0.99		1.00	0.99				0.96
Flt Protected	0.95	1.00			1.00		0.95	1.00				0.98
Satd. Flow (prot)	1770	5050			5018		1770	1836				1759
Flt Permitted	0.95	1.00			1.00		0.70	1.00				0.16
Satd. Flow (perm)	1770	5050			5018		1308	1836				284
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	65	1368	66	0	385	37	19	57	6	28	31	25
RTOR Reduction (vph)	0	3	0	0	7	0	0	2	0	0	8	0
Lane Group Flow (vph)	65	1431	0	0	415	0	19	61	0	0	76	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1910			2037		254	357			47	
v/s Ratio Prot	c0.04	c0.28			c0.08			c0.03				
v/s Ratio Perm							0.01				c0.27	
v/c Ratio	0.33	0.75			0.20		0.07	0.17			1.61	
Uniform Delay, d1	73.8	48.5			34.6		59.3	60.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	2.7			0.2		0.1	0.2			353.1	
Delay (s)	74.8	51.3			34.8		59.4	60.6			428.1	
Level of Service	E	D			C		E	E			F	
Approach Delay (s)		52.3			34.8			60.3			428.1	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		64.2										
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2022 Alt 1/2/3

20: SR-75 (Silver Strand Blvd) & Delaware St

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑
Volume (vph)	0	1234	0	612	400	38	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3494							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3494							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1387	0	651	426	40	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1387	0	651	466	0	0	0	0	0	0	3
Turn Type	NA			Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3175							609
v/s Ratio Prot		c0.27		c0.19	c0.13							
v/s Ratio Perm												0.00
v/c Ratio		0.72		0.34	0.15							0.00
Uniform Delay, d1		47.8		21.5	0.9							34.8
Progression Factor		0.18		1.00	1.00							1.00
Incremental Delay, d2		1.5		0.1	0.0							0.0
Delay (s)		9.9		21.6	0.9							34.9
Level of Service		A		C	A							C
Approach Delay (s)		9.9			13.0		0.0				34.9	
Approach LOS		A			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		11.3					HCM 2000 Level of Service		B			
HCM 2000 Volume to Capacity ratio		0.53										
Actuated Cycle Length (s)		180.0					Sum of lost time (s)		22.3			
Intersection Capacity Utilization		50.5%					ICU Level of Service		A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2022 Alt 1/2/3




















21: Dwy/Silver Strand Blvd & Palm Ave

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	4	213	0	0	306	187	0	0	0	689	0	14
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	5	248	0	0	348	212	0	0	0	1044	0	21
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	560			248			732	817	248	711	711	454
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	560			248			732	817	248	711	711	454
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	0	100	96
cM capacity (veh/h)	1011			1318			324	309	791	347	356	606
Direction, Lane #												
Volume Total	252	560	0	1065								
Volume Left	5	0	0	1044								
Volume Right	0	212	0	21								
cSH	1011	1318	1700	350								
Volume to Capacity	0.00	0.00	0.00	3.05								
Queue Length 95th (ft)	0	0	0	Err								
Control Delay (s)	0.2	0.0	0.0	Err								
Lane LOS	A			A	F							
Approach Delay (s)	0.2	0.0	0.0	Err								
Approach LOS				A	F							
Intersection Summary												
Average Delay		5672.1										
Intersection Capacity Utilization		73.2%					ICU Level of Service		D			
Analysis Period (min)		15										











NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop			Stop				Stop			Stop	
Volume (vph)	7	880	12	85	467	24	14	38	68	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	1128	15	96	525	27	25	67	119	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	1144	96	552	211	161						
Volume Left (vph)	9	0	96	0	25	61						
Volume Right (vph)	0	15	0	27	119	28						
Hadj (s)	0.53	0.02	0.53	0.00	-0.28	0.00						
Departure Headway (s)	7.6	7.1	7.5	7.0	7.6	8.1						
Degree Utilization, x	0.02	2.26	0.20	1.07	0.44	0.36						
Capacity (veh/h)	460	515	471	523	453	429						
Control Delay (s)	9.6	589.7	11.2	85.8	16.4	15.5						
Approach Delay (s)	585.2		74.8		16.4	15.5						
Approach LOS	F		F		C	C						
Intersection Summary												
Delay			335.7									
Level of Service			F									
Intersection Capacity Utilization			71.5%		ICU Level of Service		C					
Analysis Period (min)			15									









NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	221	860	567	39	53	177
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	228	887	659	45	62	208
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	705				2024	352
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	705				2024	352
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	74				0	68
cM capacity (veh/h)	889				37	644
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	228	887	440	265	271	
Volume Left	228	0	0	0	62	
Volume Right	0	0	0	45	208	
cSH	889	1700	1700	1700	136	
Volume to Capacity	0.26	0.52	0.26	0.16	1.99	
Queue Length 95th (ft)	26	0	0	0	539	
Control Delay (s)	10.4	0.0	0.0	0.0	526.9	
Lane LOS	B				F	
Approach Delay (s)	2.1		0.0		526.9	
Approach LOS					F	
Intersection Summary						
Average Delay			69.4			
Intersection Capacity Utilization			65.8%		ICU Level of Service	C
Analysis Period (min)			15			





NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	864	35	31	567		56	19	22	12	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3518		1770	3537			1755			1841	1583
Flt Permitted	0.41	1.00		0.22	1.00			0.78			0.91	1.00
Satd. Flow (perm)	772	3518		407	3537			1414			1703	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	1029	42	34	623	3	68	23	27	16	53	39
RTOR Reduction (vph)	0	4	0	0	0	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	1067	0	34	626	0	0	97	0	0	69	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	21.2	21.2		21.2	21.2			9.3			9.3	9.3
Effective Green, g (s)	21.2	21.2		21.2	21.2			9.3			9.3	9.3
Actuated g/C Ratio	0.53	0.53		0.53	0.53			0.23			0.23	0.23
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	412	1878		217	1888			331			398	370
v/s Ratio Prot		c0.30			0.18							
v/s Ratio Perm	0.04			0.08				c0.07			0.04	0.01
v/c Ratio	0.08	0.57		0.16	0.33			0.29			0.17	0.02
Uniform Delay, d1	4.5	6.2		4.7	5.2			12.5			12.1	11.7
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.4		0.3	0.1			0.5			0.2	0.0
Delay (s)	4.6	6.6		5.0	5.3			13.0			12.3	11.7
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)		6.5			5.3			13.0			12.1	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay		6.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.48										
Actuated Cycle Length (s)		39.7			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		45.5%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	1045	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1274	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)					767	
pX, platoon unblocked						
vC, conflicting volume			1284		1274	1274
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1284		1274	1274
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		95	99
cM capacity (veh/h)			540		184	204
Direction, Lane #						
Volume Total	1274	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	189			
Volume to Capacity	0.75	0.01	0.06			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.0	0.0	25.3			
Lane LOS			D			
Approach Delay (s)	0.0		25.3			
Approach LOS			D			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			65.0%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	42	1958	131	59	895	132	99	91	63	175	80	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5038		1770	4987			3342			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5038		1770	4987			3342			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	45	2083	139	60	904	133	109	100	69	197	90	29
RTOR Reduction (vph)	0	4	0	0	10	0	0	18	0	0	4	0
Lane Group Flow (vph)	45	2218	0	60	1027	0	0	260	0	0	312	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2006		196	1986			649			658	
v/s Ratio Prot	0.03	c0.44		c0.03	0.21			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.23	1.11		0.31	0.52			0.40			0.47	
Uniform Delay, d1	73.0	54.1		73.6	41.0			63.3			64.3	
Progression Factor	1.00	1.00		1.23	0.83			1.00			1.00	
Incremental Delay, d2	0.6	55.5		0.8	0.9			0.4			0.5	
Delay (s)	73.6	109.7		91.2	34.8			63.8			64.9	
Level of Service	E	F		F	C			E			E	
Approach Delay (s)		109.0			37.9			63.8			64.9	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		82.6			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		119.1%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	20	2244	58	49	1306	55	21	11	35	64	13	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.93			1.00	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.95	
Satd. Flow (prot)	1770	5066		1770	5054			1704			1770	
Flt Permitted	0.95	1.00		0.95	1.00			0.90			0.62	
Satd. Flow (perm)	1770	5066		1770	5054			1554			1156	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2290	59	51	1346	57	25	13	42	75	15	16
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	14	0
Lane Group Flow (vph)	20	2348	0	51	1401	0	0	57	0	75	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3563		157	3666			191		142	212	
v/s Ratio Prot	0.01	c0.46		c0.03	c0.28						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.66		0.32	0.38			0.30		0.53	0.08	
Uniform Delay, d1	79.3	14.8		76.9	9.4			71.8		74.0	69.9	
Progression Factor	1.45	0.18		1.55	0.27			1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		1.0	0.2			0.9		3.5	0.2	
Delay (s)	115.3	2.7		120.5	2.8			72.7		77.5	70.0	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.7			6.9			72.7			75.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.1			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		64.4%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰		↰↰	
Volume (vph)	27	2083	206	159	1380	82	131	41	129	156	45	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5017		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5017		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.92	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	29	2216	219	164	1423	85	142	45	140	211	61	27
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	116	0	4	0
Lane Group Flow (vph)	29	2428	0	164	1423	48	0	187	24	0	295	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2			4				
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2221		192	2364	736		306	269		575	
v/s Ratio Prot	0.02	c0.48		c0.09	c0.28			c0.10			c0.09	
v/s Ratio Perm					0.03			0.02				
v/c Ratio	0.18	1.09		0.85	0.60	0.07		0.61	0.09		0.51	
Uniform Delay, d1	76.0	50.1		78.8	35.8	26.6		69.1	62.9		67.9	
Progression Factor	0.99	1.05		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.4	48.4		29.0	1.1	0.2		8.8	0.7		3.2	
Delay (s)	75.7	101.3		107.8	36.9	26.7		77.9	63.5		71.1	
Level of Service	E	F		F	D	C		E	E		E	
Approach Delay (s)		101.0			43.3			71.8			71.1	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		76.9			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.86										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		108.7%			ICU Level of Service				G			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰	↰		↰↰	
Volume (vph)	10	2251	50	173	1683	16	39	9	82	23	11	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1770	5069		1770	5078			1680			1756	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.84	
Satd. Flow (perm)	1770	5069		1770	5078			1515			1514	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	11	2501	56	182	1772	17	46	11	96	28	14	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	76	0	0	11	0
Lane Group Flow (vph)	11	2555	0	182	1788	0	0	77	0	0	45	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4				4	
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.3			17.3	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.3			17.3	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2417		234	3046			310			309	
v/s Ratio Prot	0.01	c0.50		c0.10	0.35							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.69	1.06		0.78	0.59			0.25			0.15	
Uniform Delay, d1	41.7	22.1		35.4	10.4			28.1			27.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	80.1	35.7		14.9	0.3			0.4			0.2	
Delay (s)	121.8	57.8		50.4	10.7			28.6			27.8	
Level of Service	F	E		D	B			C			C	
Approach Delay (s)		58.1			14.4			28.6			27.8	
Approach LOS		E			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		38.6			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		84.5			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		75.6%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	192	2186	31	334	1690	566	67	180	543	599	243	232
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		1770	5085	1583	1770	1631	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		1770	5085	1583	1770	1631	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	202	2301	33	359	1817	609	71	191	578	651	264	252
RTOR Reduction (vph)	0	1	0	0	0	84	0	26	278	0	2	128
Lane Group Flow (vph)	202	2333	0	359	1817	525	71	373	92	651	287	99
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.4	36.4		45.0	70.0	70.0	8.7	37.9	37.9	11.8	41.0	41.0
Effective Green, g (s)	11.4	36.4		45.0	70.0	70.0	8.7	37.9	37.9	11.8	41.0	41.0
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1207		520	2326	724	100	404	372	264	468	403
v/s Ratio Prot	0.06	c0.46		c0.20	c0.36		0.04	c0.23		c0.19	c0.16	
v/s Ratio Perm					0.33			0.06				0.07
v/c Ratio	0.79	1.93		0.69	0.78	0.73	0.71	0.92	0.25	2.47	0.61	0.25
Uniform Delay, d1	69.6	58.3		47.8	35.0	33.7	70.9	56.2	46.1	70.6	49.0	43.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.4	423.0		3.9	1.8	3.6	20.6	26.6	0.3	670.9	2.4	0.3
Delay (s)	85.0	481.3		51.8	36.8	37.3	91.5	82.8	46.5	741.5	51.4	44.2
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		449.7			38.8			67.5			435.0	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		247.4			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.28										
Actuated Cycle Length (s)		153.0			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		132.0%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Volume (vph)	0	523	885	0	448	1711
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	588	941	0	492	1880
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	588	941	0	492	1877
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.17	c0.27		0.28	c0.67
v/s Ratio Perm						
v/c Ratio		0.33	1.10		0.74	1.06
Uniform Delay, d1		11.8	30.3		21.6	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	60.6		4.5	38.2
Delay (s)		11.9	90.9		26.1	52.7
Level of Service		B	F		C	D
Approach Delay (s)		11.9	90.9		47.2	
Approach LOS		B	F		D	
Intersection Summary						
HCM 2000 Control Delay		52.4			HCM 2000 Level of Service	
HCM 2000 Volume to Capacity ratio		1.14				D
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	
Intersection Capacity Utilization		89.0%			ICU Level of Service	
Analysis Period (min)		15				E
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	965	0	0	539	255	456	2	109	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3369		1681	1616				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3369		1681	1616				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1005	0	0	606	287	490	2	117	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	32	0	0	0	0
Lane Group Flow (vph)	0	1005	0	0	795	0	314	263	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.4			19.4		14.8	14.8				
Effective Green, g (s)		19.4			19.4		14.8	14.8				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1626			1548		589	566				
v/s Ratio Prot		0.28			0.24							
v/s Ratio Perm							0.19	0.16				
v/c Ratio		0.62			0.51		0.53	0.46				
Uniform Delay, d1		8.6			8.1		10.9	10.6				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.7			0.3		0.9	0.6				
Delay (s)		9.3			8.4		11.9	11.2				
Level of Service		A			A		B	B				
Approach Delay (s)		9.3			8.4		11.6				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		9.5			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		42.2			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		49.3%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	151	627	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	164	909	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1090	909	909			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1090	909	909			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	95	99			
cM capacity (veh/h)	235	333	749			
Direction, Lane #						
Volume Total	16	173	909			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	333	749	1700			
Volume to Capacity	0.05	0.01	0.53			
Queue Length 95th (ft)	4	1	0			
Control Delay (s)	16.4	0.6	0.0			
Lane LOS	C	A				
Approach Delay (s)	16.4	0.6	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		43.0%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St









MILCON Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1412	34	0	3897	553	0	0	477	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1701	41	0	4236	601	0	0	596	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4857			1762			3186	6599	628	5143	6319	1752
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4857			1762			3186	6599	628	5143	6319	1752
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	83
cM capacity (veh/h)	19			345			3	0	1357	0	0	72
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	680	680	381	1694	1694	1448	596	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	601	596	12				
cSH	1700	1700	1700	1700	1700	1700	1357	72				
Volume to Capacity	0.40	0.40	0.22	1.00	1.00	0.85	0.44	0.17				
Queue Length 95th (ft)	0	0	0	0	0	0	57	14				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	64.6				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	64.6				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				102.7%			ICU Level of Service		G			
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1273	202	0	3796	0	232	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1447	230	0	4218	0	252	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1696	3007		637	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1696	3007		637	
tC, single (s)			4.1	6.8		6.9	
tC, 2 stage (s)							
tF (s)			2.2	3.5		3.3	
p0 queue free %			100	100		38	
cM capacity (veh/h)			366	10		406	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	579	579	519	1406	1406	1406	252
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	230	0	0	0	252
cSH	1700	1700	1700	1700	1700	1700	406
Volume to Capacity	0.34	0.34	0.31	0.83	0.83	0.83	0.62
Queue Length 95th (ft)	0	0	0	0	0	0	101
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.3
Lane LOS							D
Approach Delay (s)	0.0			0.0			27.3
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			88.2%	ICU Level of Service		E	
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1657	1947	343	109	102	0	0	278	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4639		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4639		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1782	2094	369	147	138	0	0	320	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1051	3186	0	147	138	0	0	332	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3211		186	872			397	
v/s Ratio Prot				c0.69	0.69		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				1.00	0.99		0.79	0.16			0.84	
Uniform Delay, d1				29.0	28.6		82.7	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				27.1	14.0		20.0	0.1			14.2	
Delay (s)				56.1	42.7		102.7	56.1			96.5	
Level of Service				E	D		F	E			F	
Approach Delay (s)		0.0			46.0			80.1			96.5	
Approach LOS		A			D			F			F	
Intersection Summary												
HCM 2000 Control Delay				51.5			HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio				0.95								
Actuated Cycle Length (s)				189.5			Sum of lost time (s)			16.8		
Intersection Capacity Utilization				201.0%			ICU Level of Service			H		
Analysis Period (min)				15								
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	584	98	0	0	0	0	201	210	452	1540	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3252	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3252	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	635	107	0	0	0	0	234	228	491	1604	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	20	48	0	0	0
Lane Group Flow (vph)	0	636	78	0	0	0	0	301	93	491	1604	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.6	62.6	35.2	100.6	
Effective Green, g (s)		60.0	60.0					62.6	62.6	35.2	100.6	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.20	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1771	551					1182	523	701	2067	
v/s Ratio Prot								0.09		0.14	c0.45	
v/s Ratio Perm		0.13	0.05						0.06			
v/c Ratio		0.36	0.14					0.25	0.18	0.70	0.78	
Uniform Delay, d1		41.8	38.4					38.4	37.3	63.6	27.2	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.2	1.9	
Delay (s)		41.9	38.6					38.5	37.4	66.8	29.1	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.4			0.0			38.2			37.9	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.8					HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		172.2					Sum of lost time (s)			14.4		
Intersection Capacity Utilization		201.0%					ICU Level of Service			H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2023 Alt 1/2/3

Timing Plan: AM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	222	7	1187	617	0	1278
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3316			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3316			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	258	8	1276	663	0	1345
RTOR Reduction (vph)	1	0	53	0	0	0
Lane Group Flow (vph)	265	0	1886	0	0	1345
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	18.9		44.7			44.7
Effective Green, g (s)	18.9		44.7			44.7
Actuated g/C Ratio	0.26		0.61			0.61
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	413		2038			2067
v/s Ratio Prot	c0.17		c0.57			0.40
v/s Ratio Perm						
v/c Ratio	0.64		0.93			0.65
Uniform Delay, d1	23.9		12.5			9.0
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	3.4		7.8			0.7
Delay (s)	27.3		20.3			9.7
Level of Service	C		C			A
Approach Delay (s)	27.3		20.3			9.7
Approach LOS	C		C			A
Intersection Summary						
HCM 2000 Control Delay			16.8		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.88			
Actuated Cycle Length (s)			72.7		Sum of lost time (s)	12.1
Intersection Capacity Utilization			79.1%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON Year 2023 Alt 1/2/3

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↕	↕	↔	↔	↔
Volume (vph)	48	2	10	8	0	5	20	1407	26	40	1423	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1713		1770	3530		1770	3526	
Frt Permitted	0.74	0.78	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1310	1372	1583		1512		1770	3530		1770	3526	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	56	2	12	16	0	10	24	1675	31	43	1547	40
RTOR Reduction (vph)	0	0	10	0	22	0	0	1	0	0	1	0
Lane Group Flow (vph)	29	29	2	0	4	0	24	1705	0	43	1586	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.5	15.5	15.5		15.5		2.7	65.4		4.0	66.7	
Effective Green, g (s)	15.5	15.5	15.5		15.5		2.7	65.4		4.0	66.7	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	205	214	247		236		48	2331		71	2375	
v/s Ratio Prot							0.01	c0.48		c0.02	0.45	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.14	0.14	0.01		0.02		0.50	0.73		0.61	0.67	
Uniform Delay, d1	36.0	36.0	35.3		35.3		47.5	11.0		46.7	9.6	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		8.0	1.2		13.7	0.7	
Delay (s)	36.3	36.3	35.3		35.3		55.5	12.2		60.5	10.3	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		36.1			35.3			12.8			11.6	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.9		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.62									
Actuated Cycle Length (s)			99.0		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			60.9%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2023 Alt 1/2/3

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	23	0	1350	8	437	977	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	35	0	1484	9	446	997	0
RTOR Reduction (vph)	0	0	0	0	32	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1484	4	446	997	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.42		c0.25	0.28	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.89	0.01	0.73	0.33	
Uniform Delay, d1					60.6			35.1	20.4	41.6	2.5	
Progression Factor					1.00			0.36	1.00	1.00	1.00	
Incremental Delay, d2					0.1			4.9	0.0	4.5	0.3	
Delay (s)					60.6			17.7	20.5	46.1	2.8	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			17.8			16.2	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.5			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		83.2%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2023 Alt 1/2/3







8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	51	14	1	66	132	140	1184	5	298	400	319
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3260	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3260	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	49	78	22	1	75	150	156	1316	6	343	460	367
RTOR Reduction (vph)	0	0	20	0	0	126	0	0	3	0	99	0
Lane Group Flow (vph)	49	78	2	0	76	24	156	1316	3	343	728	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1070	
v/s Ratio Prot	0.03	c0.04			c0.04		0.09	c0.37		c0.19	0.22	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.40	0.61	0.02		0.26	0.10	0.28	0.84	0.00	1.01	0.68	
Uniform Delay, d1	64.6	65.6	62.9		53.5	52.1	37.8	35.5	22.3	58.5	42.1	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.93	
Incremental Delay, d2	2.2	8.0	0.1		0.5	0.2	0.3	5.4	0.0	49.6	3.4	
Delay (s)	66.8	73.6	63.0		54.0	52.3	38.1	40.9	22.3	105.6	42.5	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		69.8			52.9			40.5			61.0	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		50.8			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		88.7%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												







NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	50	203	4	92	334	9
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	59	239	5	115	363	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	798	62			120	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	798	62			120	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	78	76			75	
cM capacity (veh/h)	267	1002			1468	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	298	120	373			
Volume Left	59	0	363			
Volume Right	239	115	0			
cSH	1249	1700	1468			
Volume to Capacity	0.24	0.07	0.25			
Queue Length 95th (ft)	23	0	24			
Control Delay (s)	12.2	0.0	8.1			
Lane LOS	B		A			
Approach Delay (s)	12.2	0.0	8.1			
Approach LOS	B					
Intersection Summary						
Average Delay			8.4			
Intersection Capacity Utilization			35.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	53	3	1341	422	0	375
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1757		3539	1520		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1757		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	71	4	1412	444	0	586
RTOR Reduction (vph)	4	0	0	135	0	0
Lane Group Flow (vph)	71	0	1412	309	0	586
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		29.5	29.5		29.5
Effective Green, g (s)	3.0		29.5	29.5		29.5
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	124		2462	1057		2462
v/s Ratio Prot	c0.04		c0.40			0.17
v/s Ratio Perm				0.20		
v/c Ratio	0.57		0.57	0.29		0.24
Uniform Delay, d1	19.1		3.3	2.5		2.4
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	6.3		0.3	0.2		0.1
Delay (s)	25.4		3.6	2.6		2.4
Level of Service	C		A	A		A
Approach Delay (s)	25.4		3.4			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.8		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.57			
Actuated Cycle Length (s)			42.4		Sum of lost time (s)	9.9
Intersection Capacity Utilization			49.5%		ICU Level of Service	A
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2023 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↑↑
Volume (veh/h)	0	15	2187	5	5	432
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2352	5	7	635
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2687	1178			2357	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2687	1178			2357	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			96	
cM capacity (veh/h)	17	183			205	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1568	789	7	318	318
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	183	1700	1700	205	1700	1700
Volume to Capacity	0.14	0.92	0.46	0.04	0.19	0.19
Queue Length 95th (ft)	12	0	0	3	0	0
Control Delay (s)	27.8	0.0	0.0	23.3	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	27.8	0.0		0.3		
Approach LOS	D					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		70.6%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2023 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	17	88	2099	12	38	392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	109	2257	13	55	568
RTOR Reduction (vph)	0	3	0	1	0	0
Lane Group Flow (vph)	21	106	2257	12	55	568
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.9	26.0	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.9	20.9	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	262	308	2251	1007	82	2707
v/s Ratio Prot	0.01	c0.07	c0.64		c0.03	0.16
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.34	1.00	0.01	0.67	0.21
Uniform Delay, d1	39.3	37.2	19.5	7.1	50.3	3.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	19.6	0.0	19.4	0.0
Delay (s)	39.5	37.9	39.1	7.2	69.7	3.6
Level of Service	D	D	D	A	E	A
Approach Delay (s)	38.2		38.9			9.4
Approach LOS	D		D			A
Intersection Summary						
HCM 2000 Control Delay		32.8		HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio		0.87				
Actuated Cycle Length (s)		107.2		Sum of lost time (s)	18.1	
Intersection Capacity Utilization		74.3%		ICU Level of Service	D	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↑↑			↑↑
Volume (veh/h)	0	33	2076	26	0	409
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	53	2185	27	0	553
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2475	1106			2213	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2475	1106			2213	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	74			100	
cM capacity (veh/h)	25	205			233	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	53	1457	756	276	276	
Volume Left	0	0	0	0	0	
Volume Right	53	0	27	0	0	
cSH	205	1700	1700	1700	1700	
Volume to Capacity	0.26	0.86	0.44	0.16	0.16	
Queue Length 95th (ft)	25	0	0	0	0	
Control Delay (s)	28.6	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	28.6	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		68.2%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	10	7	2102	33	15	385
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	16	11	2190	34	19	475
RTOR Reduction (vph)	0	4	0	8	0	0
Lane Group Flow (vph)	16	7	2190	26	19	475
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.5	59.5	59.5	2.1	69.1
Effective Green, g (s)	1.4	3.5	59.5	59.5	2.1	69.1
Actuated g/C Ratio	0.02	0.05	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	71	2731	1221	48	3171
v/s Ratio Prot	c0.01	0.00	c0.62		c0.01	0.13
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.50	0.10	0.80	0.02	0.40	0.15
Uniform Delay, d1	37.5	35.3	5.3	2.0	36.9	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.8	0.6	1.8	0.0	5.3	0.0
Delay (s)	49.3	35.9	7.0	2.0	42.2	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	43.8		7.0			2.1
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		6.5		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.78				
Actuated Cycle Length (s)		77.1		Sum of lost time (s)		14.1
Intersection Capacity Utilization		70.9%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2023 Alt 1/2/3

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Movement										
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	46	1	0	45	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	85	2	0	71	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	87	71	3					
Volume Left (vph)	0	0	85	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	831	1121	815	839	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.3%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2023 Alt 1/2/3

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK








	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	37	0	0	33	230	3	1903	51	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1354	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	49	0	0	46	319	3	2024	54	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	22	0	0	0	0
Lane Group Flow (vph)	3	49	0	0	46	263	3	2024	32	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.7	16.7			16.7	16.7	47.7	43.6	43.6			
Effective Green, g (s)	16.7	16.7			16.7	16.7	47.7	43.6	43.6			
Actuated g/C Ratio	0.23	0.23			0.23	0.23	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	306	422			422	358	1145	2093	936			
v/s Ratio Prot		0.03			0.02		0.00	c0.57				
v/s Ratio Perm	0.00					c0.17			0.02			
v/c Ratio	0.01	0.12			0.11	0.74	0.00	0.97	0.03			
Uniform Delay, d1	22.1	22.6			22.6	26.5	4.6	14.4	6.3			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	7.6	0.0	12.7	0.0			
Delay (s)	22.1	22.8			22.7	34.1	4.6	27.1	6.3			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.7			32.7			26.5			0.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay		27.3						HCM 2000 Level of Service			C	
HCM 2000 Volume to Capacity ratio		0.90										
Actuated Cycle Length (s)		73.7				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		86.4%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2023 Alt 1/2/3

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: AM PEAK













Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	0	1699	0	353	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	0	1770	0	447	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1332	223	447		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1332	223	447		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	146	780	1110		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	885	885	298	149	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.52	0.52	0.18	0.09	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			50.3%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus

MILCON Year 2023 Alt 1/2/3

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	418	0	39	2	1	2	26	1558	0	135	216	216
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3213	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3213	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	475	0	44	6	3	6	27	1640	0	0	196	313
RTOR Reduction (vph)	0	30	0	0	6	0	0	0	0	0	179	0
Lane Group Flow (vph)	475	14	0	6	3	0	27	1640	0	0	330	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	26.9	26.9		1.7	1.7		1.9	43.3			37.2	
Effective Green, g (s)	26.9	26.9		1.7	1.7		1.9	43.3			37.2	
Actuated g/C Ratio	0.31	0.31		0.02	0.02		0.02	0.50			0.43	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	549	491		34	32		38	1769			1380	
v/s Ratio Prot	c0.27	0.01		c0.00	0.00		0.02	c0.46			0.10	
v/s Ratio Perm												
v/c Ratio	0.87	0.03		0.18	0.10		0.71	0.93			0.24	
Uniform Delay, d1	28.1	20.8		41.8	41.7		42.1	20.2			15.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	13.4	0.0		2.5	1.3		47.3	8.9			0.1	
Delay (s)	41.5	20.8		44.2	43.0		89.3	29.1			15.8	
Level of Service	D	C		D	D		F	C			B	
Approach Delay (s)		39.8			43.5			30.0			15.8	
Approach LOS		D			D			C			B	
Intersection Summary												
HCM 2000 Control Delay			29.3				HCM 2000 Level of Service			C		
HCM 2000 Volume to Capacity ratio			0.94									
Actuated Cycle Length (s)			86.6				Sum of lost time (s)			18.9		
Intersection Capacity Utilization			81.3%				ICU Level of Service			D		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2023 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	8	185	14	0	1414	17	38	23	1	20	41	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5031			5076		1770	1853			1731	
Flt Permitted	0.95	1.00			1.00		0.66	1.00			0.18	
Satd. Flow (perm)	1770	5031			5076		1236	1853			307	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	
Adj. Flow (vph)	9	208	16	0	1554	19	45	27	1	26	53	68
RTOR Reduction (vph)	0	5	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	9	219	0	0	1572	0	45	27	0	0	130	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2061		240	360			51	
v/s Ratio Prot	c0.01	0.04			c0.31			0.01				
v/s Ratio Perm							c0.04				c0.42	
v/c Ratio	0.05	0.12			0.76		0.19	0.08			2.54	
Uniform Delay, d1	71.5	36.4			46.0		60.6	59.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			2.5		0.4	0.1			746.7	
Delay (s)	71.6	36.5			48.5		61.0	59.4			821.7	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		37.8			48.5			60.4			821.7	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		103.8			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		66.1%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON Year 2023 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	204	0	898	1422	9	0	0	0	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	249	0	955	1513	10	0	0	0	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	249	0	955	1523	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.05		c0.28	c0.43							
v/s Ratio Perm												0.00
v/c Ratio		0.13		0.56	0.47							0.01
Uniform Delay, d1		36.6		31.2	1.3							34.9
Progression Factor		0.43		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.4	0.1							0.0
Delay (s)		15.8		31.6	1.4							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.8			13.0			0.0				35.0
Approach LOS		B			B			A				C
Intersection Summary												
HCM 2000 Control Delay				13.4				HCM 2000 Level of Service			B	
HCM 2000 Volume to Capacity ratio				0.54								
Actuated Cycle Length (s)				180.0				Sum of lost time (s)			21.9	
Intersection Capacity Utilization				61.3%				ICU Level of Service			B	
Analysis Period (min)				15								
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON Year 2023 Alt 1/2/3

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	16	234	0	0	128	779	0	0	0	123	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	19	279	0	0	138	838	0	0	0	135	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	975			279			879	1292	279	873	873	556
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	975			279			879	1292	279	873	873	556
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			100			100	100	100	49	100	99
cM capacity (veh/h)	707			1284			260	159	760	265	281	530
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	298	975	0	141								
Volume Left	19	0	0	135								
Volume Right	0	838	0	5								
cSH	707	1284	1700	270								
Volume to Capacity	0.03	0.00	0.00	0.52								
Queue Length 95th (ft)	2	0	0	69								
Control Delay (s)	1.0	0.0	0.0	31.9								
Lane LOS	A			D								
Approach Delay (s)	1.0	0.0	0.0	31.9								
Approach LOS				D								
Intersection Summary												
Average Delay				3.4								
Intersection Capacity Utilization				68.6%								C
Analysis Period (min)				15								

NBC Coastal Campus

22: 3rd St & Palm Ave

MILCON Year 2023 Alt 1/2/3

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	347	4	26	884	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	403	5	28	951	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	408	28	976	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.03	0.53	0.02	-0.45	-0.14						
Departure Headway (s)	6.6	6.1	6.4	5.9	6.3	7.1						
Degree Utilization, x	0.01	0.69	0.05	1.59	0.33	0.09						
Capacity (veh/h)	535	574	546	617	544	454						
Control Delay (s)	8.5	20.4	8.5	290.4	12.3	10.8						
Approach Delay (s)	20.2		282.5		12.3	10.8						
Approach LOS	C		F		B	B						
Intersection Summary												
Delay				178.6								
Level of Service				F								
Intersection Capacity Utilization				64.2%								C
Analysis Period (min)				15								




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↩	↑	↕	↕	↩	↩
Volume (veh/h)	245	483	839	153	17	240
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	310	611	1023	187	24	338
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked	0.82				0.82	0.82
vC, conflicting volume	1210				2348	605
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	804				2200	61
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	53				0	58
cM capacity (veh/h)	665				17	808
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	310	611	682	528	362	
Volume Left	310	0	0	0	24	
Volume Right	0	0	0	187	338	
cSH	665	1700	1700	1700	194	
Volume to Capacity	0.47	0.36	0.40	0.31	1.86	
Queue Length 95th (ft)	62	0	0	0	654	
Control Delay (s)	15.0	0.0	0.0	0.0	448.8	
Lane LOS	C				F	
Approach Delay (s)	5.1		0.0		448.8	
Approach LOS					F	
Intersection Summary						
Average Delay			67.0			
Intersection Capacity Utilization			67.4%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	475	16	26	833	0	73	35	81	1	21	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	1.00		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3522		1770	3539			1722			1858	1583
Flt Permitted	0.19	1.00		0.39	1.00			0.86			0.98	1.00
Satd. Flow (perm)	362	3522		732	3539			1510			1832	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	617	21	34	1082	0	111	53	123	2	36	47
RTOR Reduction (vph)	0	2	0	0	0	0	0	35	0	0	0	33
Lane Group Flow (vph)	21	636	0	34	1082	0	0	252	0	0	38	14
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	25.9	25.9		25.9	25.9			15.5			15.5	15.5
Effective Green, g (s)	25.9	25.9		25.9	25.9			15.5			15.5	15.5
Actuated g/C Ratio	0.51	0.51		0.51	0.51			0.31			0.31	0.31
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	185	1802		374	1811			462			561	484
v/s Ratio Prot		0.18			c0.31							
v/s Ratio Perm	0.06			0.05				c0.17			0.02	0.01
v/c Ratio	0.11	0.35		0.09	0.60			0.55			0.07	0.03
Uniform Delay, d1	6.4	7.4		6.3	8.7			14.6			12.4	12.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.3	0.1		0.1	0.5			1.3			0.1	0.0
Delay (s)	6.7	7.5		6.4	9.2			15.9			12.5	12.3
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)		7.5			9.1			15.9			12.4	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay			9.7		HCM 2000 Level of Service				A			
HCM 2000 Volume to Capacity ratio			0.58									
Actuated Cycle Length (s)			50.6		Sum of lost time (s)				9.2			
Intersection Capacity Utilization			53.7%		ICU Level of Service				A			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	560	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	609	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			613		609	609
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			613		609	609
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			966		459	495
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	609	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	484			
Volume to Capacity	0.36	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.6			
Lane LOS			B			
Approach Delay (s)	0.0		12.6			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			39.5%		ICU Level of Service	A
Analysis Period (min)			15			









NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑↑↑	↑	↑	↑	↑	↑	↑	↑
Volume (vph)	21	717	36	24	2058	44	172	38	52	91	46	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5049		1770	5069			3324			3364	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5049		1770	5069			3324			3364	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	854	43	26	2262	48	207	46	63	111	56	30
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	894	0	26	2309	0	0	304	0	0	189	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2235		118	2159			646			654	
v/s Ratio Prot	0.01	c0.18		c0.01	c0.46			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.17	0.40		0.22	1.07			0.47			0.29	
Uniform Delay, d1	76.7	34.0		79.6	51.6			64.3			61.9	
Progression Factor	1.00	1.00		1.21	0.84			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.7	38.9			0.5			0.2	
Delay (s)	77.3	34.5		96.8	82.4			64.8			62.1	
Level of Service	E	C		F	F			E			E	
Approach Delay (s)		35.7			82.6			64.8			62.1	
Approach LOS		D			F			E			E	
Intersection Summary												
HCM 2000 Control Delay		68.6			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		77.8%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	953	35	20	2235	12	18	4	31	56	11	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5058		1770	5081			1687		1770	1704	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5058		1770	5081			1542		1231	1704	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	1071	39	23	2540	14	25	5	42	80	16	21
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	18	0
Lane Group Flow (vph)	2	1108	0	23	2554	0	0	44	0	80	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			257		205	284	
v/s Ratio Prot	0.00	0.22		c0.01	c0.50						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.32		0.19	0.69			0.17		0.39	0.07	
Uniform Delay, d1	86.1	11.3		79.4	13.0			64.3		66.8	63.2	
Progression Factor	1.69	0.26		1.42	0.36			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.4	0.5			0.3		1.2	0.1	
Delay (s)	146.4	3.1		112.9	5.2			64.6		68.1	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.4			6.2			64.6			66.6	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		76.9%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	1024	65	98	2081	53	154	19	92	172	37	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5040		1770	5085	1583		1783	1583		3374	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5040		1770	5085	1583		1783	1583		3374	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1151	73	118	2507	64	173	21	103	229	49	20
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	85	0	3	0
Lane Group Flow (vph)	3	1220	0	118	2507	34	0	194	18	0	295	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		581	
v/s Ratio Prot	0.00	0.24		c0.07	c0.49			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.55		0.60	0.93	0.04		0.63	0.07		0.51	
Uniform Delay, d1	86.2	36.9		76.2	38.9	20.2		69.2	62.4		67.6	
Progression Factor	1.22	0.61		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.9		5.1	7.0	0.1		4.2	0.1		0.7	
Delay (s)	106.4	23.4		81.3	46.0	20.3		73.4	62.5		68.3	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.6			46.9			69.6			68.3	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		43.5			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		94.1%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰	↰	↰	↰	↰
Volume (vph)	14	1295	26	44	2213	12	16	6	49	39	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1670			1723	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.77	
Satd. Flow (perm)	1770	5070		1770	5081			1561			1374	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	15	1408	28	51	2573	14	19	7	58	51	3	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	46	0	0	22	0
Lane Group Flow (vph)	15	1435	0	51	2587	0	0	38	0	0	60	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.9		2.8	40.0			15.1			15.1	
Effective Green, g (s)	0.7	37.9		2.8	40.0			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2687		69	2842			329			290	
v/s Ratio Prot	0.01	0.28		c0.03	c0.51							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.88	0.53		0.74	0.91			0.12			0.21	
Uniform Delay, d1	35.4	11.0		34.0	14.1			22.8			23.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	159.7	0.2		33.5	4.9			0.2			0.4	
Delay (s)	195.1	11.2		67.5	19.0			23.0			23.6	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		13.1			20.0			23.0			23.6	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		17.8			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		71.5			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		60.2%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰	↰	↰
Volume (vph)	93	1308	31	250	2146	220	82	74	791	241	95	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	108	1521	36	266	2283	234	91	82	879	287	113	93
RTOR Reduction (vph)	0	2	0	0	0	67	0	154	181	0	2	60
Lane Group Flow (vph)	108	1555	0	266	2283	167	91	332	294	287	120	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.4	30.7	30.7	10.4	32.7	32.7
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.4	30.7	30.7	10.4	32.7	32.7
Actuated g/C Ratio	0.05	0.30		0.15	0.41	0.41	0.07	0.26	0.26	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	177	1536		272	2062	642	128	409	397	307	492	423
v/s Ratio Prot	0.03	0.31		c0.15	c0.45		0.05	c0.21		c0.08	0.07	
v/s Ratio Perm						0.11			0.20			0.02
v/c Ratio	0.61	1.01		0.98	1.11	0.26	0.71	0.81	0.74	0.93	0.24	0.06
Uniform Delay, d1	53.9	40.4		48.9	34.5	22.9	52.7	40.0	39.1	52.5	32.2	30.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.1	26.0		47.9	56.0	0.2	17.0	11.7	7.3	34.4	0.3	0.1
Delay (s)	60.0	66.5		96.8	90.5	23.1	69.6	51.7	46.3	86.9	32.4	30.5
Level of Service	E	E		F	F	C	E	D	D	F	C	C
Approach Delay (s)		66.1			85.4			50.8			63.8	
Approach LOS		E			F			D			E	
Intersection Summary												
HCM 2000 Control Delay		72.2			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		1.01										
Actuated Cycle Length (s)		116.1			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		90.9%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2023 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	293	1208	0	159	1411
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	329	1299	0	177	1568
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	0	329	1299	0	177	1564
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.37		0.10	c0.56
v/s Ratio Perm						
v/c Ratio		0.12	1.11		0.86	1.02
Uniform Delay, d1		2.5	26.8		34.6	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	63.1		27.4	28.5
Delay (s)		2.5	89.9		62.1	46.5
Level of Service		A	F		E	D
Approach Delay (s)		2.5	89.9		48.1	
Approach LOS		A	F		D	
Intersection Summary						
HCM 2000 Control Delay			59.7		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			1.13			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			72.1%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2023 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	453	0	0	446	537	867	1	147	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.96				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3249		1681	1633				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3249		1681	1633				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	521	0	0	485	584	942	1	160	0	0	0
RTOR Reduction (vph)	0	0	0	0	366	0	0	28	0	0	0	0
Lane Group Flow (vph)	0	521	0	0	703	0	565	510	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		17.5			17.5		21.4	21.4				
Effective Green, g (s)		17.5			17.5		21.4	21.4				
Actuated g/C Ratio		0.37			0.37		0.46	0.46				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1320			1212		767	745				
v/s Ratio Prot		0.15			c0.22							
v/s Ratio Perm							c0.34	0.31				
v/c Ratio		0.39			0.58		0.74	0.68				
Uniform Delay, d1		10.8			11.8		10.4	10.1				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		3.7	2.6				
Delay (s)		11.0			12.4		14.1	12.7				
Level of Service		B			B		B	B				
Approach Delay (s)		11.0			12.4		13.4				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					12.6		HCM 2000 Level of Service	B				
HCM 2000 Volume to Capacity ratio					0.67							
Actuated Cycle Length (s)					46.9		Sum of lost time (s)	8.0				
Intersection Capacity Utilization					71.5%		ICU Level of Service	C				
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰		↰	↰	↰	↰
Volume (veh/h)	0	3	4	748	89	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	1039	217	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1267	217	217			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1267	217	217			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	186	823	1353			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	1044	217			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	823	1353	1700			
Volume to Capacity	0.01	0.00	0.13			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	9.4	0.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.4	0.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			52.5%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St







MILCON Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰
Volume (veh/h)	0	4148	17	0	1827	244	0	0	910	0	0	55
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%	0%		0%	0%		0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4321	18	0	1884	252	0	0	1011	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2155			4359			5081	6505	1489	3490	6388	794
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2155			4359			5081	6505	1489	3490	6388	794
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	242			31			0	0	1850	1	0	320
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1728	1728	882	753	753	628	1011	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	252	1011	83				
cSH	1700	1700	1700	1700	1700	1700	1850	320				
Volume to Capacity	1.02	1.02	0.52	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	87	26				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3	20.2				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.3	20.2				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				145.5%	ICU Level of Service		H					
Analysis Period (min)				15								

* User Entered Value






















NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↑	
Volume (veh/h)	3913	131	0	1864	0	201	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	4034	135	0	1942	0	245	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4189		4789	1452	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4189		4789	1452	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			36		1	116	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1614	1614	942	647	647	647	245
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	135	0	0	0	245
cSH	1700	1700	1700	1700	1700	1700	116
Volume to Capacity	0.95	0.95	0.55	0.38	0.38	0.38	2.12
Queue Length 95th (ft)	0	0	0	0	0	0	516
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	592.2
Lane LOS							F
Approach Delay (s)	0.0			0.0			592.2
Approach LOS							F
Intersection Summary							
Average Delay			22.8				
Intersection Capacity Utilization			99.6%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					  			 			 	
Volume (vph)	0	0	0	990	635	109	120	252	0	0	862	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3528	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3528	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1042	668	115	124	260	0	0	889	16
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	521	1292	0	124	260	0	0	903	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1432		98	1989			1568	
v/s Ratio Prot				c0.34	0.28		c0.07	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.11	0.98dl		1.27	0.13			0.58	
Uniform Delay, d1				31.1	29.8		42.5	9.3			18.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				74.5	8.2		178.1	0.0			0.5	
Delay (s)				105.6	38.0		220.6	9.3			19.2	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			57.3			77.6			19.2	
Approach LOS		A			E			E			B	
Intersection Summary												
HCM 2000 Control Delay			48.7	HCM 2000 Level of Service					D			
HCM 2000 Volume to Capacity ratio			0.83									
Actuated Cycle Length (s)			90.0	Sum of lost time (s)					17.2			
Intersection Capacity Utilization			135.9%	ICU Level of Service					H			
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔↔	
Volume (vph)	7	2113	114	0	0	0	0	372	529	762	1113	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.97	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3106	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3106	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2322	125	0	0	0	0	433	615	794	1159	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2330	96	0	0	0	0	716	297	794	1159	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					942	409	865	2022	
v/s Ratio Prot		c0.46						c0.23		c0.23	0.33	
v/s Ratio Perm			0.06						0.22			
v/c Ratio		1.27	0.17					0.76	0.73	0.92	0.57	
Uniform Delay, d1		55.8	37.9					55.2	54.4	63.7	23.9	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		124.0	0.1					3.7	6.3	14.3	0.4	
Delay (s)		179.8	38.0					58.9	60.7	78.0	24.3	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		172.6			0.0			59.4			46.1	
Approach LOS		F			A			E			D	
Intersection Summary												
HCM 2000 Control Delay		105.6									F	
HCM 2000 Volume to Capacity ratio		1.00										
Actuated Cycle Length (s)		175.0							14.4			
Intersection Capacity Utilization		135.9%							H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2023 Alt 1/2/3
Timing Plan: PM PEAK













Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔
Volume (vph)	177	12	1035	705	0	1279
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1584		3280			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1584		3280			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	227	15	1163	792	0	1375
RTOR Reduction (vph)	2	0	57	0	0	0
Lane Group Flow (vph)	240	0	1898	0	0	1375
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	297		2478			2540
v/s Ratio Prot	c0.15		c0.58			0.41
v/s Ratio Perm						
v/c Ratio	0.81		0.77			0.54
Uniform Delay, d1	62.3		11.3			8.1
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	14.9		2.3			0.8
Delay (s)	77.2		13.7			8.9
Level of Service	E		B			A
Approach Delay (s)	77.2		13.7			8.9
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay		16.1				B
HCM 2000 Volume to Capacity ratio		0.79				
Actuated Cycle Length (s)		160.0				12.1
Intersection Capacity Utilization		84.6%				E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2023 Alt 1/2/3

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Timing Plan: PM PEAK












Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	147	10	29	26	10	25	23	1656	50	69	1509	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1724		1770	3524		1770	3489	
Flt Permitted	0.68	0.68	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1201	1202	1583		1459		1770	3524		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	188	13	37	41	16	39	25	1781	54	75	1640	170
RTOR Reduction (vph)	0	0	31	0	22	0	0	1	0	0	2	0
Lane Group Flow (vph)	100	101	6	0	74	0	25	1834	0	75	1808	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	19.1	19.1	19.1		19.1		3.1	71.9		8.1	76.9	
Effective Green, g (s)	19.1	19.1	19.1		19.1		3.1	71.9		8.1	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	201	201	265		244		48	2224		125	2355	
v/s Ratio Prot							0.01	c0.52		c0.04	0.52	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.50	0.50	0.02		0.30		0.52	0.82		0.60	0.77	
Uniform Delay, d1	43.0	43.1	39.6		41.6		54.7	16.2		51.3	12.5	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.9	2.0	0.0		0.7		9.8	2.6		7.5	1.6	
Delay (s)	45.0	45.1	39.6		42.2		64.5	18.8		58.9	14.0	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		44.2			42.2			19.4			15.8	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		19.7			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		113.9			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		76.6%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2023 Alt 1/2/3

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	8	0	148	0	1457	0	33	1651	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	12	0	214	0	1550	0	35	1775	0
RTOR Reduction (vph)	0	0	0	0	174	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	52	0	0	1550	0	35	1775	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.0			45.1		1.7	51.0	
Effective Green, g (s)					14.0			45.1		1.7	51.0	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					301			2125		40	2403	
v/s Ratio Prot					c0.03			0.44		0.02	c0.50	
v/s Ratio Perm												
v/c Ratio					0.17			0.73		0.88	0.74	
Uniform Delay, d1					25.7			10.7		36.6	7.8	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			1.3		93.6	1.2	
Delay (s)					26.0			11.9		130.2	9.0	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			26.0			11.9			11.3	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay				12.5				HCM 2000 Level of Service			B	
HCM 2000 Volume to Capacity ratio				0.71								
Actuated Cycle Length (s)				75.1				Sum of lost time (s)			18.9	
Intersection Capacity Utilization				63.7%				ICU Level of Service			B	
Analysis Period (min)				15								
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	299	51	122	7	71	432	28	736	2	143	1469	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1514		1854	1509	1770	3539	1343	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1514		1854	1509	1770	3539	1343	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	393	67	161	8	77	470	31	809	2	152	1563	71
RTOR Reduction (vph)	0	0	131	0	0	198	0	0	1	0	2	0
Lane Group Flow (vph)	393	67	30	0	85	272	31	809	1	152	1632	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.6	27.6	27.6		27.6	27.6	4.0	55.9	55.9	17.6	69.5	
Effective Green, g (s)	27.6	27.6	27.6		27.6	27.6	4.0	55.9	55.9	17.6	69.5	
Actuated g/C Ratio	0.19	0.19	0.19		0.19	0.19	0.03	0.38	0.38	0.12	0.47	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	329	347	282		345	281	47	1335	506	210	1648	
v/s Ratio Prot	c0.22	0.04			0.05		0.02	0.23		c0.09	c0.46	
v/s Ratio Perm			0.02			c0.18			0.00			
v/c Ratio	1.19	0.19	0.11		0.25	0.97	0.66	0.61	0.00	0.72	0.99	
Uniform Delay, d1	60.2	50.9	50.0		51.4	59.8	71.4	37.2	28.7	62.9	39.0	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	113.5	0.3	0.2		0.4	44.6	28.7	2.1	0.0	11.7	20.0	
Delay (s)	173.7	51.1	50.2		51.8	104.5	100.1	39.3	28.7	74.6	58.9	
Level of Service	F	D	D		D	F	F	D	C	E	E	
Approach Delay (s)		128.5			96.4			41.5			60.3	
Approach LOS		F			F			D			E	
Intersection Summary												
HCM 2000 Control Delay			72.5			HCM 2000 Level of Service			E			
HCM 2000 Volume to Capacity ratio			1.03									
Actuated Cycle Length (s)			148.1			Sum of lost time (s)			19.4			
Intersection Capacity Utilization			82.6%			ICU Level of Service			E			
Analysis Period (min)			15									







c Critical Lane Group

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	329	507	3	64	184	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	366	563	4	90	209	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	471	49			94	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	471	49			94	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	23	45			86	
cM capacity (veh/h)	474	1019			1500	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	929	94	212			
Volume Left	366	0	209			
Volume Right	563	90	0			
cSH	954	1700	1500			
Volume to Capacity	0.97	0.06	0.14			
Queue Length 95th (ft)	429	0	12			
Control Delay (s)	44.0	0.0	7.7			
Lane LOS	E		A			
Approach Delay (s)	44.0	0.0	7.7			
Approach LOS	E					
Intersection Summary						
Average Delay			34.4			
Intersection Capacity Utilization			42.2%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	332	7	773	67	0	1600
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	420	9	859	74	0	1798
RTOR Reduction (vph)	1	0	0	42	0	0
Lane Group Flow (vph)	428	0	859	32	0	1798
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.24		0.24			c0.51
v/s Ratio Perm				0.02		
v/c Ratio	0.51		0.57	0.05		1.18
Uniform Delay, d1	19.0		22.6	17.5		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.5		0.5	0.0		89.4
Delay (s)	19.5		23.0	17.5		119.3
Level of Service	B		C	B		F
Approach Delay (s)	19.5		22.6			119.3
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay			77.2		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			0.83			
Actuated Cycle Length (s)			105.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			94.1%		ICU Level of Service	F
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Volume (veh/h)	4	7	648	3	15	1541
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	14	753	3	16	1693
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1635	378			757	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1635	378			757	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	98			98	
cM capacity (veh/h)	90	619			850	
Direction, Lane #						
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	22	502	255	16	847	847
Volume Left	8	0	0	16	0	0
Volume Right	14	0	3	0	0	0
cSH	197	1700	1700	850	1700	1700
Volume to Capacity	0.11	0.30	0.15	0.02	0.50	0.50
Queue Length 95th (ft)	9	0	0	1	0	0
Control Delay (s)	25.5	0.0	0.0	9.3	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	25.5	0.0		0.1		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			52.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	30	58	593	12	104	1441
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	33	63	674	14	114	1584
RTOR Reduction (vph)	0	46	0	7	0	0
Lane Group Flow (vph)	33	17	674	7	114	1584
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.4	21.7	27.9	27.9	7.2	43.9
Effective Green, g (s)	9.4	16.6	27.9	27.9	7.2	43.9
Actuated g/C Ratio	0.15	0.27	0.45	0.45	0.12	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	265	419	1577	705	203	2481
v/s Ratio Prot	c0.02	0.01	0.19		0.06	c0.45
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.04	0.43	0.01	0.56	0.64
Uniform Delay, d1	23.0	17.1	11.9	9.7	26.2	5.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.2	0.0	3.5	0.5
Delay (s)	23.2	17.1	12.1	9.7	29.7	5.6
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.2		12.0			7.2
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			9.0		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.66			
Actuated Cycle Length (s)			62.6		Sum of lost time (s)	18.1
Intersection Capacity Utilization			51.7%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↩	↕	↕		↕
Volume (veh/h)	0	23	583	18	0	1471
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	31	670	21	0	1599
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1480	345			691	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1480	345			691	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	116	651			900	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	31	447	244	799	799	
Volume Left	0	0	0	0	0	
Volume Right	31	0	21	0	0	
cSH	651	1700	1700	1700	1700	
Volume to Capacity	0.05	0.26	0.14	0.47	0.47	
Queue Length 95th (ft)	4	0	0	0	0	
Control Delay (s)	10.8	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.8	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			44.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↕	↖	↗	↕
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	30	26	576	18	23	1446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	42	36	613	19	25	1589
RTOR Reduction (vph)	0	33	0	8	0	0
Lane Group Flow (vph)	42	3	613	11	25	1589
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	28.1	28.1	1.7	37.3
Effective Green, g (s)	2.6	4.3	28.1	28.1	1.7	37.3
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	98	146	2138	956	64	2838
v/s Ratio Prot	c0.02	0.00	0.17		0.01	c0.45
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.43	0.02	0.29	0.01	0.39	0.56
Uniform Delay, d1	21.2	19.2	4.4	3.7	21.9	1.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.1	0.1	0.0	3.9	0.2
Delay (s)	24.2	19.3	4.5	3.7	25.8	1.9
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.9		4.5			2.3
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.5		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.68			
Actuated Cycle Length (s)			46.5		Sum of lost time (s)	14.1
Intersection Capacity Utilization			50.9%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON Year 2023 Alt 1/2/3

Timing Plan: PM PEAK









	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Movement	↖	→	↗	↖	→	↗	↖	→	↗	↖
Lane Configurations	↖	↗	↗	↖	↗	↗	↖	↗	↖	↗
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	11	14	86	8	0	182	13	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	11	15	112	10	0	204	15	0	0
Direction, Lane #										
Volume Total (vph)	11	15	122	219						
Volume Left (vph)	0	0	112	0						
Volume Right (vph)	0	15	0	15						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.19						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2023 Alt 1/2/3

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	188	0	0	83	140	12	496	70	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1295	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	11	214	0	0	95	161	13	545	77	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	127	0	42	0	0	0	0
Lane Group Flow (vph)	11	214	0	0	95	34	13	545	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4				8			2				
Actuated Green, G (s)	8.5	8.5			8.5	8.5	18.1	18.1	18.1			
Effective Green, g (s)	8.5	8.5			8.5	8.5	18.1	18.1	18.1			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.45	0.45	0.45			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	275	395			395	336	800	1601	716			
v/s Ratio Prot		c0.11			0.05		0.01	c0.15				
v/s Ratio Perm	0.01					0.02		0.02				
v/c Ratio	0.04	0.54			0.24	0.10	0.02	0.34	0.05			
Uniform Delay, d1	12.5	14.0			13.1	12.7	6.0	7.1	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.5			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.6	15.5			13.4	12.8	6.0	7.2	6.2			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.0		7.1			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.1			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.40										
Actuated Cycle Length (s)		40.0			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		42.0%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2023 Alt 1/2/3

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: PM PEAK











							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	0	643	0	1617	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	0	0	731	0	1797	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2162	898	1797		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2162	898	1797		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	40	282	340		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	365	365	1198	599	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.21	0.21	0.70	0.35	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			48.0%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON Year 2023 Alt 1/2/3

Timing Plan: PM PEAK











Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	257	0	69	1	1	0	74	327	12	1	1123	238
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3521		1770	3447	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3521		1770	3447	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	343	0	92	2	2	0	81	359	13	1	1248	264
RTOR Reduction (vph)	0	68	0	0	0	0	0	2	0	0	14	0
Lane Group Flow (vph)	343	24	0	2	2	0	81	370	0	1	1498	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	23.8	23.8		0.8	0.8		5.7	48.7		0.8	43.8	
Effective Green, g (s)	23.8	23.8		0.8	0.8		5.7	48.7		0.8	43.8	
Actuated g/C Ratio	0.26	0.26		0.01	0.01		0.06	0.52		0.01	0.47	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	452	405		15	16		108	1843		15	1623	
v/s Ratio Prot	c0.19	0.01		c0.00	0.00		c0.05	0.11		0.00	c0.43	
v/s Ratio Perm												
v/c Ratio	0.76	0.06		0.13	0.12		0.75	0.20		0.07	0.92	
Uniform Delay, d1	32.0	26.1		45.8	45.8		42.9	11.8		45.7	23.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.2	0.1		4.0	3.5		25.0	0.1		1.9	9.2	
Delay (s)	39.1	26.2		49.8	49.3		67.9	11.8		47.6	32.2	
Level of Service	D	C		D	D		E	B		D	C	
Approach Delay (s)		36.4			49.5			21.9			32.2	
Approach LOS		D			D			C			C	
Intersection Summary												
HCM 2000 Control Delay		31.0										
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		93.0										
Intersection Capacity Utilization		75.6%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	58	1078	59	0	365	35	13	40		4	24	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6				5.6
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00				1.00
Flt	1.00	0.99			0.99		1.00	0.99				0.96
Flt Protected	0.95	1.00			1.00		0.95	1.00				0.98
Satd. Flow (prot)	1770	5046			5019		1770	1836				1759
Flt Permitted	0.95	1.00			1.00		0.70	1.00				0.16
Satd. Flow (perm)	1770	5046			5019		1308	1836				284
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	66	1225	67	0	388	37	19	57	6	28	31	25
RTOR Reduction (vph)	0	3	0	0	6	0	0	2	0	0	8	0
Lane Group Flow (vph)	66	1289	0	0	419	0	19	61	0	0	76	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1909			2038		254	357			47	
v/s Ratio Prot	c0.04	c0.26			c0.08			c0.03				
v/s Ratio Perm							0.01				c0.27	
v/c Ratio	0.34	0.68			0.21		0.07	0.17			1.61	
Uniform Delay, d1	73.9	46.7			34.6		59.3	60.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	1.9			0.2		0.1	0.2			353.1	
Delay (s)	74.9	48.6			34.9		59.4	60.6			428.1	
Level of Service	E	D			C		E	E			F	
Approach Delay (s)		49.9			34.9			60.3			428.1	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		63.4										
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2023 Alt 1/2/3

20: SR-75 (Silver Strand Blvd) & Delaware St

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑↑			↑↑	↑↑							↑
Volume (vph)	0	1108	0	631	403	38	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3494							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3494							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1245	0	671	429	40	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1245	0	671	469	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3175							609
v/s Ratio Prot		c0.24		c0.20	c0.13							
v/s Ratio Perm												0.00
v/c Ratio		0.65		0.35	0.15							0.00
Uniform Delay, d1		46.1		21.7	0.9							34.8
Progression Factor		0.19		1.00	1.00							1.00
Incremental Delay, d2		1.2		0.1	0.0							0.0
Delay (s)		9.8		21.8	0.9							34.9
Level of Service		A		C	A							C
Approach Delay (s)		9.8			13.2		0.0				34.9	
Approach LOS		A			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		11.5				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.50										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		48.6%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2023 Alt 1/2/3

21: Dwy/Silver Strand Blvd & Palm Ave

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑				↑↑
Volume (veh/h)	5	213	0	0	307	206	0	0	0	771	0	15
Sign Control		Free			Free			Stop				Stop
Grade		0%			0%			0%				0%
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	6	248	0	0	349	234	0	0	0	1168	0	23
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	583			248			748	842	248	725	725	466
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	583			248			748	842	248	725	725	466
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	0	100	96
cM capacity (veh/h)	991			1318			315	299	791	339	349	597
Direction, Lane #												
Volume Total	253	583	0	1191								
Volume Left	6	0	0	1168								
Volume Right	0	234	0	23								
cSH	991	1318	1700	342								
Volume to Capacity	0.01	0.00	0.00	3.49								
Queue Length 95th (ft)	0	0	0	Err								
Control Delay (s)	0.3	0.0	0.0	Err								
Lane LOS	A			A	F							
Approach Delay (s)	0.3	0.0	0.0	Err								
Approach LOS				A	F							
Intersection Summary												
Average Delay		5873.7										
Intersection Capacity Utilization		79.0%				ICU Level of Service		D				
Analysis Period (min)		15										

NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱			↰	↱		↰	↱
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	962	12	85	487	24	14	38	68	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	1233	15	96	547	27	25	67	119	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	1249	96	574	211	161						
Volume Left (vph)	9	0	96	0	25	61						
Volume Right (vph)	0	15	0	27	119	28						
Hadj (s)	0.53	0.03	0.53	0.00	-0.28	0.00						
Departure Headway (s)	7.6	7.1	7.5	7.0	7.6	8.1						
Degree Utilization, x	0.02	2.47	0.20	1.12	0.44	0.36						
Capacity (veh/h)	460	516	471	517	454	429						
Control Delay (s)	9.6	683.0	11.2	100.3	16.4	15.5						
Approach Delay (s)	678.2		87.6		16.4	15.5						
Approach LOS	F		F		C	C						
Intersection Summary												
Delay			399.2									
Level of Service			F									
Intersection Capacity Utilization			75.8%		ICU Level of Service				D			
Analysis Period (min)			15									









NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱
Volume (veh/h)	242	923	581	39	53	183
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	249	952	676	45	62	215
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	721				2149	360
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	721				2149	360
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	72				0	66
cM capacity (veh/h)	877				30	636
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	249	952	450	271	278	
Volume Left	249	0	0	0	62	
Volume Right	0	0	0	45	215	
cSH	877	1700	1700	1700	113	
Volume to Capacity	0.28	0.56	0.26	0.16	2.45	
Queue Length 95th (ft)	29	0	0	0	619	
Control Delay (s)	10.7	0.0	0.0	0.0	738.9	
Lane LOS	B				F	
Approach Delay (s)	2.2		0.0		738.9	
Approach LOS					F	
Intersection Summary						
Average Delay			94.5			
Intersection Capacity Utilization			69.5%		ICU Level of Service	C
Analysis Period (min)			15			







NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	925	36	31	582		57	19	22	12	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3519		1770	3537			1755			1841	1583
Flt Permitted	0.41	1.00		0.20	1.00			0.78			0.91	1.00
Satd. Flow (perm)	759	3519		365	3537			1411			1702	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	1101	43	34	640	3	70	23	27	16	53	39
RTOR Reduction (vph)	0	4	0	0	0	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	1140	0	34	643	0	0	99	0	0	69	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	22.2	22.2		22.2	22.2			9.3			9.3	9.3
Effective Green, g (s)	22.2	22.2		22.2	22.2			9.3			9.3	9.3
Actuated g/C Ratio	0.55	0.55		0.55	0.55			0.23			0.23	0.23
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	414	1919		199	1929			322			388	361
v/s Ratio Prot		c0.32			0.18							
v/s Ratio Perm	0.04			0.09			c0.07			0.04	0.01	
v/c Ratio	0.08	0.59		0.17	0.33		0.31			0.18	0.02	
Uniform Delay, d1	4.4	6.2		4.6	5.1		13.0			12.6	12.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00			1.00	1.00	
Incremental Delay, d2	0.1	0.5		0.4	0.1		0.5			0.2	0.0	
Delay (s)	4.5	6.7		5.0	5.2		13.6			12.8	12.2	
Level of Service	A	A		A	A		B			B	B	
Approach Delay (s)		6.7			5.2		13.6			12.6		
Approach LOS		A			A		B			B		
Intersection Summary												
HCM 2000 Control Delay		6.9			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.51										
Actuated Cycle Length (s)		40.7			Sum of lost time (s)		9.2					
Intersection Capacity Utilization		46.5%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												








NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	973	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1187	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			1196		1187	1187
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1196		1187	1187
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		96	99
cM capacity (veh/h)			583		208	230
Direction, Lane #						
Volume Total	1187	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	213			
Volume to Capacity	0.70	0.01	0.06			
Queue Length 95th (ft)	0	0	4			
Control Delay (s)	0.0	0.0	22.9			
Lane LOS			C			
Approach Delay (s)	0.0		22.9			
Approach LOS			C			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			61.2%		ICU Level of Service	B
Analysis Period (min)			15			








NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	1892	133	59	914	133	101	91	63	176	81	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5035		1770	4989			3342			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5035		1770	4989			3342			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	45	2013	141	60	923	134	111	100	69	198	91	29
RTOR Reduction (vph)	0	4	0	0	10	0	0	18	0	0	4	0
Lane Group Flow (vph)	45	2150	0	60	1047	0	0	262	0	0	314	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2005		196	1987			649			658	
v/s Ratio Prot	0.03	c0.43		c0.03	0.21			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.23	1.07		0.31	0.53			0.40			0.48	
Uniform Delay, d1	73.0	54.1		73.6	41.2			63.4			64.4	
Progression Factor	1.00	1.00		1.23	0.84			1.00			1.00	
Incremental Delay, d2	0.6	42.7		0.8	0.9			0.4			0.5	
Delay (s)	73.6	96.8		91.0	35.6			63.8			64.9	
Level of Service	E	F		F	D			E			E	
Approach Delay (s)		96.3			38.6			63.8			64.9	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		75.0			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		119.1%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	2180	58	49	1328	56	21	11	35	64	13	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5066		1770	5054			1704		1770	1719	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.62	1.00	
Satd. Flow (perm)	1770	5066		1770	5054			1554		1156	1719	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2224	59	51	1369	58	25	13	42	75	15	16
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	14	0
Lane Group Flow (vph)	20	2282	0	51	1425	0	0	57	0	75	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3563		157	3666			191		142	212	
v/s Ratio Prot	0.01	c0.45		c0.03	c0.28						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.64		0.32	0.39			0.30		0.53	0.08	
Uniform Delay, d1	79.3	14.4		76.9	9.4			71.8		74.0	69.9	
Progression Factor	1.45	0.15		1.54	0.27			1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.2		1.0	0.2			0.9		3.5	0.2	
Delay (s)	115.5	2.3		119.7	2.8			72.7		77.5	70.0	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.3			6.9			72.7			75.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.0			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		63.1%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	2057	208	160	1402	83	133	41	130	157	45	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5015		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5015		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	29	2188	221	165	1445	86	145	45	141	212	61	27
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	117	0	4	0
Lane Group Flow (vph)	29	2402	0	165	1445	49	0	190	24	0	296	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2			4				
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2220		192	2364	736		305	269		575	
v/s Ratio Prot	0.02	c0.48		c0.09	c0.28			c0.11			c0.09	
v/s Ratio Perm					0.03			0.02				
v/c Ratio	0.18	1.08		0.86	0.61	0.07		0.62	0.09		0.51	
Uniform Delay, d1	76.0	50.1		78.8	36.0	26.6		69.3	62.9		67.9	
Progression Factor	1.00	1.04		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	44.1		29.6	1.2	0.2		9.2	0.7		3.3	
Delay (s)	76.1	96.1		108.5	37.2	26.8		78.5	63.5		71.1	
Level of Service	E	F		F	D	C		E	E		E	
Approach Delay (s)		95.8			43.6			72.1			71.1	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		74.0			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		108.3%			ICU Level of Service				G			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2023 Alt 1/2/3
Timing Plan: PM PEAK












Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	2187	50	174	1707	16	40	9	83	24	11	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5068		1770	5078			1679			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.83	
Satd. Flow (perm)	1770	5068		1770	5078			1512			1496	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	11	2430	56	183	1797	17	47	11	98	30	14	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	78	0	0	11	0
Lane Group Flow (vph)	11	2484	0	183	1813	0	0	78	0	0	47	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4				4	
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.3			17.3	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.3			17.3	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2417		234	3046			309			306	
v/s Ratio Prot	0.01	c0.49		c0.10	0.36							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.69	1.03		0.78	0.60			0.25			0.15	
Uniform Delay, d1	41.7	22.1		35.5	10.5			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	80.1	25.8		15.5	0.3			0.4			0.2	
Delay (s)	121.8	47.9		51.0	10.8			28.6			27.8	
Level of Service	F	D		D	B			C			C	
Approach Delay (s)		48.2			14.5			28.6			27.8	
Approach LOS		D			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		33.0			HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		84.5			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		74.5%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	193	2121	32	336	1715	569	69	182	547	603	245	233
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	203	2233	34	361	1844	612	73	194	582	655	266	253
RTOR Reduction (vph)	0	1	0	0	0	83	0	26	279	0	2	126
Lane Group Flow (vph)	203	2266	0	361	1844	529	73	378	93	655	289	102
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.2	38.2	11.8	41.3	41.3
Effective Green, g (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.2	38.2	11.8	41.3	41.3
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1202		519	2320	722	100	406	375	264	470	405
v/s Ratio Prot	0.06	c0.45		c0.20	c0.36		0.04	c0.23		c0.19	c0.17	
v/s Ratio Perm						0.33		0.06				0.07
v/c Ratio	0.80	1.89		0.70	0.79	0.73	0.73	0.93	0.25	2.48	0.61	0.25
Uniform Delay, d1	69.8	58.4		48.0	35.5	34.0	71.1	56.2	46.0	70.7	49.0	43.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.7	401.6		4.0	2.0	3.8	23.2	28.2	0.3	677.7	2.4	0.3
Delay (s)	85.4	460.0		52.1	37.5	37.9	94.3	84.4	46.3	748.4	51.4	44.2
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		429.3			39.4			68.6			438.9	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		238.7			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.27										
Actuated Cycle Length (s)		153.2			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		131.6%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑	↑↑
Volume (vph)	0	528	893	0	451	1732
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	593	950	0	496	1903
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	593	950	0	496	1900
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.17	c0.27		0.28	c0.68
v/s Ratio Perm						
v/c Ratio		0.33	1.11		0.75	1.07
Uniform Delay, d1		11.8	30.3		21.7	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	64.5		4.6	42.8
Delay (s)		11.9	94.8		26.3	57.3
Level of Service		B	F		C	E
Approach Delay (s)		11.9	94.8		50.9	
Approach LOS		B	F		D	
Intersection Summary						
HCM 2000 Control Delay		55.6		HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio		1.16				
Actuated Cycle Length (s)		80.0		Sum of lost time (s)	14.2	
Intersection Capacity Utilization		89.9%		ICU Level of Service	E	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑↑				
Volume (vph)	0	972	0	0	542	257	462	2	110	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1618				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1618				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1012	0	0	609	289	497	2	118	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	31	0	0	0	0
Lane Group Flow (vph)	0	1012	0	0	800	0	313	273	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.7			19.7		14.8	14.8				
Effective Green, g (s)		19.7			19.7		14.8	14.8				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1640			1561		585	563				
v/s Ratio Prot		0.29			0.24							
v/s Ratio Perm							0.19	0.17				
v/c Ratio		0.62			0.51		0.54	0.48				
Uniform Delay, d1		8.6			8.0		11.1	10.9				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.7			0.3		0.9	0.7				
Delay (s)		9.3			8.3		12.0	11.5				
Level of Service		A			A		B	B				
Approach Delay (s)		9.3			8.3		11.8				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		9.5			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		42.5			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		49.7%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2023 Alt 1/2/3
Timing Plan: PM PEAK















Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	171	710	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	186	1029	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1232	1029	1029			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1232	1029	1029			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	94	99			
cM capacity (veh/h)	193	284	675			
Direction, Lane #						
Volume Total	16	195	1029			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	284	675	1700			
Volume to Capacity	0.06	0.01	0.61			
Queue Length 95th (ft)	4	1	0			
Control Delay (s)	18.4	0.6	0.0			
Lane LOS	C	A				
Approach Delay (s)	18.4	0.6	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		47.4%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus

1: 2015 AM SR-75 (Silver Strand Blvd) & Hooper Blvd

North Gate with Signal

Timing Plan:















							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	0	155	1582	0	172	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0		4.0	
Lane Util. Factor			1.00	0.95		0.95	
Frt			1.00	1.00		1.00	
Flt Protected			0.95	1.00		1.00	
Satd. Flow (prot)			1770	3539		3539	
Flt Permitted			0.95	1.00		1.00	
Satd. Flow (perm)			1770	3539		3539	
Peak-hour factor, PHF	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Adj. Flow (vph)	0	0	161	1648	0	218	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	161	1648	0	218	0
Turn Type	Perm		Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2	6		6
Permitted Phases	4				6		6
Actuated Green, G (s)			4.1	36.9			28.8
Effective Green, g (s)			4.1	36.9			28.8
Actuated g/C Ratio			0.09	0.77			0.60
Clearance Time (s)			4.0	4.0			4.0
Vehicle Extension (s)			3.0	3.0			3.0
Lane Grp Cap (vph)			150	2709			2114
v/s Ratio Prot			c0.09	c0.47			0.06
v/s Ratio Perm							
v/c Ratio			1.07	0.61			0.10
Uniform Delay, d1			22.1	2.5			4.2
Progression Factor			1.00	1.00			1.00
Incremental Delay, d2			94.4	0.4			0.0
Delay (s)			116.4	2.9			4.2
Level of Service			F	A			A
Approach Delay (s)	0.0		13.0		4.2		
Approach LOS	A		B		A		
Intersection Summary							
HCM 2000 Control Delay			12.0	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio			0.65				
Actuated Cycle Length (s)			48.2	Sum of lost time (s)		12.0	
Intersection Capacity Utilization			53.7%	ICU Level of Service		A	
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus

2: 2015 PM SR-75 (Silver Strand Blvd)

North Gate with Signal

Timing Plan:

							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	155	0	446	0	1483	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0		4.0	
Lane Util. Factor		1.00		0.95		0.95	
Flt		0.85		1.00		1.00	
Flt Protected		1.00		1.00		1.00	
Satd. Flow (prot)		1583		3539		3539	
Flt Permitted		1.00		1.00		1.00	
Satd. Flow (perm)		1583		3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	168	0	485	0	1612	0
RTOR Reduction (vph)	0	110	0	0	0	0	0
Lane Group Flow (vph)	0	58	0	485	0	1612	0
Turn Type	Perm		Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2	6		6
Permitted Phases	4				6		6
Actuated Green, G (s)	9.5			45.6	45.6		
Effective Green, g (s)	9.5			45.6	45.6		
Actuated g/C Ratio	0.15			0.72	0.72		
Clearance Time (s)	4.0			4.0	4.0		
Vehicle Extension (s)	3.0			3.0	3.0		
Lane Grp Cap (vph)	238			2557	2557		
v/s Ratio Prot				0.14	c0.46		
v/s Ratio Perm	c0.04						
v/c Ratio	0.25			0.19	0.63		
Uniform Delay, d1	23.6			2.8	4.5		
Progression Factor	1.00			1.00	1.00		
Incremental Delay, d2	0.5			0.2	1.2		
Delay (s)	24.2			3.0	5.6		
Level of Service	C			A	A		
Approach Delay (s)	24.2			3.0	5.6		
Approach LOS	C			A	A		
Intersection Summary							
HCM 2000 Control Delay			6.5	HCM 2000 Level of Service		A	
HCM 2000 Volume to Capacity ratio			0.61				
Actuated Cycle Length (s)			63.1	Sum of lost time (s)		12.0	
Intersection Capacity Utilization			57.3%	ICU Level of Service		B	
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus
3: 2016 AM SR-75 (Silver Strand Blvd)

North Gate with Signal
Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement	↖	↗	↖	↗	↖	↗	↖
Lane Configurations	↖	↗	↖	↗	↖	↗	↖
Volume (vph)	0	12	255	1594	0	174	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00	0.95		0.95	
Frt		0.85	1.00	1.00		1.00	
Flt Protected		1.00	0.95	1.00		1.00	
Satd. Flow (prot)		1583	1770	3539		3539	
Flt Permitted		1.00	0.95	1.00		1.00	
Satd. Flow (perm)		1583	1770	3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	13	277	1733	0	189	0
RTOR Reduction (vph)	0	11	0	0	0	0	0
Lane Group Flow (vph)	0	2	277	1733	0	189	0
Turn Type	Perm	Prot	NA	Perm	NA	Perm	
Protected Phases	4	5	2		6		
Permitted Phases		4		6		6	
Actuated Green, G (s)		8.8	15.0	48.2		29.2	
Effective Green, g (s)		8.8	15.0	48.2		29.2	
Actuated g/C Ratio		0.14	0.23	0.74		0.45	
Clearance Time (s)		4.0	4.0	4.0		4.0	
Vehicle Extension (s)		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)		214	408	2624		1589	
v/s Ratio Prot			0.16	0.49		0.05	
v/s Ratio Perm		0.00					
v/c Ratio		0.01	0.68	0.66		0.12	
Uniform Delay, d1		24.3	22.8	4.3		10.4	
Progression Factor		1.00	1.00	1.00		1.00	
Incremental Delay, d2		0.0	4.5	1.3		0.2	
Delay (s)		24.3	27.3	5.6		10.6	
Level of Service		C	C	A		B	
Approach Delay (s)	24.3			8.6		10.6	
Approach LOS	C			A		B	
Intersection Summary							
HCM 2000 Control Delay		8.8		HCM 2000 Level of Service		A	
HCM 2000 Volume to Capacity ratio		0.60					
Actuated Cycle Length (s)		65.0		Sum of lost time (s)		12.0	
Intersection Capacity Utilization		54.1%		ICU Level of Service		A	
Analysis Period (min)		15					
c Critical Lane Group							

NBC Coastal Campus
4: 2016 PM SR-75 (Silver Strand Blvd)

North Gate with Signal
Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement	↖	↗	↖	↗	↖	↗	↖
Lane Configurations	↖	↗	↖	↗	↖	↗	↖
Volume (vph)	0	255	12	450	0	1494	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00	0.95		0.95	
Frt		0.85	1.00	1.00		1.00	
Flt Protected		1.00	0.95	1.00		1.00	
Satd. Flow (prot)		1583	1770	3539		3539	
Flt Permitted		1.00	0.95	1.00		1.00	
Satd. Flow (perm)		1583	1770	3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	277	13	489	0	1624	0
RTOR Reduction (vph)	0	96	0	0	0	0	0
Lane Group Flow (vph)	0	181	13	489	0	1624	0
Turn Type	Perm	Prot	NA	Perm	NA	Perm	
Protected Phases	4	5	2		6		
Permitted Phases		4		6		6	
Actuated Green, G (s)		12.8	0.7	50.0		45.3	
Effective Green, g (s)		12.8	0.7	50.0		45.3	
Actuated g/C Ratio		0.18	0.01	0.71		0.64	
Clearance Time (s)		4.0	4.0	4.0		4.0	
Vehicle Extension (s)		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)		286	17	2499		2264	
v/s Ratio Prot			0.01	0.14		0.46	
v/s Ratio Perm		0.11					
v/c Ratio		0.63	0.76	0.20		0.72	
Uniform Delay, d1		26.8	35.0	3.5		8.5	
Progression Factor		1.00	1.00	1.00		1.00	
Incremental Delay, d2		4.5	106.9	0.2		2.0	
Delay (s)		31.4	141.8	3.7		10.5	
Level of Service		C	F	A		B	
Approach Delay (s)	31.4			7.3		10.5	
Approach LOS	C			A		B	
Intersection Summary							
HCM 2000 Control Delay		12.2		HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio		0.70					
Actuated Cycle Length (s)		70.8		Sum of lost time (s)		12.0	
Intersection Capacity Utilization		63.8%		ICU Level of Service		B	
Analysis Period (min)		15					
c Critical Lane Group							

NBC Coastal Campus
5: 2017 AM SR-75 (Silver Strand Blvd)

North Gate with Signal
Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↩	↩	↩	↩	↩	↩	↩
Volume (vph)	0	12	274	1610	0	206	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00	0.95		0.95	
Frt		0.85	1.00	1.00		1.00	
Flt Protected		1.00	0.95	1.00		1.00	
Satd. Flow (prot)		1583	1770	3539		3539	
Flt Permitted		1.00	0.95	1.00		1.00	
Satd. Flow (perm)		1583	1770	3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	13	298	1750	0	224	0
RTOR Reduction (vph)	0	12	0	0	0	0	0
Lane Group Flow (vph)	0	1	298	1750	0	224	0
Turn Type	Perm	Prot	NA	Perm	NA	Perm	
Protected Phases	4	5	2		6	6	
Permitted Phases		4		6		6	
Actuated Green, G (s)		4.3	9.3	37.7		24.4	
Effective Green, g (s)		4.3	9.3	37.7		24.4	
Actuated g/C Ratio		0.09	0.19	0.75		0.49	
Clearance Time (s)		4.0	4.0	4.0		4.0	
Vehicle Extension (s)		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)		136	329	2668		1727	
v/s Ratio Prot			c0.17	c0.49		0.06	
v/s Ratio Perm		c0.00					
v/c Ratio		0.01	0.91	0.66		0.13	
Uniform Delay, d1		20.9	19.9	3.0		7.0	
Progression Factor		1.00	1.00	1.00		1.00	
Incremental Delay, d2		0.0	27.0	1.3		0.2	
Delay (s)		20.9	46.9	4.3		7.2	
Level of Service		C	D	A		A	
Approach Delay (s)	20.9			10.5		7.2	
Approach LOS	C			B		A	
Intersection Summary							
HCM 2000 Control Delay			10.2		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio			0.69				
Actuated Cycle Length (s)			50.0		Sum of lost time (s)		12.0
Intersection Capacity Utilization			54.5%		ICU Level of Service		A
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus
6: 2017 PM SR-75 (Silver Strand Blvd)

North Gate with Signal
Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↩	↩	↩	↩	↩	↩	↩
Volume (vph)	0	274	12	484	0	1513	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00	0.95		0.95	
Frt		0.85	1.00	1.00		1.00	
Flt Protected		1.00	0.95	1.00		1.00	
Satd. Flow (prot)		1583	1770	3539		3539	
Flt Permitted		1.00	0.95	1.00		1.00	
Satd. Flow (perm)		1583	1770	3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	298	13	526	0	1645	0
RTOR Reduction (vph)	0	95	0	0	0	0	0
Lane Group Flow (vph)	0	203	13	526	0	1645	0
Turn Type	Perm	Prot	NA	Perm	NA	Perm	
Protected Phases	4	5	2		6	6	
Permitted Phases		4		6		6	
Actuated Green, G (s)		13.5	0.7	49.6		44.9	
Effective Green, g (s)		13.5	0.7	49.6		44.9	
Actuated g/C Ratio		0.19	0.01	0.70		0.63	
Clearance Time (s)		4.0	4.0	4.0		4.0	
Vehicle Extension (s)		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)		300	17	2468		2234	
v/s Ratio Prot			c0.01	0.15		c0.46	
v/s Ratio Perm		c0.13					
v/c Ratio		0.68	0.76	0.21		0.74	
Uniform Delay, d1		26.8	35.1	3.8		9.0	
Progression Factor		1.00	1.00	1.00		1.00	
Incremental Delay, d2		6.0	106.9	0.2		2.2	
Delay (s)		32.7	142.0	4.0		11.2	
Level of Service		C	F	A		B	
Approach Delay (s)	32.7			7.3		11.2	
Approach LOS	C			A		B	
Intersection Summary							
HCM 2000 Control Delay			13.0		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio			0.72				
Actuated Cycle Length (s)			71.1		Sum of lost time (s)		12.0
Intersection Capacity Utilization			65.5%		ICU Level of Service		C
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus
7: 2018 AM SR-75 (Silver Strand Blvd)

North Gate with Signal
Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement							
Lane Configurations							
Volume (vph)	0	0	264	1623	0	220	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0		4.0	
Lane Util. Factor			1.00	0.95		0.95	
Frt			1.00	1.00		1.00	
Flt Protected			0.95	1.00		1.00	
Satd. Flow (prot)			1770	3539		3539	
Flt Permitted			0.95	1.00		1.00	
Satd. Flow (perm)			1770	3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	287	1764	0	239	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	287	1764	0	239	0
Turn Type	Perm	Prot	NA	Perm	NA	Perm	
Protected Phases	4	5	2		6		
Permitted Phases		4		6		6	
Actuated Green, G (s)			9.4	38.0		24.6	
Effective Green, g (s)			9.4	38.0		24.6	
Actuated g/C Ratio			0.19	0.77		0.50	
Clearance Time (s)			4.0	4.0		4.0	
Vehicle Extension (s)			3.0	3.0		3.0	
Lane Grp Cap (vph)			338	2738		1773	
v/s Ratio Prot			c0.16	c0.50		0.07	
v/s Ratio Perm							
v/c Ratio			0.85	0.64		0.13	
Uniform Delay, d1			19.2	2.5		6.6	
Progression Factor			1.00	1.00		1.00	
Incremental Delay, d2			17.7	1.2		0.2	
Delay (s)			36.9	3.7		6.7	
Level of Service			D	A		A	
Approach Delay (s)	0.0			8.3		6.7	
Approach LOS	A			A		A	
Intersection Summary							
HCM 2000 Control Delay			8.2		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.69				
Actuated Cycle Length (s)			49.1		Sum of lost time (s)		12.0
Intersection Capacity Utilization			54.9%		ICU Level of Service		A
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus
8: 2018 PM SR-75 (Silver Strand Blvd)

North Gate with Signal
Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement							
Lane Configurations							
Volume (vph)	0	264	0	499	0	1528	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0		4.0	
Lane Util. Factor		1.00		0.95		0.95	
Frt		0.85		1.00		1.00	
Flt Protected		1.00		1.00		1.00	
Satd. Flow (prot)		1583		3539		3539	
Flt Permitted		1.00		1.00		1.00	
Satd. Flow (perm)		1583		3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	287	0	542	0	1661	0
RTOR Reduction (vph)	0	93	0	0	0	0	0
Lane Group Flow (vph)	0	194	0	542	0	1661	0
Turn Type	Perm	Prot	NA	Perm	NA	Perm	
Protected Phases	4	5	2		6		
Permitted Phases		4		6		6	
Actuated Green, G (s)		13.2		46.5		46.5	
Effective Green, g (s)		13.2		46.5		46.5	
Actuated g/C Ratio		0.19		0.69		0.69	
Clearance Time (s)		4.0		4.0		4.0	
Vehicle Extension (s)		3.0		3.0		3.0	
Lane Grp Cap (vph)		308		2430		2430	
v/s Ratio Prot				0.15		c0.47	
v/s Ratio Perm		c0.12					
v/c Ratio		0.63		0.22		0.68	
Uniform Delay, d1		25.0		3.9		6.3	
Progression Factor		1.00		1.00		1.00	
Incremental Delay, d2		4.0		0.2		1.6	
Delay (s)		29.0		4.1		7.8	
Level of Service		C		A		A	
Approach Delay (s)	29.0			4.1		7.8	
Approach LOS	C			A		A	
Intersection Summary							
HCM 2000 Control Delay			9.5		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.72				
Actuated Cycle Length (s)			67.7		Sum of lost time (s)		12.0
Intersection Capacity Utilization			65.3%		ICU Level of Service		C
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus
9: 2019 AM SR-75 (Silver Strand Blvd)

North Gate with Signal
Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↩	↩	↩	↩	↩	↩	↩
Volume (vph)	0	0	394	1637	0	236	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0		4.0	
Lane Util. Factor			1.00	0.95		0.95	
Flt			1.00	1.00		1.00	
Flt Protected			0.95	1.00		1.00	
Satd. Flow (prot)			1770	3539		3539	
Flt Permitted			0.95	1.00		1.00	
Satd. Flow (perm)			1770	3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	428	1779	0	257	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	428	1779	0	257	0
Turn Type	Perm	Prot	NA	Perm	NA	Perm	
Protected Phases	4	5	2		6		
Permitted Phases		4		6		6	
Actuated Green, G (s)			18.8	46.3		23.5	
Effective Green, g (s)			18.8	46.3		23.5	
Actuated g/C Ratio			0.33	0.81		0.41	
Clearance Time (s)			4.0	4.0		4.0	
Vehicle Extension (s)			3.0	3.0		3.0	
Lane Grp Cap (vph)			578	2849		1446	
v/s Ratio Prot			c0.24	c0.50		0.07	
v/s Ratio Perm							
v/c Ratio			0.74	0.62		0.18	
Uniform Delay, d1			17.2	2.2		10.8	
Progression Factor			1.00	1.00		1.00	
Incremental Delay, d2			5.1	1.0		0.3	
Delay (s)			22.3	3.2		11.1	
Level of Service			C	A		B	
Approach Delay (s)	0.0			6.9		11.1	
Approach LOS	A			A		B	
Intersection Summary							
HCM 2000 Control Delay			7.4		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.66				
Actuated Cycle Length (s)			57.5		Sum of lost time (s)		12.0
Intersection Capacity Utilization			55.3%		ICU Level of Service		B
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus
10: 2019 PM SR-75 (Silver Strand Blvd)

North Gate with Signal
Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↩	↩	↩	↩	↩	↩	↩
Volume (vph)	0	394	0	519	0	1543	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0		4.0	
Lane Util. Factor			1.00	0.95		0.95	
Flt			0.85	1.00		1.00	
Flt Protected			1.00	1.00		1.00	
Satd. Flow (prot)			1583	3539		3539	
Flt Permitted			1.00	1.00		1.00	
Satd. Flow (perm)			1583	3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	428	0	564	0	1677	0
RTOR Reduction (vph)	0	86	0	0	0	0	0
Lane Group Flow (vph)	0	342	0	564	0	1677	0
Turn Type	Perm	Prot	NA	Perm	NA	Perm	
Protected Phases	4	5	2		6		
Permitted Phases		4		6		6	
Actuated Green, G (s)			18.7	45.1		45.1	
Effective Green, g (s)			18.7	45.1		45.1	
Actuated g/C Ratio			0.26	0.63		0.63	
Clearance Time (s)			4.0	4.0		4.0	
Vehicle Extension (s)			3.0	3.0		3.0	
Lane Grp Cap (vph)			412	2222		2222	
v/s Ratio Prot				0.16		c0.47	
v/s Ratio Perm			c0.22				
v/c Ratio			0.83	0.25		0.75	
Uniform Delay, d1			25.1	5.9		9.4	
Progression Factor			1.00	1.00		1.00	
Incremental Delay, d2			13.3	0.3		2.4	
Delay (s)			38.3	6.2		11.9	
Level of Service			D	A		B	
Approach Delay (s)	38.3			6.2		11.9	
Approach LOS	D			A		B	
Intersection Summary							
HCM 2000 Control Delay			14.9		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio			0.83				
Actuated Cycle Length (s)			71.8		Sum of lost time (s)		12.0
Intersection Capacity Utilization			73.7%		ICU Level of Service		D
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus
11: 2020 AM SR-75 (Silver Strand Blvd)

North Gate with Signal
Timing Plan:

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	0	564	1652	0	258	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0		4.0	
Lane Util. Factor			1.00	0.95		0.95	
Flt			1.00	1.00		1.00	
Flt Protected			0.95	1.00		1.00	
Satd. Flow (prot)			1770	3539		3539	
Flt Permitted			0.95	1.00		1.00	
Satd. Flow (perm)			1770	3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	613	1796	0	280	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	613	1796	0	280	0
Turn Type	Perm		Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)			28.0	61.7		29.7	
Effective Green, g (s)			28.0	61.7		29.7	
Actuated g/C Ratio			0.36	0.80		0.39	
Clearance Time (s)			4.0	4.0		4.0	
Vehicle Extension (s)			3.0	3.0		3.0	
Lane Grp Cap (vph)			643	2835		1365	
v/s Ratio Prot			c0.35	c0.51		0.08	
v/s Ratio Perm							
v/c Ratio			0.95	0.63		0.21	
Uniform Delay, d1			23.9	3.1		15.8	
Progression Factor			1.00	1.00		1.00	
Incremental Delay, d2			24.4	1.1		0.3	
Delay (s)			48.2	4.2		16.1	
Level of Service			D	A		B	
Approach Delay (s)	0.0			15.4		16.1	
Approach LOS	A			B		B	
Intersection Summary							
HCM 2000 Control Delay			15.5		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio			0.72				
Actuated Cycle Length (s)			77.0		Sum of lost time (s)		12.0
Intersection Capacity Utilization			55.7%		ICU Level of Service		B
Analysis Period (min)			15				
c Critical Lane Group							








NBC Coastal Campus
12: 2020 PM SR-75 (Silver Strand Blvd)

North Gate with Signal
Timing Plan:

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	564	0	542	0	1560	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0		4.0	
Lane Util. Factor		1.00		0.95		0.95	
Flt		0.85		1.00		1.00	
Flt Protected		1.00		1.00		1.00	
Satd. Flow (prot)		1583		3539		3539	
Flt Permitted		1.00		1.00		1.00	
Satd. Flow (perm)		1583		3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	613	0	589	0	1696	0
RTOR Reduction (vph)	0	66	0	0	0	0	0
Lane Group Flow (vph)	0	547	0	589	0	1696	0
Turn Type	Perm		Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)		30.0		52.0		52.0	
Effective Green, g (s)		30.0		52.0		52.0	
Actuated g/C Ratio		0.33		0.58		0.58	
Clearance Time (s)		4.0		4.0		4.0	
Vehicle Extension (s)		3.0		3.0		3.0	
Lane Grp Cap (vph)		527		2044		2044	
v/s Ratio Prot				0.17		c0.48	
v/s Ratio Perm		c0.35					
v/c Ratio		1.04		0.29		0.83	
Uniform Delay, d1		30.0		9.6		15.4	
Progression Factor		1.00		1.00		1.00	
Incremental Delay, d2		49.4		0.4		4.1	
Delay (s)		79.4		10.0		19.5	
Level of Service		E		A		B	
Approach Delay (s)	79.4			10.0		19.5	
Approach LOS	E			A		B	
Intersection Summary							
HCM 2000 Control Delay			30.2		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio			0.95				
Actuated Cycle Length (s)			90.0		Sum of lost time (s)		12.0
Intersection Capacity Utilization			84.7%		ICU Level of Service		E
Analysis Period (min)			15				
c Critical Lane Group							








NBC Coastal Campus
13: 2021 AM SR-75 (Silver Strand Blvd)

North Gate with Signal
Timing Plan:

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	0	450	1667	0	290	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0		4.0	
Lane Util. Factor			1.00	0.95		0.95	
Frt			1.00	1.00		1.00	
Flt Protected			0.95	1.00		1.00	
Satd. Flow (prot)			1770	3539		3539	
Flt Permitted			0.95	1.00		1.00	
Satd. Flow (perm)			1770	3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	489	1812	0	315	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	489	1812	0	315	0
Turn Type	Perm		Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)			23.0	42.1		15.1	
Effective Green, g (s)			23.0	42.1		15.1	
Actuated g/C Ratio			0.41	0.75		0.27	
Clearance Time (s)			4.0	4.0		4.0	
Vehicle Extension (s)			3.0	3.0		3.0	
Lane Grp Cap (vph)			726	2660		954	
v/s Ratio Prot			0.28	0.51		0.09	
v/s Ratio Perm							
v/c Ratio			0.67	0.68		0.33	
Uniform Delay, d1			13.4	3.5		16.4	
Progression Factor			1.00	1.00		1.00	
Incremental Delay, d2			2.5	0.7		0.2	
Delay (s)			15.9	4.3		16.6	
Level of Service			B	A		B	
Approach Delay (s)	0.0			6.7		16.6	
Approach LOS	A			A		B	
Intersection Summary							
HCM 2000 Control Delay			7.9	HCM 2000 Level of Service			A
HCM 2000 Volume to Capacity ratio			0.65				
Actuated Cycle Length (s)			56.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization			56.1%	ICU Level of Service			B
Analysis Period (min)			15				
c Critical Lane Group							















NBC Coastal Campus
14: 2021 PM SR-75 (Silver Strand Blvd)

North Gate with Signal
Timing Plan:

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	450	0	575	0	1578	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0		4.0	
Lane Util. Factor			1.00	0.95		0.95	
Frt			0.85	1.00		1.00	
Flt Protected			1.00	1.00		1.00	
Satd. Flow (prot)			1583	3539		3539	
Flt Permitted			1.00	1.00		1.00	
Satd. Flow (perm)			1583	3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	489	0	625	0	1715	0
RTOR Reduction (vph)	0	66	0	0	0	0	0
Lane Group Flow (vph)	0	423	0	625	0	1715	0
Turn Type	Perm		Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)			24.8	46.4		46.4	
Effective Green, g (s)			24.8	46.4		46.4	
Actuated g/C Ratio			0.31	0.59		0.59	
Clearance Time (s)			4.0	4.0		4.0	
Vehicle Extension (s)			3.0	3.0		3.0	
Lane Grp Cap (vph)			495	2073		2073	
v/s Ratio Prot				0.18		0.48	
v/s Ratio Perm			0.27				
v/c Ratio			0.85	0.30		0.83	
Uniform Delay, d1			25.5	8.2		13.2	
Progression Factor			1.00	1.00		1.00	
Incremental Delay, d2			13.5	0.1		2.9	
Delay (s)			39.0	8.3		16.0	
Level of Service			D	A		B	
Approach Delay (s)	39.0			8.3		16.0	
Approach LOS	D			A		B	
Intersection Summary							
HCM 2000 Control Delay			18.3	HCM 2000 Level of Service			B
HCM 2000 Volume to Capacity ratio			0.89				
Actuated Cycle Length (s)			79.2	Sum of lost time (s)		12.0	
Intersection Capacity Utilization			78.2%	ICU Level of Service			D
Analysis Period (min)			15				
c Critical Lane Group							















NBC Coastal Campus
15: 2022 AM SR-75 (Silver Strand Blvd)

North Gate with Signal
Timing Plan:

							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	0	134	1685	0	331	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0		4.0	
Lane Util. Factor			1.00	0.95		0.95	
Frt			1.00	1.00		1.00	
Flt Protected			0.95	1.00		1.00	
Satd. Flow (prot)			1770	3539		3539	
Flt Permitted			0.95	1.00		1.00	
Satd. Flow (perm)			1770	3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	146	1832	0	360	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	146	1832	0	360	0
Turn Type	Perm		Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2	6		6
Permitted Phases	4				6		6
Actuated Green, G (s)			6.4	44.3			33.9
Effective Green, g (s)			6.4	44.3			33.9
Actuated g/C Ratio			0.11	0.79			0.61
Clearance Time (s)			4.0	4.0			4.0
Vehicle Extension (s)			3.0	3.0			3.0
Lane Grp Cap (vph)			203	2809			2150
v/s Ratio Prot			0.08	c0.52			0.10
v/s Ratio Perm							
v/c Ratio			0.72	0.65			0.17
Uniform Delay, d1			23.8	2.5			4.8
Progression Factor			1.00	1.00			1.00
Incremental Delay, d2			11.5	0.6			0.0
Delay (s)			35.4	3.0			4.8
Level of Service			D	A			A
Approach Delay (s)	0.0			5.4		4.8	
Approach LOS	A			A		A	
Intersection Summary							
HCM 2000 Control Delay			5.3	HCM 2000 Level of Service		A	
HCM 2000 Volume to Capacity ratio			0.66				
Actuated Cycle Length (s)			55.8	Sum of lost time (s)		12.0	
Intersection Capacity Utilization			56.6%	ICU Level of Service		B	
Analysis Period (min)			15				
c Critical Lane Group							








NBC Coastal Campus
16: 2022 PM SR-75 (Silver Strand Blvd)

North Gate with Signal
Timing Plan:

							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	134	0	618	0	1600	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0		4.0	
Lane Util. Factor		1.00		0.95		0.95	
Flt		0.85		1.00		1.00	
Flt Protected		1.00		1.00		1.00	
Satd. Flow (prot)		1583		3539		3539	
Flt Permitted		1.00		1.00		1.00	
Satd. Flow (perm)		1583		3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	146	0	672	0	1739	0
RTOR Reduction (vph)	0	92	0	0	0	0	0
Lane Group Flow (vph)	0	54	0	672	0	1739	0
Turn Type	Perm		Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2	6		6
Permitted Phases	4				6		6
Actuated Green, G (s)	7.9		47.9		47.9		
Effective Green, g (s)	7.9		47.9		47.9		
Actuated g/C Ratio	0.12		0.75		0.75		
Clearance Time (s)	4.0		4.0		4.0		
Vehicle Extension (s)	3.0		3.0		3.0		
Lane Grp Cap (vph)	196		2657		2657		
v/s Ratio Prot			0.19		c0.49		
v/s Ratio Perm	c0.03						
v/c Ratio	0.28		0.25		0.65		
Uniform Delay, d1	25.4		2.4		3.9		
Progression Factor	1.00		1.00		1.00		
Incremental Delay, d2	0.8		0.1		0.6		
Delay (s)	26.1		2.5		4.5		
Level of Service	C		A		A		
Approach Delay (s)	26.1		2.5		4.5		
Approach LOS	C		A		A		
Intersection Summary							
HCM 2000 Control Delay			5.2		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.65				
Actuated Cycle Length (s)			63.8		Sum of lost time (s)		12.0
Intersection Capacity Utilization			59.2%		ICU Level of Service		B
Analysis Period (min)			15				
c Critical Lane Group							








NBC Coastal Campus
17: 2023 AM SR-75 (Silver Strand Blvd)

North Gate with Signal
Timing Plan:

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	0	0	1699	0	353	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	
Lane Util. Factor				0.95		0.95	
Flt				1.00		1.00	
Flt Protected				1.00		1.00	
Satd. Flow (prot)				3539		3539	
Flt Permitted				1.00		1.00	
Satd. Flow (perm)				3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1847	0	384	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	1847	0	384	0
Turn Type	Perm		Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)				50.3		50.3	
Effective Green, g (s)				50.3		50.3	
Actuated g/C Ratio				0.82		0.82	
Clearance Time (s)				4.0		4.0	
Vehicle Extension (s)				3.0		3.0	
Lane Grp Cap (vph)				2894		2894	
v/s Ratio Prot				c0.52		0.11	
v/s Ratio Perm							
v/c Ratio				0.64		0.13	
Uniform Delay, d1				2.1		1.1	
Progression Factor				1.00		1.00	
Incremental Delay, d2				0.5		0.0	
Delay (s)				2.6		1.2	
Level of Service				A		A	
Approach Delay (s)	0.0			2.6		1.2	
Approach LOS	A			A		A	
Intersection Summary							
HCM 2000 Control Delay			2.4	HCM 2000 Level of Service			A
HCM 2000 Volume to Capacity ratio			0.65				
Actuated Cycle Length (s)			61.5	Sum of lost time (s)		12.0	
Intersection Capacity Utilization			50.3%	ICU Level of Service			A
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus
18: 2023 PM SR-75 (Silver Strand Blvd)

North Gate with Signal
Timing Plan:















Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	0	0	643	0	1617	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	
Lane Util. Factor				0.95		0.95	
Flt				1.00		1.00	
Flt Protected				1.00		1.00	
Satd. Flow (prot)				3539		3539	
Flt Permitted				1.00		1.00	
Satd. Flow (perm)				3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	699	0	1758	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	699	0	1758	0
Turn Type	Perm		Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)				54.2		54.2	
Effective Green, g (s)				54.2		54.2	
Actuated g/C Ratio				0.79		0.79	
Clearance Time (s)				4.0		4.0	
Vehicle Extension (s)				3.0		3.0	
Lane Grp Cap (vph)				2783		2783	
v/s Ratio Prot				0.20		c0.50	
v/s Ratio Perm							
v/c Ratio				0.25		0.63	
Uniform Delay, d1				2.0		3.1	
Progression Factor				1.00		1.00	
Incremental Delay, d2				0.0		0.5	
Delay (s)				2.0		3.6	
Level of Service				A		A	
Approach Delay (s)	0.0			2.0		3.6	
Approach LOS	A			A		A	
Intersection Summary							
HCM 2000 Control Delay			3.1	HCM 2000 Level of Service			A
HCM 2000 Volume to Capacity ratio			0.60				
Actuated Cycle Length (s)			68.9	Sum of lost time (s)		12.0	
Intersection Capacity Utilization			48.0%	ICU Level of Service			A
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus

19: 2021 AM SR-75 (Silver Strand Blvd) Alt3noB

North Gate with Signal

Timing Plan:















							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	0	569	1697	0	290	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0		4.0	
Lane Util. Factor			1.00	0.95		0.95	
Frt			1.00	1.00		1.00	
Flt Protected			0.95	1.00		1.00	
Satd. Flow (prot)			1770	3539		3539	
Flt Permitted			0.95	1.00		1.00	
Satd. Flow (perm)			1770	3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	618	1845	0	315	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	618	1845	0	315	0
Turn Type	Perm		Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2	6		6
Permitted Phases	4				6		6
Actuated Green, G (s)			29.4	47.9		14.5	
Effective Green, g (s)			29.4	47.9		14.5	
Actuated g/C Ratio			0.48	0.78		0.24	
Clearance Time (s)			4.0	4.0		4.0	
Vehicle Extension (s)			3.0	3.0		3.0	
Lane Grp Cap (vph)			843	2747		831	
v/s Ratio Prot			c0.35	c0.52		0.09	
v/s Ratio Perm							
v/c Ratio			0.73	0.67		0.38	
Uniform Delay, d1			13.0	3.2		19.8	
Progression Factor			1.00	1.00		1.00	
Incremental Delay, d2			3.3	0.7		0.3	
Delay (s)			16.3	3.9		20.1	
Level of Service			B	A		C	
Approach Delay (s)	0.0		7.0		20.1		
Approach LOS	A		A		C		
Intersection Summary							
HCM 2000 Control Delay			8.5		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.66				
Actuated Cycle Length (s)			61.7		Sum of lost time (s)		12.0
Intersection Capacity Utilization			56.9%		ICU Level of Service		B
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus

20: 2021 PM SR-75 (Silver Strand Blvd) Alt3noB

North Gate with Signal

Timing Plan:








							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	569	0	575	0	1608	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0		4.0	
Lane Util. Factor		1.00		0.95		0.95	
Frt		0.85		1.00		1.00	
Flt Protected		1.00		1.00		1.00	
Satd. Flow (prot)		1583		3539		3539	
Flt Permitted		1.00		1.00		1.00	
Satd. Flow (perm)		1583		3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	618	0	625	0	1748	0
RTOR Reduction (vph)	0	56	0	0	0	0	0
Lane Group Flow (vph)	0	562	0	625	0	1748	0
Turn Type		Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)		34.0		50.0		50.0	
Effective Green, g (s)		34.0		50.0		50.0	
Actuated g/C Ratio		0.37		0.54		0.54	
Clearance Time (s)		4.0		4.0		4.0	
Vehicle Extension (s)		3.0		3.0		3.0	
Lane Grp Cap (vph)		585		1923		1923	
v/s Ratio Prot				0.18		c0.49	
v/s Ratio Perm		c0.35					
v/c Ratio		0.96		0.33		0.91	
Uniform Delay, d1		28.3		11.6		18.9	
Progression Factor		1.00		1.00		1.00	
Incremental Delay, d2		27.5		0.1		6.7	
Delay (s)		55.8		11.7		25.7	
Level of Service		E		B		C	
Approach Delay (s)	55.8			11.7		25.7	
Approach LOS	E			B		C	
Intersection Summary							
HCM 2000 Control Delay			29.0			HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.98				
Actuated Cycle Length (s)			92.0			Sum of lost time (s)	12.0
Intersection Capacity Utilization			86.3%			ICU Level of Service	E
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus

21: 2022 AM SR-75 (Silver Strand Blvd) Alt3noB

North Gate with Signal

Timing Plan:















Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	0	253	1715	0	331	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0		4.0	
Lane Util. Factor			1.00	0.95		0.95	
Frt			1.00	1.00		1.00	
Flt Protected			0.95	1.00		1.00	
Satd. Flow (prot)			1770	3539		3539	
Flt Permitted			0.95	1.00		1.00	
Satd. Flow (perm)			1770	3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	275	1864	0	360	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	275	1864	0	360	0
Turn Type	Perm		Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2	6		6
Permitted Phases	4				6		6
Actuated Green, G (s)			9.3	39.1		25.8	
Effective Green, g (s)			9.3	39.1		25.8	
Actuated g/C Ratio			0.18	0.78		0.51	
Clearance Time (s)			4.0	4.0		4.0	
Vehicle Extension (s)			3.0	3.0		3.0	
Lane Grp Cap (vph)			327	2750		1815	
v/s Ratio Prot			c0.16	c0.53		0.10	
v/s Ratio Perm							
v/c Ratio			0.84	0.68		0.20	
Uniform Delay, d1			19.8	2.6		6.6	
Progression Factor			1.00	1.00		1.00	
Incremental Delay, d2			17.4	0.7		0.1	
Delay (s)			37.2	3.3		6.7	
Level of Service			D	A		A	
Approach Delay (s)	0.0		7.7		6.7		
Approach LOS	A		A		A		
Intersection Summary							
HCM 2000 Control Delay			7.5		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.70				
Actuated Cycle Length (s)			50.3		Sum of lost time (s)		12.0
Intersection Capacity Utilization			57.4%		ICU Level of Service		B
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus

22: 2022 PM SR-75 (Silver Strand Blvd) Alt3noB

North Gate with Signal

Timing Plan:








							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	253	0	618	0	1630	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0		4.0	
Lane Util. Factor		1.00		0.95		0.95	
Flt		0.85		1.00		1.00	
Flt Protected		1.00		1.00		1.00	
Satd. Flow (prot)		1583		3539		3539	
Flt Permitted		1.00		1.00		1.00	
Satd. Flow (perm)		1583		3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	275	0	672	0	1772	0
RTOR Reduction (vph)	0	83	0	0	0	0	0
Lane Group Flow (vph)	0	192	0	672	0	1772	0
Turn Type	Perm		Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2	6		6
Permitted Phases	4				6		6
Actuated Green, G (s)		13.0		43.5		43.5	
Effective Green, g (s)		13.0		43.5		43.5	
Actuated g/C Ratio		0.20		0.67		0.67	
Clearance Time (s)		4.0		4.0		4.0	
Vehicle Extension (s)		3.0		3.0		3.0	
Lane Grp Cap (vph)		319		2386		2386	
v/s Ratio Prot				0.19		c0.50	
v/s Ratio Perm		c0.12					
v/c Ratio		0.60		0.28		0.74	
Uniform Delay, d1		23.4		4.2		6.8	
Progression Factor		1.00		1.00		1.00	
Incremental Delay, d2		3.2		0.1		1.3	
Delay (s)		26.6		4.3		8.1	
Level of Service		C		A		A	
Approach Delay (s)	26.6		4.3		8.1		
Approach LOS	C		A		A		
Intersection Summary							
HCM 2000 Control Delay			9.0	HCM 2000 Level of Service		A	
HCM 2000 Volume to Capacity ratio			0.76				
Actuated Cycle Length (s)			64.5	Sum of lost time (s)		12.0	
Intersection Capacity Utilization			67.4%	ICU Level of Service		C	
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus

23: 2023 AM SR-75 (Silver Strand Blvd) Alt3noB

North Gate with Signal

Timing Plan:








Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	0	0	1721	0	375	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	
Lane Util. Factor				0.95		0.95	
Flt				1.00		1.00	
Flt Protected				1.00		1.00	
Satd. Flow (prot)				3539		3539	
Flt Permitted				1.00		1.00	
Satd. Flow (perm)				3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1871	0	408	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	1871	0	408	0
Turn Type	Perm		Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)				50.9		50.9	
Effective Green, g (s)				50.9		50.9	
Actuated g/C Ratio				0.82		0.82	
Clearance Time (s)				4.0		4.0	
Vehicle Extension (s)				3.0		3.0	
Lane Grp Cap (vph)				2900		2900	
v/s Ratio Prot				0.53		0.12	
v/s Ratio Perm							
v/c Ratio				0.65		0.14	
Uniform Delay, d1				2.1		1.1	
Progression Factor				1.00		1.00	
Incremental Delay, d2				0.5		0.0	
Delay (s)				2.6		1.2	
Level of Service				A		A	
Approach Delay (s)	0.0			2.6		1.2	
Approach LOS	A			A		A	
Intersection Summary							
HCM 2000 Control Delay			2.4	HCM 2000 Level of Service			A
HCM 2000 Volume to Capacity ratio			0.66				
Actuated Cycle Length (s)			62.1	Sum of lost time (s)		12.0	
Intersection Capacity Utilization			50.9%	ICU Level of Service			A
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus

24: 2023 PM SR-75 (Silver Strand Blvd) Alt3noB








North Gate with Signal

Timing Plan:

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	0	0	668	0	1642	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	
Lane Util. Factor				0.95		0.95	
Flt				1.00		1.00	
Flt Protected				1.00		1.00	
Satd. Flow (prot)				3539		3539	
Flt Permitted				1.00		1.00	
Satd. Flow (perm)				3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	726	0	1785	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	726	0	1785	0
Turn Type	Perm		Perm	NA	Perm	NA	Perm
Protected Phases	4			2		6	
Permitted Phases		4	2		6		6
Actuated Green, G (s)				49.2		49.2	
Effective Green, g (s)				49.2		49.2	
Actuated g/C Ratio				0.82		0.82	
Clearance Time (s)				4.0		4.0	
Vehicle Extension (s)				3.0		3.0	
Lane Grp Cap (vph)				2887		2887	
v/s Ratio Prot				0.21		0.50	
v/s Ratio Perm							
v/c Ratio				0.25		0.62	
Uniform Delay, d1				1.3		2.1	
Progression Factor				1.00		1.00	
Incremental Delay, d2				0.0		0.4	
Delay (s)				1.3		2.5	
Level of Service				A		A	
Approach Delay (s)	0.0			1.3		2.5	
Approach LOS	A			A		A	
Intersection Summary							
HCM 2000 Control Delay			2.1	HCM 2000 Level of Service			A
HCM 2000 Volume to Capacity ratio			0.58				
Actuated Cycle Length (s)			60.3	Sum of lost time (s)		8.0	
Intersection Capacity Utilization			48.7%	ICU Level of Service			A
Analysis Period (min)			15				
c Critical Lane Group							








NBC Coastal Campus
25: 2016 AM SR-75 (Silver Strand Blvd) Alt2

North Gate with Signal
Timing Plan:

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	0	243	1594	0	174	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0		4.0	
Lane Util. Factor			1.00	0.95		0.95	
Flt			1.00	1.00		1.00	
Flt Protected			0.95	1.00		1.00	
Satd. Flow (prot)			1770	3539		3539	
Flt Permitted			0.95	1.00		1.00	
Satd. Flow (perm)			1770	3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	264	1733	0	189	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	264	1733	0	189	0
Turn Type	Perm		Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)			9.4	37.0		23.6	
Effective Green, g (s)			9.4	37.0		23.6	
Actuated g/C Ratio			0.20	0.77		0.49	
Clearance Time (s)			4.0	4.0		4.0	
Vehicle Extension (s)			3.0	3.0		3.0	
Lane Grp Cap (vph)			346	2727		1740	
v/s Ratio Prot			c0.15	c0.49		0.05	
v/s Ratio Perm							
v/c Ratio			0.76	0.64		0.11	
Uniform Delay, d1			18.2	2.5		6.6	
Progression Factor			1.00	1.00		1.00	
Incremental Delay, d2			9.6	0.5		0.0	
Delay (s)			27.8	3.0		6.6	
Level of Service			C	A		A	
Approach Delay (s)	0.0			6.3		6.6	
Approach LOS	A			A		A	
Intersection Summary							
HCM 2000 Control Delay			6.3	HCM 2000 Level of Service			A
HCM 2000 Volume to Capacity ratio			0.66				
Actuated Cycle Length (s)			48.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization			54.1%	ICU Level of Service			A
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus
26: 2016 PM SR-75 (Silver Strand Blvd) Alt2

North Gate with Signal
Timing Plan:

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	243	0	450	0	1494	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0		4.0	
Lane Util. Factor		1.00		0.95		0.95	
Flt		0.85		1.00		1.00	
Flt Protected		1.00		1.00		1.00	
Satd. Flow (prot)		1583		3539		3539	
Flt Permitted		1.00		1.00		1.00	
Satd. Flow (perm)		1583		3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	264	0	489	0	1624	0
RTOR Reduction (vph)	0	94	0	0	0	0	0
Lane Group Flow (vph)	0	170	0	489	0	1624	0
Turn Type	Perm		Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)		11.7		38.6		38.6	
Effective Green, g (s)		11.7		38.6		38.6	
Actuated g/C Ratio		0.20		0.66		0.66	
Clearance Time (s)		4.0		4.0		4.0	
Vehicle Extension (s)		3.0		3.0		3.0	
Lane Grp Cap (vph)		317		2343		2343	
v/s Ratio Prot				0.14		c0.46	
v/s Ratio Perm		c0.11					
v/c Ratio		0.54		0.21		0.69	
Uniform Delay, d1		20.9		3.9		6.2	
Progression Factor		1.00		1.00		1.00	
Incremental Delay, d2		1.8		0.0		0.9	
Delay (s)		22.6		3.9		7.1	
Level of Service		C		A		A	
Approach Delay (s)	22.6			3.9		7.1	
Approach LOS	C			A		A	
Intersection Summary							
HCM 2000 Control Delay			8.1	HCM 2000 Level of Service			A
HCM 2000 Volume to Capacity ratio			0.71				
Actuated Cycle Length (s)			58.3	Sum of lost time (s)		12.0	
Intersection Capacity Utilization			63.0%	ICU Level of Service			B
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus

27: 2017 AM SR-75 (Silver Strand Blvd) Alt2

North Gate with Signal

Timing Plan:

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	0	262	1610	0	206	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0		4.0	
Lane Util. Factor			1.00	0.95		0.95	
Flt			1.00	1.00		1.00	
Flt Protected			0.95	1.00		1.00	
Satd. Flow (prot)			1770	3539		3539	
Flt Permitted			0.95	1.00		1.00	
Satd. Flow (perm)			1770	3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	285	1750	0	224	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	285	1750	0	224	0
Turn Type	Perm		Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)			9.4	36.4		23.0	
Effective Green, g (s)			9.4	36.4		23.0	
Actuated g/C Ratio			0.20	0.77		0.49	
Clearance Time (s)			4.0	4.0		4.0	
Vehicle Extension (s)			3.0	3.0		3.0	
Lane Grp Cap (vph)			351	2717		1717	
v/s Ratio Prot			c0.16	c0.49		0.06	
v/s Ratio Perm							
v/c Ratio			0.81	0.64		0.13	
Uniform Delay, d1			18.2	2.5		6.7	
Progression Factor			1.00	1.00		1.00	
Incremental Delay, d2			13.3	0.5		0.0	
Delay (s)			31.5	3.1		6.7	
Level of Service			C	A		A	
Approach Delay (s)	0.0			7.0		6.7	
Approach LOS	A			A		A	
Intersection Summary							
HCM 2000 Control Delay			7.0		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.68				
Actuated Cycle Length (s)			47.4		Sum of lost time (s)	12.0	
Intersection Capacity Utilization			54.5%		ICU Level of Service		A
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus

28: 2017 PM SR-75 (Silver Strand Blvd) Alt2







North Gate with Signal

Timing Plan:

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	262	0	484	0	1513	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0		4.0	
Lane Util. Factor		1.00		0.95		0.95	
Flt		0.85		1.00		1.00	
Flt Protected		1.00		1.00		1.00	
Satd. Flow (prot)		1583		3539		3539	
Flt Permitted		1.00		1.00		1.00	
Satd. Flow (perm)		1583		3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	285	0	526	0	1645	0
RTOR Reduction (vph)	0	92	0	0	0	0	0
Lane Group Flow (vph)	0	193	0	526	0	1645	0
Turn Type	Perm		Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)		12.3		38.1		38.1	
Effective Green, g (s)		12.3		38.1		38.1	
Actuated g/C Ratio		0.21		0.65		0.65	
Clearance Time (s)		4.0		4.0		4.0	
Vehicle Extension (s)		3.0		3.0		3.0	
Lane Grp Cap (vph)		333		2308		2308	
v/s Ratio Prot				0.15		c0.46	
v/s Ratio Perm		c0.12					
v/c Ratio		0.58		0.23		0.71	
Uniform Delay, d1		20.7		4.1		6.6	
Progression Factor		1.00		1.00		1.00	
Incremental Delay, d2		2.4		0.1		1.1	
Delay (s)		23.2		4.2		7.7	
Level of Service		C		A		A	
Approach Delay (s)	23.2			4.2		7.7	
Approach LOS	C			A		A	
Intersection Summary							
HCM 2000 Control Delay			8.7		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.74				
Actuated Cycle Length (s)			58.4		Sum of lost time (s)	12.0	
Intersection Capacity Utilization			64.7%		ICU Level of Service		C
Analysis Period (min)			15				
c Critical Lane Group							







NBC Coastal Campus
29:

North Gate with Signal
Timing Plan:

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Flt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	
Intersection Summary						
HCM 2000 Control Delay			0.0	HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.00			
Actuated Cycle Length (s)			3.0	Sum of lost time (s)		0.0
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
30:

North Gate with Signal
Timing Plan:







						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Flt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	
Intersection Summary						
HCM 2000 Control Delay			0.0	HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.00			
Actuated Cycle Length (s)			3.0	Sum of lost time (s)		0.0
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

31:

North Gate with Signal

Timing Plan:







						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Flt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	
Intersection Summary						
HCM 2000 Control Delay			0.0	HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.00			
Actuated Cycle Length (s)			3.0	Sum of lost time (s)		0.0
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32:







North Gate with Signal

Timing Plan:

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Flt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	
Intersection Summary						
HCM 2000 Control Delay			0.0	HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.00			
Actuated Cycle Length (s)			3.0	Sum of lost time (s)		0.0
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						







NBC Coastal Campus
33:

North Gate with Signal
Timing Plan:

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Flt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	
Intersection Summary						
HCM 2000 Control Delay			0.0	HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.00			
Actuated Cycle Length (s)			3.0	Sum of lost time (s)		0.0
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
34:

North Gate with Signal
Timing Plan:

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Flt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	
Intersection Summary						
HCM 2000 Control Delay			0.0	HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.00			
Actuated Cycle Length (s)			3.0	Sum of lost time (s)		0.0
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
1: Glorietta Blvd & Fourth St









MILCON Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1398	34	0	3795	552	0	0	476	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1684	41	0	4125	600	0	0	595	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4745			1745			3132	6470	622	5026	6190	1715
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4745			1745			3132	6470	622	5026	6190	1715
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	84
cM capacity (veh/h)	21			350			4	0	1354	0	0	77
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	674	674	378	1650	1650	1425	595	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	600	595	12				
cSH	1700	1700	1700	1700	1700	1700	1354	77				
Volume to Capacity	0.40	0.40	0.22	0.97	0.97	0.84	0.44	0.16				
Queue Length 95th (ft)	0	0	0	0	0	0	57	13				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	60.6				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	60.6				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				100.7%			ICU Level of Service		G			
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2016 Alt 1
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1259	201	0	3694	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1431	228	0	4104	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1679	2953		631	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1679	2953		631	
tC, single (s)			4.1	6.8		6.9	
tC, 2 stage (s)							
tF (s)			2.2	3.5		3.3	
p0 queue free %			100	100		39	
cM capacity (veh/h)			371	11		410	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	572	572	515	1368	1368	1368	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	228	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	410
Volume to Capacity	0.34	0.34	0.30	0.80	0.80	0.80	0.61
Queue Length 95th (ft)	0	0	0	0	0	0	99
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	26.7
Lane LOS	D						
Approach Delay (s)	0.0			0.0			26.7
Approach LOS	D						
Intersection Summary							
Average Delay	1.1						
Intersection Capacity Utilization	86.2%			ICU Level of Service		E	
Analysis Period (min)	15						

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1559	1943	342	105	102	0	0	277	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4640		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4640		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1676	2089	368	142	138	0	0	318	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1022	3103	0	142	138	0	0	330	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.6			21.4	
Effective Green, g (s)				131.2	131.2		20.0	46.6			21.4	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1054	3214		186	870			396	
v/s Ratio Prot				c0.67	0.67		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.97	0.97		0.76	0.16			0.83	
Uniform Delay, d1				27.2	27.0		82.4	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				20.4	9.2		16.8	0.1			14.0	
Delay (s)				47.7	36.2		99.2	56.1			96.3	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			39.0			78.0			96.3	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		45.3		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		189.4		Sum of lost time (s)						16.8		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	583	64	0	0	0	0	197	198	451	1442	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3262	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3262	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	634	70	0	0	0	0	229	215	490	1502	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	18	49	0	0	0
Lane Group Flow (vph)	0	635	41	0	0	0	0	288	89	490	1502	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1178	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.42	
v/s Ratio Perm		0.12	0.03						0.06			
v/c Ratio		0.36	0.07					0.24	0.17	0.70	0.73	
Uniform Delay, d1		41.5	37.2					38.4	37.3	63.2	26.0	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.3	
Delay (s)		41.6	37.3					38.5	37.5	66.2	27.3	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.2			36.9	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.0		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)						14.4		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2016 Alt 1

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖↗		↖↗		↖↗	↖↗
Volume (vph)	210	6	1112	585	0	1077
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0		5.0	
Lane Util. Factor	1.00		0.95		0.95	
Flpb, ped/bikes	1.00		0.99		1.00	
Flpb, ped/bikes	1.00		1.00		1.00	
Frt	1.00		0.95		1.00	
Frt Protected	0.95		1.00		1.00	
Satd. Flow (prot)	1592		3315		3362	
Frt Permitted	0.95		1.00		1.00	
Satd. Flow (perm)	1592		3315		3362	
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	244	7	1196	629	0	1134
RTOR Reduction (vph)	2	0	54	0	0	0
Lane Group Flow (vph)	249	0	1771	0	0	1134
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2		6	
Permitted Phases						
Actuated Green, G (s)	16.6		42.2		42.2	
Effective Green, g (s)	16.6		42.2		42.2	
Actuated g/C Ratio	0.24		0.62		0.62	
Clearance Time (s)	4.1		5.0		5.0	
Vehicle Extension (s)	3.0		3.0		3.0	
Lane Grp Cap (vph)	389		2060		2089	
v/s Ratio Prot	c0.16		c0.53		0.34	
v/s Ratio Perm						
v/c Ratio	0.64		0.86		0.54	
Uniform Delay, d1	23.0		10.4		7.3	
Progression Factor	1.00		1.00		1.00	
Incremental Delay, d2	3.6		3.8		0.3	
Delay (s)	26.6		14.3		7.6	
Level of Service	C		B		A	
Approach Delay (s)	26.6		14.3		7.6	
Approach LOS	C		B		A	
Intersection Summary						
HCM 2000 Control Delay			12.9		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.84			
Actuated Cycle Length (s)			67.9		Sum of lost time (s)	12.1
Intersection Capacity Utilization			75.7%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON Year 2016 Alt 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↖↗	↖↗	↖↗	↖↗	↖↗	↖↗	↖↗	↖↗	↖↗	↖↗	↖↗
Volume (vph)	45	2	9	7	0	5	19	1320	25	38	1215	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1708		1770	3529		1770	3524	
Frt Permitted	0.74	0.78	1.00		0.87		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1312	1384	1583		1526		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	52	2	10	14	0	10	23	1571	30	41	1321	38
RTOR Reduction (vph)	0	0	8	0	20	0	0	1	0	0	1	0
Lane Group Flow (vph)	27	27	2	0	4	0	23	1600	0	41	1358	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	14.9	14.9	14.9		14.9		2.6	60.8		4.0	62.2	
Effective Green, g (s)	14.9	14.9	14.9		14.9		2.6	60.8		4.0	62.2	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.65		0.04	0.66	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	208	219	251		242		49	2287		75	2336	
v/s Ratio Prot							0.01	c0.45		c0.02	0.39	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.13	0.12	0.01		0.02		0.47	0.70		0.55	0.58	
Uniform Delay, d1	33.9	33.8	33.2		33.3		44.9	10.6		44.0	8.7	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		6.9	1.0		7.9	0.4	
Delay (s)	34.2	34.1	33.2		33.3		51.9	11.6		51.9	9.0	
Level of Service	C	C	C		C		D	B		D	A	
Approach Delay (s)		34.0			33.3			12.1			10.3	
Approach LOS		C			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			11.9		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.59									
Actuated Cycle Length (s)			93.8		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			55.1%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2016 Alt 1

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	22	0	1266	7	415	792	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	33	0	1391	8	423	808	0
RTOR Reduction (vph)	0	0	0	0	30	0	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1391	4	423	808	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.39		c0.24	0.23	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.84	0.01	0.69	0.27	
Uniform Delay, d1					60.6			33.6	20.4	40.9	2.3	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			3.5	0.0	3.4	0.2	
Delay (s)					60.6			16.0	20.4	44.3	2.5	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			16.0			16.9	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.0			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		76.8%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2016 Alt 1

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	48	13	1	63	125	133	1108	5	283	245	302
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.98	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3193	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3193	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	46	74	20	1	72	142	148	1231	6	325	282	347
RTOR Reduction (vph)	0	0	19	0	0	119	0	0	3	0	154	0
Lane Group Flow (vph)	46	74	1	0	73	23	148	1231	3	325	475	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1048	
v/s Ratio Prot	0.03	c0.04			c0.04		0.08	c0.35		c0.18	0.15	
v/s Ratio Perm			0.00			0.01		0.00				
v/c Ratio	0.38	0.58	0.01		0.25	0.09	0.27	0.78	0.00	0.95	0.45	
Uniform Delay, d1	64.5	65.5	62.9		53.4	52.1	37.6	34.2	22.3	57.9	38.4	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.91	
Incremental Delay, d2	2.0	6.2	0.1		0.4	0.2	0.3	3.9	0.0	36.0	1.4	
Delay (s)	66.5	71.7	63.0		53.9	52.3	37.9	38.1	22.3	91.6	36.4	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		68.7			52.8			38.0			55.2	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		46.9			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		82.0%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰	↱	↰	↱
Volume (veh/h)	22	193	4	85	317	8
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	26	227	5	106	345	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)			915		600	
pX, platoon unblocked						
vC, conflicting volume	756	58			111	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	756	58			111	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	77			77	
cM capacity (veh/h)	288	1008			1479	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	253	111	353			
Volume Left	26	0	345			
Volume Right	227	106	0			
cSH	1123	1700	1479			
Volume to Capacity	0.23	0.07	0.23			
Queue Length 95th (ft)	22	0	23			
Control Delay (s)	10.5	0.0	8.0			
Lane LOS	B		A			
Approach Delay (s)	10.5	0.0	8.0			
Approach LOS	B					
Intersection Summary						
Average Delay			7.7			
Intersection Capacity Utilization			34.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰	↱	↰	↱
Volume (vph)	25	3	1258	397	0	221
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.98		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1729		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1729		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	33	4	1324	418	0	345
RTOR Reduction (vph)	4	0	0	114	0	0
Lane Group Flow (vph)	33	0	1324	304	0	345
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	1.9		31.5	31.5		31.5
Effective Green, g (s)	1.9		31.5	31.5		31.5
Actuated g/C Ratio	0.04		0.73	0.73		0.73
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	75		2574	1105		2574
v/s Ratio Prot	c0.02		c0.37			0.10
v/s Ratio Perm				0.20		
v/c Ratio	0.44		0.51	0.28		0.13
Uniform Delay, d1	20.2		2.6	2.0		1.8
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.1		0.2	0.1		0.0
Delay (s)	24.3		2.7	2.1		1.8
Level of Service	C		A	A		A
Approach Delay (s)	24.3		2.6			1.8
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			2.8		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.51			
Actuated Cycle Length (s)			43.3		Sum of lost time (s)	9.9
Intersection Capacity Utilization			47.2%		ICU Level of Service	A
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2016 Alt 1

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↙
Volume (veh/h)	0	14	2056	5	5	248
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	24	2211	5	7	365
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2410	1108			2216	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2410	1108			2216	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	88			97	
cM capacity (veh/h)	26	204			233	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	24	1474	742	7	182	182
Volume Left	0	0	0	7	0	0
Volume Right	24	0	5	0	0	0
cSH	204	1700	1700	233	1700	1700
Volume to Capacity	0.12	0.87	0.44	0.03	0.11	0.11
Queue Length 95th (ft)	10	0	0	2	0	0
Control Delay (s)	24.9	0.0	0.0	21.0	0.0	0.0
Lane LOS	C			C		
Approach Delay (s)	24.9	0.0		0.4		
Approach LOS	C					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		67.0%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2016 Alt 1

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↙
Volume (vph)	16	84	1973	11	36	211
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	20	104	2122	12	52	306
RTOR Reduction (vph)	0	5	0	1	0	0
Lane Group Flow (vph)	20	99	2122	11	52	306
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.7	25.8	68.3	68.3	5.0	82.1
Effective Green, g (s)	15.7	20.7	68.3	68.3	5.0	82.1
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	259	305	2256	1009	82	2712
v/s Ratio Prot	0.01	c0.06	c0.60		c0.03	0.09
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.33	0.94	0.01	0.63	0.11
Uniform Delay, d1	39.4	37.2	17.6	7.1	50.2	3.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	8.6	0.0	14.9	0.0
Delay (s)	39.6	37.8	26.2	7.1	65.1	3.2
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.1		26.1			12.2
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay		24.8		HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio		0.81				
Actuated Cycle Length (s)		107.1		Sum of lost time (s)	18.1	
Intersection Capacity Utilization		70.6%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2016 Alt 1
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↗		↖	↗
Volume (veh/h)	0	31	1951	25	0	227
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	50	2054	26	0	307
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2220	1040			2080	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2220	1040			2080	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	78			100	
cM capacity (veh/h)	37	227			263	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	50	1369	711	153	153	
Volume Left	0	0	0	0	0	
Volume Right	50	0	26	0	0	
cSH	227	1700	1700	1700	1700	
Volume to Capacity	0.22	0.81	0.42	0.09	0.09	
Queue Length 95th (ft)	20	0	0	0	0	
Control Delay (s)	25.3	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	25.3	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		64.7%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2016 Alt 1
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↗	↖	↖	↗
Volume (vph)	9	6	1976	31	14	204
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	15	10	2058	32	17	252
RTOR Reduction (vph)	0	6	0	7	0	0
Lane Group Flow (vph)	15	4	2058	25	17	252
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.9	59.9	2.0	69.4
Effective Green, g (s)	1.4	3.4	59.9	59.9	2.0	69.4
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2738	1225	45	3173
v/s Ratio Prot	c0.01	0.00	c0.58		c0.01	0.07
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.47	0.06	0.75	0.02	0.38	0.08
Uniform Delay, d1	37.6	35.5	4.7	2.0	37.1	0.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.5	0.4	1.2	0.0	5.2	0.0
Delay (s)	48.1	35.8	5.9	2.0	42.3	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	43.2		5.9			3.1
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		5.9		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.73				
Actuated Cycle Length (s)		77.4		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		67.5%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2016 Alt 1

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	43	1	0	42	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	80	2	0	67	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	81	67	3					
Volume Left (vph)	0	0	80	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	836	1121	817	843	1121					
Control Delay (s)	7.2	6.2	7.7	7.5	6.2					
Approach Delay (s)	7.2		7.7	7.4						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.1%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2016 Alt 1

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	35	0	0	31	218	3	1787	48	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1358	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	47	0	0	43	303	3	1901	51	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	20	0	0	0	0
Lane Group Flow (vph)	3	47	0	0	43	247	3	1901	31	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	15.9	15.9			15.9	15.9	47.7	43.6	43.6			
Effective Green, g (s)	15.9	15.9			15.9	15.9	47.7	43.6	43.6			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.60	0.60			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	296	406			406	345	1158	2116	946			
v/s Ratio Prot		0.03			0.02		0.00	c0.54				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.12			0.11	0.72	0.00	0.90	0.03			
Uniform Delay, d1	22.3	22.9			22.8	26.4	4.4	12.7	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	6.9	0.0	5.5	0.0			
Delay (s)	22.3	23.0			22.9	33.3	4.4	18.3	6.0			
Level of Service	C	C			C	C	A	B	A			
Approach Delay (s)		23.0			32.0			17.9			0.0	
Approach LOS		C			C			B			A	
Intersection Summary												
HCM 2000 Control Delay		20.1										
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		72.9				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		82.5%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON Year 2016 Alt 1

Timing Plan: AM PEAK

























							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	12	255	1594	0	174	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	48	266	1660	0	220	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1582	110	220		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1582	110	220		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	95	80		0		
cM capacity (veh/h)	80	922	1346		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	48	266	830	830	147	73	0
Volume Left	0	266	0	0	0	0	0
Volume Right	48	0	0	0	0	0	0
cSH	922	1346	1700	1700	1700	1700	1700
Volume to Capacity	0.05	0.20	0.49	0.49	0.09	0.04	0.00
Queue Length 95th (ft)	4	18	0	0	0	0	0
Control Delay (s)	9.1	8.3	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	A					
Approach Delay (s)	9.1	1.1			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay		1.2					
Intersection Capacity Utilization		60.7%		ICU Level of Service		B	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON Year 2016 Alt 1

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	378	0	37	2	1	2	25	1734	0	0	141	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3415	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3415	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	430	0	42	6	3	6	26	1825	0	0	204	62
RTOR Reduction (vph)	0	30	0	0	6	0	0	0	0	0	25	0
Lane Group Flow (vph)	430	12	0	6	3	0	26	1825	0	0	241	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	25.1	25.1		1.7	1.7		1.9	43.6			37.5	
Effective Green, g (s)	25.1	25.1		1.7	1.7		1.9	43.6			37.5	
Actuated g/C Ratio	0.29	0.29		0.02	0.02		0.02	0.51			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	522	466		35	33		39	1813			1504	
v/s Ratio Prot	c0.24	0.01		c0.00	0.00		0.01	c0.52			0.07	
v/s Ratio Perm												
v/c Ratio	0.82	0.03		0.17	0.09		0.67	1.01			0.16	
Uniform Delay, d1	27.9	21.3		41.0	40.9		41.3	20.7			14.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	10.2	0.0		2.3	1.2		35.5	22.7			0.1	
Delay (s)	38.1	21.3		43.3	42.2		76.8	43.5			14.4	
Level of Service	D	C		D	D		E	D			B	
Approach Delay (s)		36.6			42.6			44.0			14.4	
Approach LOS		D			D			D			B	
Intersection Summary												
HCM 2000 Control Delay		39.6						HCM 2000 Level of Service			D	
HCM 2000 Volume to Capacity ratio		0.98										
Actuated Cycle Length (s)		85.1						Sum of lost time (s)		18.9		
Intersection Capacity Utilization		84.0%						ICU Level of Service		E		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	7	188	13	0	1597	16	36	22	1	19	39	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5035			5078		1770	1852			1732	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.19	
Satd. Flow (perm)	1770	5035			5078		1244	1852			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	
Adj. Flow (vph)	8	211	15	0	1755	18	43	26	1	25	51	64
RTOR Reduction (vph)	0	4	0	0	1	0	0	1	0	0	17	0
Lane Group Flow (vph)	8	222	0	0	1772	0	43	26	0	0	123	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1904			2062		241	360			53	
v/s Ratio Prot	c0.00	0.04			c0.35			0.01				
v/s Ratio Perm							c0.03				c0.38	
v/c Ratio	0.04	0.12			0.86		0.18	0.07			2.33	
Uniform Delay, d1	71.4	36.4			48.8		60.5	59.2			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			4.5		0.4	0.1			651.7	
Delay (s)	71.5	36.5			53.3		60.9	59.3			726.7	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		37.7			53.3			60.3			726.7	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		94.4			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		69.6%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	206	0	382	1605	8	0	0	0	0	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	251	0	406	1707	9	0	0	0	0	0	16
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	10
Lane Group Flow (vph)	0	251	0	406	1716	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.05		0.12	c0.49							
v/s Ratio Perm												0.00
v/c Ratio		0.13		0.24	0.53							0.01
Uniform Delay, d1		36.6		25.5	1.5							34.9
Progression Factor		0.42		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.1	0.2							0.0
Delay (s)		15.5		25.6	1.6							34.9
Level of Service		B		C	A							C
Approach Delay (s)		15.5			6.2			0.0				34.9
Approach LOS		B			A			A				C
Intersection Summary												
HCM 2000 Control Delay		7.4			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		66.3%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON Year 2016 Alt 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	9	232	0	0	128	107	0	0	0	47	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	11	276	0	0	138	115	0	0	0	52	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	253			276			497	550	276	493	493	195
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	253			276			497	550	276	493	493	195
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1313			1287			478	439	763	484	473	846
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	287	253	0	56								
Volume Left	11	0	0	52								
Volume Right	0	115	0	4								
cSH	1313	1287	1700	500								
Volume to Capacity	0.01	0.00	0.00	0.11								
Queue Length 95th (ft)	1	0	0	9								
Control Delay (s)	0.4	0.0	0.0	13.1								
Lane LOS	A			B								
Approach Delay (s)	0.4	0.0	0.0	13.1								
Approach LOS				B								
Intersection Summary												
Average Delay			1.4									
Intersection Capacity Utilization		29.5%		ICU Level of Service			A					
Analysis Period (min)			15									

NBC Coastal Campus

22: 3rd St & Palm Ave

MILCON Year 2016 Alt 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	270	4	26	212	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	314	5	28	228	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	319	28	254	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.1	5.5	5.1	5.7						
Degree Utilization, x	0.01	0.49	0.05	0.39	0.26	0.07						
Capacity (veh/h)	578	634	566	631	636	548						
Control Delay (s)	7.9	12.4	8.2	10.7	9.9	9.1						
Approach Delay (s)	12.3		10.4		9.9	9.1						
Approach LOS	B		B		A	A						
Intersection Summary												
Delay			10.9									
Level of Service			B									
Intersection Capacity Utilization		37.3%		ICU Level of Service			A					
Analysis Period (min)			15									




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱	↰↱		↰	↱
Volume (veh/h)	224	424	334	152	17	69
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	284	537	407	185	24	97
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	593				1604	296
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	593				1604	296
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	71				65	86
cM capacity (veh/h)	979				68	700
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	284	537	272	321	121	
Volume Left	284	0	0	0	24	
Volume Right	0	0	0	185	97	
cSH	979	1700	1700	1700	248	
Volume to Capacity	0.29	0.32	0.16	0.19	0.49	
Queue Length 95th (ft)	30	0	0	0	62	
Control Delay (s)	10.2	0.0	0.0	0.0	32.7	
Lane LOS	B				D	
Approach Delay (s)	3.5		0.0		32.7	
Approach LOS					D	
Intersection Summary						
Average Delay			4.5			
Intersection Capacity Utilization			41.7%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2016 Alt 1
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	417	15	26	335	0	65	35	80	1	21	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1720			1858	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.88			0.98	1.00
Satd. Flow (perm)	930	3521		823	3539			1534			1830	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	542	19	34	435	0	98	53	121	2	36	47
RTOR Reduction (vph)	0	3	0	0	0	0	0	33	0	0	0	30
Lane Group Flow (vph)	21	558	0	34	435	0	0	239	0	0	38	17
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.1	13.1		13.1	13.1			13.1			13.1	13.1
Effective Green, g (s)	13.1	13.1		13.1	13.1			13.1			13.1	13.1
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	344	1302		304	1309			567			677	585
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.16			0.02	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.42			0.06	0.03
Uniform Delay, d1	7.2	8.3		7.3	8.0			8.3			7.2	7.1
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.2			0.5			0.0	0.0
Delay (s)	7.3	8.6		7.5	8.2			8.8			7.2	7.1
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.5			8.1			8.8			7.2	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.4			HCM 2000 Level of Service			A			
HCM 2000 Volume to Capacity ratio			0.42									
Actuated Cycle Length (s)			35.4			Sum of lost time (s)			9.2			
Intersection Capacity Utilization			46.3%			ICU Level of Service			A			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	513	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	558	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			562		558	558
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			562		558	558
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1009		491	529
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	558	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	518			
Volume to Capacity	0.33	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.1			
Lane LOS			B			
Approach Delay (s)	0.0		12.1			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			37.0%		ICU Level of Service	A
Analysis Period (min)			15			








NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑↑↑	↑	↑	↑	↑	↑	↑	↑
Volume (vph)	21	645	34	23	1757	42	158	36	1900	87	44	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5048		1770	5068			3324			3363	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5048		1770	5068			3324			3363	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	768	40	25	1931	46	190	43	59	106	54	29
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	805	0	25	1976	0	0	280	0	0	181	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2235		118	2159			646			653	
v/s Ratio Prot	0.01	c0.16		c0.01	c0.39			c0.08			c0.05	
v/s Ratio Perm												
v/c Ratio	0.17	0.36		0.21	0.92			0.43			0.28	
Uniform Delay, d1	76.7	33.2		79.5	48.6			63.8			61.7	
Progression Factor	1.00	1.00		1.28	0.71			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.7	6.4			0.5			0.2	
Delay (s)	77.3	33.7		102.2	40.8			64.2			62.0	
Level of Service	E	C		F	D			E			E	
Approach Delay (s)		35.0			41.6			64.2			62.0	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		43.1			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		72.0%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	870	34	20	1926	11	17	4	30	53	10	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5081			1685		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.91		0.67	1.00	
Satd. Flow (perm)	1770	5057		1770	5081			1551		1242	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	978	38	23	2189	12	23	5	41	76	14	20
RTOR Reduction (vph)	0	2	0	0	0	0	0	29	0	0	17	0
Lane Group Flow (vph)	2	1014	0	23	2201	0	0	40	0	76	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases						4				8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			258		207	283	
v/s Ratio Prot	0.00	0.20		c0.01	c0.43						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.29		0.19	0.59			0.15		0.37	0.06	
Uniform Delay, d1	86.1	11.0		79.4	11.4			64.2		66.6	63.1	
Progression Factor	1.68	0.27		1.40	0.29			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.5	0.4			0.3		1.1	0.1	
Delay (s)	145.6	3.2		111.8	3.8			64.4		67.7	63.2	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.5			4.9			64.4			66.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		7.6			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.54										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		70.9%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	936	62	93	1785	50	141	18	88	164	35	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.91	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5038		1770	5085	1583		1784	1583		3374	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5038		1770	5085	1583		1784	1583		3374	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1052	70	112	2151	60	158	20	99	219	47	19
RTOR Reduction (vph)	0	4	0	0	0	28	0	0	82	0	3	0
Lane Group Flow (vph)	3	1118	0	112	2151	32	0	178	17	0	282	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		581	
v/s Ratio Prot	0.00	0.22		c0.06	c0.42			c0.10			c0.08	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.50		0.57	0.80	0.04		0.58	0.06		0.48	
Uniform Delay, d1	86.2	35.9		75.9	34.2	20.1		68.5	62.3		67.3	
Progression Factor	1.22	0.63		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.8		4.0	2.5	0.1		2.6	0.1		0.6	
Delay (s)	106.3	23.4		79.9	36.7	20.2		71.2	62.4		67.9	
Level of Service	F	C		E	D	C		E	E		E	
Approach Delay (s)		23.6			38.4			68.0			67.9	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		38.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		88.4%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	↰
Volume (vph)	13	1198	25	42	1912	11	15	6	47	37	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1670			1722	
Flt Permitted	0.95	1.00		0.95	1.00			0.93			0.78	
Satd. Flow (perm)	1770	5070		1770	5081			1566			1384	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	14	1302	27	49	2223	13	18	7	56	49	3	28
RTOR Reduction (vph)	0	2	0	0	0	0	0	44	0	0	22	0
Lane Group Flow (vph)	14	1327	0	49	2236	0	0	37	0	0	58	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Effective Green, g (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2666		72	2829			332			293	
v/s Ratio Prot	0.01	0.26		c0.03	c0.44							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.82	0.50		0.68	0.79			0.11			0.20	
Uniform Delay, d1	35.1	10.8		33.6	12.5			22.6			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	132.1	0.1		23.3	1.6			0.1			0.3	
Delay (s)	167.2	11.0		56.9	14.0			22.7			23.4	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		12.6			15.0			22.7			23.4	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		14.5			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		71.1			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		54.0%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰	↰	↰
Volume (vph)	89	1212	29	239	1854	210	72	71	755	230	90	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	103	1409	34	254	1972	223	80	79	839	274	107	89
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	182	0	3	56
Lane Group Flow (vph)	103	1441	0	254	1972	156	80	312	271	274	113	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.4	30.4	10.4	34.1	34.1
Effective Green, g (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.4	30.4	10.4	34.1	34.1
Actuated g/C Ratio	0.05	0.30		0.15	0.41	0.41	0.06	0.26	0.26	0.09	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	177	1543		273	2070	644	102	406	394	308	514	442
v/s Ratio Prot	0.03	0.28		c0.14	c0.39		0.05	c0.20		c0.08	c0.06	
v/s Ratio Perm						0.10		0.18				0.02
v/c Ratio	0.58	0.93		0.93	0.95	0.24	0.78	0.77	0.69	0.89	0.22	0.05
Uniform Delay, d1	53.7	39.2		48.4	33.3	22.6	53.9	39.5	38.5	52.2	30.9	29.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.8	10.7		36.3	10.7	0.2	31.6	8.5	4.9	25.2	0.2	0.1
Delay (s)	58.5	49.9		84.7	44.0	22.8	85.5	48.0	43.4	77.4	31.1	29.4
Level of Service	E	D		F	D	C	F	D	D	E	C	C
Approach Delay (s)		50.5			46.3			48.9			57.8	
Approach LOS		D			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		48.9			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.90										
Actuated Cycle Length (s)		115.9			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		84.0%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↔	↔
Volume (vph)	0	278	1107	0	152	1198
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	312	1190	0	169	1331
RTOR Reduction (vph)	0	0	0	0	0	6
Lane Group Flow (vph)	0	312	1190	0	169	1325
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.34		0.10	c0.48
v/s Ratio Perm						
v/c Ratio		0.12	1.02		0.82	0.86
Uniform Delay, d1		2.5	26.8		34.5	15.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	31.4		21.4	5.4
Delay (s)		2.5	58.2		55.8	20.8
Level of Service		A	E		E	C
Approach Delay (s)		2.5	58.2		24.8	
Approach LOS		A	E		C	
Intersection Summary						
HCM 2000 Control Delay			35.7		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.99			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			64.3%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↔	↔				
Volume (vph)	0	431	0	0	413	513	794	1	141	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3245		1681	1632				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3245		1681	1632				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	495	0	0	449	558	863	1	153	0	0	0
RTOR Reduction (vph)	0	0	0	0	351	0	0	29	0	0	0	0
Lane Group Flow (vph)	0	495	0	0	656	0	518	470	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.4			16.4		19.9	19.9				
Effective Green, g (s)		16.4			16.4		19.9	19.9				
Actuated g/C Ratio		0.37			0.37		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1310			1201		755	733				
v/s Ratio Prot		0.14			c0.20							
v/s Ratio Perm							c0.31	0.29				
v/c Ratio		0.38			0.55		0.69	0.64				
Uniform Delay, d1		10.2			11.0		9.7	9.4				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.5		2.6	1.9				
Delay (s)		10.4			11.5		12.3	11.4				
Level of Service		B			B		B	B				
Approach Delay (s)		10.4			11.5		11.8				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					11.4					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.62							
Actuated Cycle Length (s)					44.3					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					67.6%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰			↱	↰	↱
Volume (veh/h)	0	3	4	69	13	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	96	32	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	139	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	139	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	851	1042	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	101	32			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	1042	1581	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		1.0				
Intersection Capacity Utilization		16.9%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Volume (veh/h)	0	4046	17	0	1798	243	0	0	907	0	0	55
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%			0%			0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4215	18	0	1854	251	0	0	1008	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2124			4252			4965	6368	1454	3424	6251	783
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2124			4252			4965	6368	1454	3424	6251	783
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	249			34			0	0	1829	1	0	325
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1686	1686	861	741	741	621	1008	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	251	1008	83				
cSH	1700	1700	1700	1700	1700	1700	1829	325				
Volume to Capacity	0.99	0.99	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	89	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.4	19.8				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.4	19.8				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				143.3%			ICU Level of Service	H				
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2016 Alt 1
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3812	130	0	1835	0	200	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3930	134	0	1911	0	244	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4084		4674	1417	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4084		4674	1417	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			40		1	122	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1572	1572	920	637	637	637	244
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	244
cSH	1700	1700	1700	1700	1700	1700	122
Volume to Capacity	0.92	0.92	0.54	0.37	0.37	0.37	1.99
Queue Length 95th (ft)	0	0	0	0	0	0	495
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	534.5
Lane LOS							F
Approach Delay (s)	0.0			0.0			534.5
Approach LOS							F
Intersection Summary							
Average Delay			21.0				
Intersection Capacity Utilization			97.6%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2016 Alt 1
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑↑			↑↑↑	
Volume (vph)	0	0	0	963	634	109	86	251			860	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3528	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3528	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1014	667	115	89	259	0	0	887	16
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	507	1277	0	89	259	0	0	901	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1432		98	1989			1568	
v/s Ratio Prot				c0.33	0.28		c0.05	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.08	0.96d1		0.91	0.13			0.57	
Uniform Delay, d1				31.1	29.7		42.3	9.3			18.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				64.3	7.4		61.4	0.0			0.5	
Delay (s)				95.4	37.1		103.7	9.3			19.2	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			53.6			33.5			19.2	
Approach LOS		A			D			C			B	
Intersection Summary												
HCM 2000 Control Delay			41.1				HCM 2000 Level of Service				D	
HCM 2000 Volume to Capacity ratio			0.79									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)				17.2	
Intersection Capacity Utilization		135.5%					ICU Level of Service				H	
Analysis Period (min)			15									
d1 Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												










NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔↔	
Volume (vph)	7	2108	106	0	0	0	0	337	435	760	1087	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3128	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3128	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2316	116	0	0	0	0	392	506	792	1132	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2324	87	0	0	0	0	614	249	792	1132	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm				NA	Perm	Prot	NA		
Protected Phases	4	4					2		1	6		
Permitted Phases			4					2				
Actuated Green, G (s)		63.4	63.4				53.1	53.1	44.1	100.0		
Effective Green, g (s)		63.4	63.4				53.1	53.1	44.1	100.0		
Actuated g/C Ratio		0.36	0.36				0.30	0.30	0.25	0.57		
Clearance Time (s)		5.6	5.6				4.6	4.6	4.2	6.0		
Vehicle Extension (s)		3.0	3.0				3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)		1841	573				949	409	865	2022		
v/s Ratio Prot		c0.46					c0.20		c0.23	0.32		
v/s Ratio Perm			0.06					0.18				
v/c Ratio		1.26	0.15				0.65	0.61	0.92	0.56		
Uniform Delay, d1		55.8	37.7				52.8	52.1	63.6	23.6		
Progression Factor		1.00	1.00				1.00	1.00	1.00	1.00		
Incremental Delay, d2		122.6	0.1				1.5	2.6	14.1	0.3		
Delay (s)		178.4	37.8				54.4	54.6	77.7	24.0		
Level of Service		F	D				D	D	E	C		
Approach Delay (s)		171.7			0.0		54.4			46.1		
Approach LOS		F			A		D			D		
Intersection Summary												
HCM 2000 Control Delay			105.8				HCM 2000 Level of Service			F		
HCM 2000 Volume to Capacity ratio			0.96									
Actuated Cycle Length (s)			175.0				Sum of lost time (s)			14.4		
Intersection Capacity Utilization			135.5%				ICU Level of Service			H		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2016 Alt 1
Timing Plan: PM PEAK













						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	168	11	847	668	0	1181
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1584		3257			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1584		3257			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	215	14	952	751	0	1270
RTOR Reduction (vph)	2	0	68	0	0	0
Lane Group Flow (vph)	227	0	1635	0	0	1270
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	297		2461			2540
v/s Ratio Prot	c0.14		c0.50			0.38
v/s Ratio Perm						
v/c Ratio	0.77		0.66			0.50
Uniform Delay, d1	61.7		9.6			7.7
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	11.2		1.4			0.7
Delay (s)	72.8		11.0			8.4
Level of Service	E		B			A
Approach Delay (s)	72.8		11.0			8.4
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay			14.4		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.70			
Actuated Cycle Length (s)			160.0		Sum of lost time (s)	12.1
Intersection Capacity Utilization			78.3%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2016 Alt 1

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	139	9	28	25	9	24	22	1436	47	65	1398	147
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1695	1583		1721		1770	3522		1770	3489	
Flt Permitted	0.69	0.69	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1219	1217	1583		1463		1770	3522		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	178	12	36	39	14	38	24	1544	51	71	1520	160
RTOR Reduction (vph)	0	0	30	0	23	0	0	1	0	0	3	0
Lane Group Flow (vph)	94	96	6	0	68	0	24	1594	0	71	1677	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4		4							
Actuated Green, G (s)	18.9	18.9	18.9		18.9		3.1	72.0		8.0	76.9	
Effective Green, g (s)	18.9	18.9	18.9		18.9		3.1	72.0		8.0	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	202	263		243		48	2230		124	2359	
v/s Ratio Prot							0.01	0.45		c0.04	c0.48	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.47	0.48	0.02		0.28		0.50	0.71		0.57	0.71	
Uniform Delay, d1	42.8	42.9	39.7		41.4		54.5	14.0		51.2	11.5	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	1.8	0.0		0.6		8.0	1.1		6.3	1.0	
Delay (s)	44.5	44.7	39.7		42.1		62.5	15.1		57.4	12.5	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.8			42.1			15.8			14.3	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.5										
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		113.7						14.8				
Intersection Capacity Utilization		73.2%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2016 Alt 1

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	7	0	140	0	1247	0	31	1533	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1619			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1619			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	10	0	203	0	1327	0	33	1648	0
RTOR Reduction (vph)	0	0	0	0	165	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	48	0	0	1327	0	33	1648	0
Turn Type	Split			Split	NA		NA	Perm		Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					14.1			45.5		1.7	51.4	
Effective Green, g (s)					14.1			45.5		1.7	51.4	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					301			2129		39	2406	
v/s Ratio Prot					c0.03			0.37		0.02	c0.47	
v/s Ratio Perm												
v/c Ratio					0.16			0.62		0.85	0.68	
Uniform Delay, d1					25.8			9.6		36.8	7.2	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.2			0.6		84.9	0.8	
Delay (s)					26.0			10.2		121.7	8.1	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			26.0			10.2			10.3	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					11.3							
HCM 2000 Volume to Capacity ratio					0.66							
Actuated Cycle Length (s)					75.6					18.9		
Intersection Capacity Utilization					59.8%							
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2016 Alt 1

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	284	48	115	6	67	409	27	565	2	135	1361	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1516		1855	1511	1770	3539	1350	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1516		1855	1511	1770	3539	1350	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	374	63	151	7	73	445	30	621	2	144	1448	68
RTOR Reduction (vph)	0	0	122	0	0	226	0	0	1	0	2	0
Lane Group Flow (vph)	374	63	29	0	80	219	30	621	1	144	1514	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.7	27.7	27.7		23.1	23.1	2.9	56.2	56.2	16.6	69.9	
Effective Green, g (s)	27.7	27.7	27.7		23.1	23.1	2.9	56.2	56.2	16.6	69.9	
Actuated g/C Ratio	0.19	0.19	0.19		0.16	0.16	0.02	0.39	0.39	0.12	0.49	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	342	360	293		299	244	35	1390	530	205	1716	
v/s Ratio Prot	c0.21	0.03			0.04		0.02	0.18		c0.08	c0.43	
v/s Ratio Perm			0.02			c0.14		0.00				
v/c Ratio	1.09	0.17	0.10		0.27	0.90	0.86	0.45	0.00	0.70	0.88	
Uniform Delay, d1	57.6	48.1	47.4		52.5	58.8	69.8	32.0	26.4	60.8	32.9	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	76.1	0.2	0.1		0.5	31.4	94.8	1.0	0.0	10.4	6.9	
Delay (s)	133.8	48.3	47.5		53.0	90.1	164.6	33.0	26.4	71.2	39.8	
Level of Service	F	D	D		D	F	F	C	C	E	D	
Approach Delay (s)		102.5			84.5			39.0			42.5	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay		58.6			HCM 2000 Level of Service					E		
HCM 2000 Volume to Capacity ratio		0.94										
Actuated Cycle Length (s)		143.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		78.6%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2016 Alt 1

9: Strand Wy & Guadalcanal Rd

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	305	481	3	35	174	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	339	534	4	49	198	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	428	29			54	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	428	29			54	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	33	49			87	
cM capacity (veh/h)	510	1046			1552	
Direction, Lane #						
Volume Total	873	54	201			
Volume Left	339	0	198			
Volume Right	534	49	0			
cSH	1123	1700	1552			
Volume to Capacity	0.78	0.03	0.13			
Queue Length 95th (ft)	207	0	11			
Control Delay (s)	18.4	0.0	7.5			
Lane LOS	C		A			
Approach Delay (s)	18.4	0.0	7.5			
Approach LOS	C					
Intersection Summary						
Average Delay		15.6				
Intersection Capacity Utilization		40.0%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2016 Alt 1

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	308	6	600	38	0	1485
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	390	8	667	42	0	1669
RTOR Reduction (vph)	1	0	0	24	0	0
Lane Group Flow (vph)	397	0	667	18	0	1669
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.22		0.19			c0.47
v/s Ratio Perm				0.01		
v/c Ratio	0.47		0.44	0.03		1.10
Uniform Delay, d1	18.6		21.1	17.3		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.2	0.0		54.8
Delay (s)	19.0		21.3	17.3		84.7
Level of Service	B		C	B		F
Approach Delay (s)	19.0		21.0			84.7
Approach LOS	B		C			F

Intersection Summary

HCM 2000 Control Delay	59.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	9.9
Intersection Capacity Utilization	91.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2016 Alt 1

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Volume (veh/h)	4	6	455	3	14	1422
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	529	3	15	1563
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1343	266			533	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1343	266			533	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	94	98			99	
cM capacity (veh/h)	141	732			1031	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	20	353	180	15	781	781
Volume Left	8	0	0	15	0	0
Volume Right	12	0	3	0	0	0
cSH	274	1700	1700	1031	1700	1700
Volume to Capacity	0.07	0.21	0.11	0.01	0.46	0.46
Queue Length 95th (ft)	6	0	0	1	0	0
Control Delay (s)	19.2	0.0	0.0	8.5	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	19.2	0.0		0.1		
Approach LOS	C					

Intersection Summary

Average Delay	0.2		
Intersection Capacity Utilization	49.3%	ICU Level of Service	A
Analysis Period (min)	15		

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2016 Alt 1
Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	29	55	403	11	99	1327
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	32	60	458	12	109	1458
RTOR Reduction (vph)	0	44	0	7	0	0
Lane Group Flow (vph)	32	16	458	5	109	1458
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.3	21.5	27.8	27.8	7.1	43.7
Effective Green, g (s)	9.3	16.4	27.8	27.8	7.1	43.7
Actuated g/C Ratio	0.15	0.26	0.45	0.45	0.11	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	264	416	1579	706	201	2482
v/s Ratio Prot	c0.02	0.01	0.13		0.06	c0.41
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.04	0.29	0.01	0.54	0.59
Uniform Delay, d1	23.0	17.1	11.0	9.6	26.1	4.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.0	3.0	0.4
Delay (s)	23.2	17.1	11.1	9.6	29.0	5.1
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.2		11.0			6.7
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			8.2		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.61			
Actuated Cycle Length (s)			62.3		Sum of lost time (s)	18.1
Intersection Capacity Utilization			48.6%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2016 Alt 1
Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↩	↕	↕		↕
Volume (veh/h)	0	22	394	18	0	1356
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	29	453	21	0	1474
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1200	237			474	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1200	237			474	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	178	765			1085	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	29	302	172	737	737	
Volume Left	0	0	0	0	0	
Volume Right	29	0	21	0	0	
cSH	765	1700	1700	1700	1700	
Volume to Capacity	0.04	0.18	0.10	0.43	0.43	
Queue Length 95th (ft)	3	0	0	0	0	
Control Delay (s)	9.9	0.0	0.0	0.0	0.0	
Lane LOS	A					
Approach Delay (s)	9.9	0.0		0.0		
Approach LOS	A					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			40.8%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2016 Alt 1

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↖	↗	↖	↗
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (vph)	29	25	387	18	22	1332
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	40	35	412	19	24	1464
RTOR Reduction (vph)	0	32	0	8	0	0
Lane Group Flow (vph)	40	3	412	11	24	1464
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.4	27.1	27.1	1.8	36.4
Effective Green, g (s)	2.6	4.4	27.1	27.1	1.8	36.4
Actuated g/C Ratio	0.06	0.10	0.59	0.59	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	152	2103	940	69	2824
v/s Ratio Prot	c0.02	0.00	0.12		0.01	c0.41
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.40	0.02	0.20	0.01	0.35	0.52
Uniform Delay, d1	20.7	18.7	4.2	3.8	21.3	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.6	0.1	0.0	0.0	3.0	0.2
Delay (s)	23.4	18.7	4.3	3.8	24.4	1.7
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.2		4.3			2.1
Approach LOS	C		A			A

Intersection Summary

HCM 2000 Control Delay	3.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	45.6	Sum of lost time (s)	14.1
Intersection Capacity Utilization	47.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON Year 2016 Alt 1

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Movement	↖	→	↗	↖	→	↗	↖	→	↗	↖
Lane Configurations	↖	↗	↖	↖	↗	↖	↖	↗	↖	↗
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	10	13	81	7	0	172	12	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	10	14	105	9	0	193	13	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	10	14	114	207						
Volume Left (vph)	0	0	105	0						
Volume Right (vph)	0	14	0	13						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.13	0.18						
Capacity (veh/h)	873	1121	860	1121						
Control Delay (s)	7.1	6.2	7.7	6.9						
Approach Delay (s)	6.6		7.7	6.9						
Approach LOS	A		A	A						

Intersection Summary

Delay	7.2		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

NBC Coastal Campus

MILCON Year 2016 Alt 1

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑		↰	↑	↰	↰	↑	↰			
Volume (vph)	9	178	0	0	78	133	11	311	66	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1301	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	10	202	0	0	90	153	12	342	73	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	121	0	0	39	0	0	0
Lane Group Flow (vph)	10	202	0	0	90	32	12	342	34	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.7	18.7	18.7			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.7	18.7	18.7			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	269	386			386	328	817	1634	730			
v/s Ratio Prot		c0.11			0.05		0.01	c0.10				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.52			0.23	0.10	0.01	0.21	0.05			
Uniform Delay, d1	12.8	14.3			13.4	13.0	5.9	6.5	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.3			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.9	15.6			13.7	13.1	5.9	6.6	6.0			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.3		6.4			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.5			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.31										
Actuated Cycle Length (s)		40.5			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		40.3%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2016 Alt 1

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: PM PEAK











Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰		↰	↑	↰	↑	↰
Volume (veh/h)	0	255	12	450	0	1494	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	1020	14	511	0	1660	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1943	830	1660		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1943	830	1660		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	0	96		0		
cM capacity (veh/h)	55	313	384		0		
Direction, Lane #							
Volume Total	1020	14	256	256	1107	553	0
Volume Left	0	14	0	0	0	0	0
Volume Right	1020	0	0	0	0	0	0
cSH	313	384	1700	1700	1700	1700	1700
Volume to Capacity	3.26	0.04	0.15	0.15	0.65	0.33	0.00
Queue Length 95th (ft)	Err	3	0	0	0	0	0
Control Delay (s)	Err	14.7	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B					
Approach Delay (s)	Err	0.4			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			3182.3				
Intersection Capacity Utilization			63.8%		ICU Level of Service		
Analysis Period (min)			15				B

NBC Coastal Campus

MILCON Year 2016 Alt 1

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Timing Plan: PM PEAK











Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	0	65	1	1	0	70	322	11	1	1321	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3522		1770	3474	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3522		1770	3474	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	113	0	87	2	2	0	77	354	12	1	1468	207
RTOR Reduction (vph)	0	70	0	0	0	0	0	2	0	0	8	0
Lane Group Flow (vph)	113	17	0	2	2	0	77	364	0	1	1667	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	17.9	17.9		0.8	0.8		5.8	52.4		0.8	47.4	
Effective Green, g (s)	17.9	17.9		0.8	0.8		5.8	52.4		0.8	47.4	
Actuated g/C Ratio	0.20	0.20		0.01	0.01		0.06	0.58		0.01	0.52	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	348	312		15	16		113	2032		15	1813	
v/s Ratio Prot	c0.06	0.01		c0.00	0.00		c0.04	0.10		0.00	c0.48	
v/s Ratio Perm												
v/c Ratio	0.32	0.05		0.13	0.12		0.68	0.18		0.07	0.92	
Uniform Delay, d1	31.3	29.6		44.7	44.7		41.6	9.1		44.6	19.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.1		4.0	3.5		15.6	0.0		1.9	8.0	
Delay (s)	31.8	29.7		48.7	48.2		57.2	9.1		46.5	27.9	
Level of Service	C	C		D	D		E	A		D	C	
Approach Delay (s)		30.9			48.4			17.5			27.9	
Approach LOS		C			D			B			C	
Intersection Summary												
HCM 2000 Control Delay		26.2										
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		90.8							18.9			
Intersection Capacity Utilization		69.9%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2016 Alt 1

19: 7th St & SR-75 (Silver Strand Blvd)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	1278	56	0	358	33	12	38	4	23	25	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5053			5021		1770	1835			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.17	
Satd. Flow (perm)	1770	5053			5021		1313	1835			299	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	62	1452	64	0	381	35	17	54	6	27	29	24
RTOR Reduction (vph)	0	2	0	0	6	0	0	2	0	0	8	0
Lane Group Flow (vph)	62	1514	0	0	410	0	17	58	0	0	72	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1911			2039		255	356			49	
v/s Ratio Prot	c0.04	c0.30			c0.08			c0.03				
v/s Ratio Perm							0.01				c0.24	
v/c Ratio	0.32	0.79			0.20		0.07	0.16			1.46	
Uniform Delay, d1	73.7	49.7			34.6		59.2	60.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.9	3.5			0.2		0.1	0.2			291.2	
Delay (s)	74.6	53.1			34.8		59.3	60.5			366.2	
Level of Service	E	D			C		E	E			F	
Approach Delay (s)		54.0			34.8			60.2			366.2	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		62.1										
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		180.0							22.3			
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2016 Alt 1

20: SR-75 (Silver Strand Blvd) & Delaware St

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←
Volume (vph)	0	1307	0	483	394	36	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3495							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3495							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1469	0	514	419	38	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1469	0	514	457	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3176							609
v/s Ratio Prot		c0.29		c0.15	c0.13							
v/s Ratio Perm												0.00
v/c Ratio		0.76		0.27	0.14							0.00
Uniform Delay, d1		48.9		20.5	0.9							34.8
Progression Factor		0.18		1.00	1.00							1.00
Incremental Delay, d2		1.7		0.1	0.0							0.0
Delay (s)		10.4		20.6	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		10.4			11.3		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		10.9										B
HCM 2000 Volume to Capacity ratio		0.50										
Actuated Cycle Length (s)		180.0							22.3			
Intersection Capacity Utilization		48.2%							A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2016 Alt 1

21: Dwy/Silver Strand Blvd & Palm Ave

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		←←			←←			←←			←←	
Volume (veh/h)	3	212	0	0	304	41	0	0	0	107	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	247	0	0	345	47	0	0	0	162	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	392			247			634	646	247	622	622	369
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	392			247			634	646	247	622	622	369
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	59	100	98
cM capacity (veh/h)	1166			1319			384	389	792	398	401	677
Direction, Lane #												
Volume Total	250	392	0	174								
Volume Left	3	0	0	162								
Volume Right	0	47	0	12								
cSH	1166	1319	1700	410								
Volume to Capacity	0.00	0.00	0.00	0.43								
Queue Length 95th (ft)	0	0	0	52								
Control Delay (s)	0.1	0.0	0.0	20.1								
Lane LOS	A			A			C					
Approach Delay (s)	0.1	0.0	0.0	20.1								
Approach LOS				A			C					
Intersection Summary												
Average Delay		4.3										
Intersection Capacity Utilization		31.6%								A		
Analysis Period (min)		15										

NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	297	12	84	319	24	14	38	67	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	381	15	94	358	27	25	67	118	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	396	94	385	209	161						
Volume Left (vph)	9	0	94	0	25	61						
Volume Right (vph)	0	15	0	27	118	28						
Hadj (s)	0.53	0.01	0.53	-0.01	-0.28	0.00						
Departure Headway (s)	7.2	6.7	7.1	6.6	6.6	7.1						
Degree Utilization, x	0.02	0.73	0.19	0.70	0.38	0.32						
Capacity (veh/h)	472	520	484	528	477	435						
Control Delay (s)	9.1	24.6	10.5	22.3	13.7	13.3						
Approach Delay (s)	24.3		20.0		13.7	13.3						
Approach LOS	C		C		B	B						
Intersection Summary												
Delay			19.5									
Level of Service			C									
Intersection Capacity Utilization			41.3%		ICU Level of Service				A			
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	73	424	455	39	52	140
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	75	437	529	45	61	165
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	574				1139	287
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	574				1139	287
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	92				66	77
cM capacity (veh/h)	995				180	710
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	75	437	353	222	226	
Volume Left	75	0	0	0	61	
Volume Right	0	0	0	45	165	
cSH	995	1700	1700	1700	395	
Volume to Capacity	0.08	0.26	0.21	0.13	0.57	
Queue Length 95th (ft)	6	0	0	0	86	
Control Delay (s)	8.9	0.0	0.0	0.0	25.6	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		25.6	
Approach LOS					D	
Intersection Summary						
Average Delay			4.9			
Intersection Capacity Utilization			40.5%		ICU Level of Service	
Analysis Period (min)			15			A

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	433	29	31	457	3	54	19	22	12	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3536			1754			1841	1583
Flt Permitted	0.47	1.00		0.45	1.00			0.79			0.90	1.00
Satd. Flow (perm)	869	3505		831	3536			1417			1669	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	515	35	34	502	3	66	23	27	16	53	39
RTOR Reduction (vph)	0	7	0	0	1	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	543	0	34	504	0	0	95	0	0	69	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Effective Green, g (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	414	1671		396	1686			309			364	345
v/s Ratio Prot		c0.15			0.14							
v/s Ratio Perm	0.04			0.04				c0.07			0.04	0.01
v/c Ratio	0.08	0.32		0.09	0.30			0.31			0.19	0.02
Uniform Delay, d1	4.3	4.9		4.3	4.8			9.9			9.6	9.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.6			0.3	0.0
Delay (s)	4.4	5.0		4.4	4.9			10.5			9.9	9.3
Level of Service	A	A		A	A			B			A	A
Approach Delay (s)		5.0			4.9			10.5			9.7	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		30.2			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		44.7%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	735	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	896	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			906		896	896
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			906		896	896
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	99
cM capacity (veh/h)			751		311	339
Direction, Lane #						
Volume Total	EB 1	EB 2	NB 1			
Volume Left	896	10	12			
Volume Right	0	0	9			
cSH	0	10	3			
cSH	1700	1700	317			
Volume to Capacity	0.53	0.01	0.04			
Queue Length 95th (ft)	0	0	3			
Control Delay (s)	0.0	0.0	16.8			
Lane LOS			C			
Approach Delay (s)	0.0		16.8			
Approach LOS			C			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			48.7%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	40	1604	120	56	771	127	94	87	61	168	77	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5032		1770	4978			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5032		1770	4978			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	43	1706	128	57	779	128	103	96	67	189	87	28
RTOR Reduction (vph)	0	5	0	0	12	0	0	19	0	0	4	0
Lane Group Flow (vph)	43	1829	0	57	895	0	0	247	0	0	300	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2116		157	1982			649			658	
v/s Ratio Prot	0.02	c0.36		c0.03	0.18			c0.07			c0.09	
v/s Ratio Perm												
v/c Ratio	0.22	0.86		0.36	0.45			0.38			0.46	
Uniform Delay, d1	72.9	47.5		77.2	39.7			63.1			64.1	
Progression Factor	1.00	1.00		1.25	0.70			1.00			1.00	
Incremental Delay, d2	0.6	4.0		1.4	0.7			0.4			0.5	
Delay (s)	73.5	51.4		97.6	28.6			63.5			64.6	
Level of Service	E	D		F	C			E			E	
Approach Delay (s)		51.9			32.7			63.5			64.6	
Approach LOS		D			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		48.5			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		116.6%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	20	1879	55	47	1166	53	21	10	34	62	12	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.93			1.00	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.95	
Satd. Flow (prot)	1770	5064		1770	5052			1703			1770	
Flt Permitted	0.95	1.00		0.95	1.00			0.90			0.63	
Satd. Flow (perm)	1770	5064		1770	5052			1551			1169	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	1917	56	48	1202	55	25	12	41	73	14	15
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	13	0
Lane Group Flow (vph)	20	1972	0	48	1255	0	0	55	0	73	16	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Effective Green, g (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3564		157	3668			190		143	210	
v/s Ratio Prot	0.01	c0.39		c0.03	c0.25						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.55		0.31	0.34			0.29		0.51	0.08	
Uniform Delay, d1	79.3	12.9		76.8	9.0			71.8		73.9	69.9	
Progression Factor	1.45	0.10		1.57	0.30			1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4		0.9	0.2			0.9		3.1	0.2	
Delay (s)	115.0	1.7		121.6	2.9			72.7		76.9	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		2.8			7.3			72.7			75.0	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.52										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		58.7%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	1694	192	153	1239	79	125	39	124	150	43	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5008		1770	5085	1583		1794	1583		3371	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5008		1770	5085	1583		1794	1583		3371	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	28	1802	204	158	1277	81	136	42	135	203	58	27
RTOR Reduction (vph)	0	8	0	0	0	37	0	0	112	0	4	0
Lane Group Flow (vph)	28	1998	0	158	1277	44	0	178	23	0	284	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2217		192	2364	736		305	269		574	
v/s Ratio Prot	0.02	c0.40		c0.09	c0.25			c0.10			c0.08	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.18	0.90		0.82	0.54	0.06		0.58	0.09		0.49	
Uniform Delay, d1	75.9	46.5		78.5	34.4	26.5		68.8	62.8		67.6	
Progression Factor	1.04	0.91		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	5.6		23.9	0.9	0.2		7.9	0.6		3.0	
Delay (s)	79.7	48.1		102.4	35.3	26.7		76.7	63.5		70.6	
Level of Service	E	D		F	D	C		E	E		E	
Approach Delay (s)		48.5			41.8			71.0			70.6	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		49.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		100.9%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												












NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	1891	48	166	1531	15	38	8	79	23	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5067		1770	5078			1678			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.83	
Satd. Flow (perm)	1770	5067		1770	5078			1513			1506	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85		0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	10	2101	53	175	1612	16	45	9	93	28	12	12
RTOR Reduction (vph)	0	2	0	0	1	0	0	74	0	0	10	0
Lane Group Flow (vph)	10	2152	0	175	1627	0	0	73	0	0	42	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4				4	
Actuated Green, G (s)	0.8	40.4		11.2	50.8			17.2			17.2	
Effective Green, g (s)	0.8	40.4		11.2	50.8			17.2			17.2	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2422		234	3052			307			306	
v/s Ratio Prot	0.01	c0.42		c0.10	0.32							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.62	0.89		0.75	0.53			0.24			0.14	
Uniform Delay, d1	41.7	20.0		35.3	9.9			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	57.6	4.4		12.3	0.2			0.4			0.2	
Delay (s)	99.3	24.4		47.6	10.1			28.6			27.8	
Level of Service	F	C		D	B			C			C	
Approach Delay (s)		24.8			13.7			28.6			27.8	
Approach LOS		C			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		20.1			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		84.5			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		67.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												





NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	185	1835	24	321	1539	544	64	173	522	576	234	223
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	195	1932	25	345	1655	585	68	184	555	626	254	242
RTOR Reduction (vph)	0	1	0	0	0	88	0	26	269	0	2	132
Lane Group Flow (vph)	195	1956	0	345	1655	497	68	358	86	626	276	86
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.3	36.4		45.0	70.1	70.1	8.6	36.8	36.8	11.8	40.0	40.0
Effective Green, g (s)	11.3	36.4		45.0	70.1	70.1	8.6	36.8	36.8	11.8	40.0	40.0
Actuated g/C Ratio	0.07	0.24		0.30	0.46	0.46	0.06	0.24	0.24	0.08	0.26	0.26
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1216		524	2346	730	100	395	364	266	460	396
v/s Ratio Prot	0.06	c0.39		c0.19	c0.33		0.04	c0.22		c0.18	c0.16	
v/s Ratio Perm						0.31		0.06				0.06
v/c Ratio	0.76	1.61		0.66	0.71	0.68	0.91	0.24	2.35	0.60	0.22	
Uniform Delay, d1	69.0	57.8		46.7	32.7	32.1	70.3	55.9	46.3	70.0	48.9	43.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.8	277.8		3.0	1.0	2.6	17.3	23.8	0.3	620.6	2.1	0.3
Delay (s)	81.8	335.5		49.7	33.6	34.7	87.6	79.7	46.6	690.6	51.1	44.0
Level of Service	F	F		D	C	C	F	E	D	F	D	D
Approach Delay (s)		312.5			36.0			65.8			406.5	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		191.3			HCM 2000 Level of Service					F		
HCM 2000 Volume to Capacity ratio		1.15										
Actuated Cycle Length (s)		151.9			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		120.7%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	492	832	0	431	1578
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	553	885	0	474	1734
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	0	553	885	0	474	1730
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.16	c0.25		0.27	c0.62
v/s Ratio Perm						
v/c Ratio		0.31	1.03		0.71	0.97
Uniform Delay, d1		11.6	30.3		21.3	13.9
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	39.1		3.7	15.5
Delay (s)		11.7	69.4		25.0	29.4
Level of Service		B	E		C	C
Approach Delay (s)		11.7	69.4		28.4	
Approach LOS		B	E		C	
Intersection Summary						
HCM 2000 Control Delay		35.8			HCM 2000 Level of Service	
HCM 2000 Volume to Capacity ratio		1.06				D
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	
Intersection Capacity Utilization		83.5%			ICU Level of Service	
Analysis Period (min)		15				E
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑				
Volume (vph)	0	917	0	0	515	245	423	2	105	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.25	0.25	0.25	
Adj. Flow (vph)	0	955	0	0	579	275	455	2	113	0	0	0
RTOR Reduction (vph)	0	0	0	0	99	0	0	38	0	0	0	0
Lane Group Flow (vph)	0	955	0	0	755	0	291	241	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		18.7			18.7		13.6	13.6				
Effective Green, g (s)		18.7			18.7		13.6	13.6				
Actuated g/C Ratio		0.46			0.46		0.34	0.34				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1642			1562		567	545				
v/s Ratio Prot		0.27			0.22							
v/s Ratio Perm							0.17	0.15				
v/c Ratio		0.58			0.48		0.51	0.44				
Uniform Delay, d1		7.9			7.5		10.7	10.4				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.5			0.2		0.8	0.6				
Delay (s)		8.5			7.7		11.5	11.0				
Level of Service		A			A		B	B				
Approach Delay (s)		8.5			7.7		11.2			0.0		
Approach LOS		A			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		8.9			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		40.3			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		47.0%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												
















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	4	40	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	4	58	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	80	58	58			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	80	58	58			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	918	1008	1546			
Direction, Lane #						
Volume Total	16	13	58			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	1008	1546	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	4.9	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	4.9	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.3				
Intersection Capacity Utilization		17.3%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St









MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1400	34	0	3813	552	0	0	476	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1687	41	0	4145	600	0	0	595	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4765			1748			3141	6492	623	5047	6212	1722
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4765			1748			3141	6492	623	5047	6212	1722
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	84
cM capacity (veh/h)	21			349			4	0	1355	0	0	76
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	675	675	378	1658	1658	1429	595	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	600	595	12				
cSH	1700	1700	1700	1700	1700	1700	1355	76				
Volume to Capacity	0.40	0.40	0.22	0.98	0.98	0.84	0.44	0.16				
Queue Length 95th (ft)	0	0	0	0	0	0	57	13				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	61.3				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	61.3				
Approach LOS							A	F				
Intersection Summary												
Average Delay	0.9											
Intersection Capacity Utilization	101.1%			ICU Level of Service					G			
Analysis Period (min)	15											

* User Entered Value




















NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1261	201	0	3713	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1433	228	0	4126	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1681			2962	632
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1681			2962	632
tC, single (s)			4.1			6.8	6.9
tC, 2 stage (s)							
tF (s)			2.2			3.5	3.3
p0 queue free %			100			100	39
cM capacity (veh/h)			370			11	409
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	573	573	515	1375	1375	1375	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	228	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	409
Volume to Capacity	0.34	0.34	0.30	0.81	0.81	0.81	0.61
Queue Length 95th (ft)	0	0	0	0	0	0	99
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	26.8
Lane LOS	D						
Approach Delay (s)	0.0			0.0			26.8
Approach LOS	D						
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			86.6%	ICU Level of Service		E	
Analysis Period (min)			15				

























NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1577	1944	342	106	102	0	0	277	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4640		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4640		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1696	2090	368	143	138	0	0	318	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1018	3128	0	143	138	0	0	330	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.6			21.4	
Effective Green, g (s)				131.2	131.2		20.0	46.6			21.4	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1054	3214		186	870			396	
v/s Ratio Prot				0.67	c0.67		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.97	0.97		0.77	0.16			0.83	
Uniform Delay, d1				27.0	27.4		82.4	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				19.8	10.4		17.2	0.1			14.0	
Delay (s)				46.8	37.8		99.7	56.1			96.3	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			40.0			78.3			96.3	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay			46.2	HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio			0.93									
Actuated Cycle Length (s)			189.4	Sum of lost time (s)				16.8				
Intersection Capacity Utilization			201.0%	ICU Level of Service				H				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  						 		  	 	
Volume (vph)	1	583	70	0	0	0	0	198	200	451	1460	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3259	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3259	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	634	76	0	0	0	0	230	217	490	1521	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	19	49	0	0	0
Lane Group Flow (vph)	0	635	47	0	0	0	0	291	88	490	1521	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1177	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.43	
v/s Ratio Perm		0.12	0.03						0.06			
v/c Ratio		0.36	0.08					0.25	0.17	0.70	0.74	
Uniform Delay, d1		41.5	37.4					38.4	37.3	63.2	26.2	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.4	
Delay (s)		41.6	37.5					38.6	37.4	66.2	27.6	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.2			37.0	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.1		HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		201.0%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 1

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (vph)	212	6	1123	589	0	1112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3315			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3315			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	247	7	1208	633	0	1171
RTOR Reduction (vph)	2	0	53	0	0	0
Lane Group Flow (vph)	252	0	1788	0	0	1171
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	16.7		42.4			42.4
Effective Green, g (s)	16.7		42.4			42.4
Actuated g/C Ratio	0.24		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	389		2060			2090
v/s Ratio Prot	c0.16		c0.54			0.35
v/s Ratio Perm						
v/c Ratio	0.65		0.87			0.56
Uniform Delay, d1	23.1		10.6			7.5
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	3.7		4.2			0.3
Delay (s)	26.8		14.8			7.8
Level of Service	C		B			A
Approach Delay (s)	26.8		14.8			7.8
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			13.2		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.85			
Actuated Cycle Length (s)			68.2		Sum of lost time (s)	12.1
Intersection Capacity Utilization			76.2%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2017 Alt 1

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↗	↖	↗	↖	↖	↗	↖
Volume (vph)	46	2	9	7	0	5	19	1333	25	38	1250	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1708		1770	3529		1770	3525	
Frt Permitted	0.74	0.78	1.00		0.87		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1312	1385	1583		1526		1770	3529		1770	3525	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	53	2	10	14	0	10	23	1587	30	41	1359	38
RTOR Reduction (vph)	0	0	8	0	20	0	0	1	0	0	1	0
Lane Group Flow (vph)	28	27	2	0	4	0	23	1616	0	41	1396	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.2	15.2	15.2		15.2		2.6	62.6		4.0	64.0	
Effective Green, g (s)	15.2	15.2	15.2		15.2		2.6	62.6		4.0	64.0	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.65		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	207	219	250		241		47	2303		73	2352	
v/s Ratio Prot							0.01	c0.46		c0.02	0.40	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.14	0.12	0.01		0.02		0.49	0.70		0.56	0.59	
Uniform Delay, d1	34.7	34.6	34.0		34.0		46.0	10.7		45.1	8.8	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		7.8	1.0		9.5	0.4	
Delay (s)	35.0	34.9	34.0		34.1		53.8	11.7		54.6	9.2	
Level of Service	C	C	C		C		D	B		D	A	
Approach Delay (s)		34.8			34.1			12.2			10.5	
Approach LOS		C			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.1		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.59									
Actuated Cycle Length (s)			95.9		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			56.1%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 1

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	22	0	1279	7	418	824	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	33	0	1405	8	427	841	0
RTOR Reduction (vph)	0	0	0	0	30	0	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1405	4	427	841	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.40		c0.24	0.24	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.85	0.01	0.70	0.28	
Uniform Delay, d1					60.6			33.8	20.4	41.0	2.3	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			3.7	0.0	3.5	0.2	
Delay (s)					60.6			16.1	20.4	44.5	2.6	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			16.1			16.7	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		16.9			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		77.3%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 1







8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	49	14	1	63	126	134	1120	5	285	273	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.98	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3208	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3208	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	46	75	22	1	72	143	149	1244	6	328	314	349
RTOR Reduction (vph)	0	0	20	0	0	120	0	0	3	0	140	0
Lane Group Flow (vph)	46	75	2	0	73	23	149	1244	3	328	523	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1053	
v/s Ratio Prot	0.03	c0.04			c0.04		0.08	c0.35		c0.19	0.16	
v/s Ratio Perm			0.00			0.02			0.00			
v/c Ratio	0.38	0.59	0.02		0.25	0.09	0.27	0.79	0.00	0.96	0.50	
Uniform Delay, d1	64.5	65.5	62.9		53.4	52.1	37.7	34.4	22.3	58.0	39.1	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.91	
Incremental Delay, d2	2.0	6.7	0.1		0.4	0.2	0.3	4.1	0.0	38.1	1.6	
Delay (s)	66.5	72.2	63.0		53.9	52.3	37.9	38.5	22.3	93.8	37.3	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		68.9			52.8			38.4			56.0	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		47.4			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		83.1%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												







NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	27	194	4	86	319	8
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	32	228	5	108	347	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	761	59			112	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	761	59			112	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	77			77	
cM capacity (veh/h)	286	1007			1477	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	260	112	355			
Volume Left	32	0	347			
Volume Right	228	108	0			
cSH	1147	1700	1477			
Volume to Capacity	0.23	0.07	0.23			
Queue Length 95th (ft)	22	0	23			
Control Delay (s)	10.8	0.0	8.0			
Lane LOS	B		A			
Approach Delay (s)	10.8	0.0	8.0			
Approach LOS	B					
Intersection Summary						
Average Delay			7.8			
Intersection Capacity Utilization			34.8%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	30	3	1270	401	0	249
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1737		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1737		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	40	4	1337	422	0	389
RTOR Reduction (vph)	4	0	0	116	0	0
Lane Group Flow (vph)	40	0	1337	306	0	389
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	1.9		31.0	31.0		31.0
Effective Green, g (s)	1.9		31.0	31.0		31.0
Actuated g/C Ratio	0.04		0.72	0.72		0.72
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	77		2563	1100		2563
v/s Ratio Prot	c0.02		c0.38			0.11
v/s Ratio Perm				0.20		
v/c Ratio	0.52		0.52	0.28		0.15
Uniform Delay, d1	20.0		2.6	2.0		1.8
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	6.2		0.2	0.1		0.0
Delay (s)	26.3		2.8	2.2		1.9
Level of Service	C		A	A		A
Approach Delay (s)	26.3		2.7			1.9
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.0		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.52			
Actuated Cycle Length (s)			42.8		Sum of lost time (s)	9.9
Intersection Capacity Utilization			47.5%		ICU Level of Service	A
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2017 Alt 1

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↑↑
Volume (veh/h)	0	15	2076	5	5	281
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2232	5	7	413
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2456	1119			2238	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2456	1119			2238	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	87			97	
cM capacity (veh/h)	25	201			228	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1488	749	7	207	207
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	201	1700	1700	228	1700	1700
Volume to Capacity	0.13	0.88	0.44	0.03	0.12	0.12
Queue Length 95th (ft)	11	0	0	2	0	0
Control Delay (s)	25.5	0.0	0.0	21.3	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	25.5	0.0		0.4		
Approach LOS	D					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		67.5%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2017 Alt 1

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	17	84	1992	11	36	244
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	104	2142	12	52	354
RTOR Reduction (vph)	0	5	0	1	0	0
Lane Group Flow (vph)	21	99	2142	11	52	354
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.7	25.8	68.3	68.3	5.0	82.1
Effective Green, g (s)	15.7	20.7	68.3	68.3	5.0	82.1
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	259	305	2256	1009	82	2712
v/s Ratio Prot	0.01	c0.06	c0.61		c0.03	0.10
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.33	0.95	0.01	0.63	0.13
Uniform Delay, d1	39.5	37.2	17.8	7.1	50.2	3.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	9.5	0.0	14.9	0.0
Delay (s)	39.6	37.8	27.4	7.1	65.1	3.3
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.1		27.2			11.2
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay		25.3		HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio		0.82				
Actuated Cycle Length (s)		107.1		Sum of lost time (s)	18.1	
Intersection Capacity Utilization		71.1%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↕	↕	↕	↕
Volume (veh/h)	0	31	1970	25	0	259
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	50	2074	26	0	350
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2262	1050			2100	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2262	1050			2100	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	78			100	
cM capacity (veh/h)	35	224			258	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	50	1382	718	175	175	
Volume Left	0	0	0	0	0	
Volume Right	50	0	26	0	0	
cSH	224	1700	1700	1700	1700	
Volume to Capacity	0.22	0.81	0.42	0.10	0.10	
Queue Length 95th (ft)	21	0	0	0	0	
Control Delay (s)	25.7	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	25.7	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			65.3%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↕	↕	↖	↕
Volume (vph)	9	6	1995	31	15	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	15	10	2078	32	19	291
RTOR Reduction (vph)	0	5	0	7	0	0
Lane Group Flow (vph)	15	5	2078	25	19	291
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.8	59.8	2.0	69.3
Effective Green, g (s)	1.4	3.4	59.8	59.8	2.0	69.3
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2737	1224	45	3172
v/s Ratio Prot	c0.01	0.00	c0.59		c0.01	0.08
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.47	0.08	0.76	0.02	0.42	0.09
Uniform Delay, d1	37.6	35.4	4.8	2.0	37.1	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.5	0.5	1.3	0.0	6.3	0.0
Delay (s)	48.0	35.9	6.1	2.0	43.4	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	43.2		6.0			3.1
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay			6.0		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.74			
Actuated Cycle Length (s)			77.3		Sum of lost time (s)	14.1
Intersection Capacity Utilization			68.0%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2017 Alt 1

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	44	1	0	43	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	81	2	0	68	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	83	68	3					
Volume Left (vph)	0	0	81	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	834	1121	816	842	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.4						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.2%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2017 Alt 1

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	35	0	0	31	219	3	1804	49	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1358	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	47	0	0	43	304	3	1919	52	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	0	21	0	0	0
Lane Group Flow (vph)	3	47	0	0	43	248	3	1919	31	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	15.9	15.9			15.9	15.9	47.7	43.6	43.6			
Effective Green, g (s)	15.9	15.9			15.9	15.9	47.7	43.6	43.6			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.60	0.60			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	296	406			406	345	1158	2116	946			
v/s Ratio Prot		0.03			0.02		0.00	c0.54				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.12			0.11	0.72	0.00	0.91	0.03			
Uniform Delay, d1	22.3	22.9			22.8	26.4	4.4	12.9	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	7.0	0.0	6.1	0.0			
Delay (s)	22.3	23.0			22.9	33.4	4.4	18.9	6.0			
Level of Service	C	C			C	C	A	B	A			
Approach Delay (s)		23.0			32.1			18.6			0.0	
Approach LOS		C			C			B			A	
Intersection Summary												
HCM 2000 Control Delay		20.7						HCM 2000 Level of Service		C		
HCM 2000 Volume to Capacity ratio		0.86										
Actuated Cycle Length (s)		72.9						Sum of lost time (s)		13.4		
Intersection Capacity Utilization		83.0%						ICU Level of Service		E		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON Year 2017 Alt 1

Timing Plan: AM PEAK

























							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	12	274	1610	0	206	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	48	285	1677	0	261	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None			None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1670	130	261		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1670	130	261		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	95	78		0		
cM capacity (veh/h)	68	895	1301		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	48	285	839	839	174	87	0
Volume Left	0	285	0	0	0	0	0
Volume Right	48	0	0	0	0	0	0
cSH	895	1301	1700	1700	1700	1700	1700
Volume to Capacity	0.05	0.22	0.49	0.49	0.10	0.05	0.00
Queue Length 95th (ft)	4	21	0	0	0	0	0
Control Delay (s)	9.2	8.5	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	A					
Approach Delay (s)	9.2	1.2			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay		1.3					
Intersection Capacity Utilization		61.2%		ICU Level of Service		B	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON Year 2017 Alt 1

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	385	0	37	2	1	2	25	1764	0	0	142	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3356	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3356	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	438	0	42	6	3	6	26	1857	0	0	206	109
RTOR Reduction (vph)	0	29	0	0	6	0	0	0	0	0	59	0
Lane Group Flow (vph)	438	13	0	6	3	0	26	1857	0	0	256	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	25.4	25.4		1.7	1.7		1.9	43.5			37.4	
Effective Green, g (s)	25.4	25.4		1.7	1.7		1.9	43.5			37.4	
Actuated g/C Ratio	0.30	0.30		0.02	0.02		0.02	0.51			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	527	471		35	33		39	1804			1471	
v/s Ratio Prot	c0.25	0.01		c0.00	0.00		0.01	c0.52			0.08	
v/s Ratio Perm												
v/c Ratio	0.83	0.03		0.17	0.09		0.67	1.03			0.17	
Uniform Delay, d1	27.9	21.2		41.1	41.0		41.4	20.9			14.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	10.7	0.0		2.3	1.2		35.5	29.1			0.1	
Delay (s)	38.7	21.2		43.4	42.3		76.9	50.0			14.6	
Level of Service	D	C		D	D		E	D			B	
Approach Delay (s)		37.1			42.7			50.4			14.6	
Approach LOS		D			D			D			B	
Intersection Summary												
HCM 2000 Control Delay		43.8						HCM 2000 Level of Service		D		
HCM 2000 Volume to Capacity ratio		1.00										
Actuated Cycle Length (s)		85.3					Sum of lost time (s)		18.9			
Intersection Capacity Utilization		85.2%					ICU Level of Service		E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	7	189	14	0	1626	17	36	22	1	19	39	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5032			5077		1770	1852			1731	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.19	
Satd. Flow (perm)	1770	5032			5077		1243	1852			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	
Adj. Flow (vph)	8	212	16	0	1787	19	43	26	1	25	51	65
RTOR Reduction (vph)	0	5	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	8	223	0	0	1805	0	43	26	0	0	124	0
Turn Type	Prot	NA			NA	Perm	NA		Perm	NA		
Protected Phases	1	6			2		4			3		
Permitted Phases						4				3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2061		241	360			53	
v/s Ratio Prot	c0.00	0.04			c0.36			0.01				
v/s Ratio Perm							c0.03				c0.38	
v/c Ratio	0.04	0.12			0.88		0.18	0.07			2.33	
Uniform Delay, d1	71.4	36.4			49.3		60.5	59.2			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			5.1		0.4	0.1			653.1	
Delay (s)	71.5	36.5			54.3		60.9	59.3			728.1	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		37.7			54.3			60.3			728.1	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		94.9			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		70.2%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	207	0	475	1634	8	0	0	0	0	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	252	0	505	1738	9	0	0	0	0	0	16
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	10
Lane Group Flow (vph)	0	252	0	505	1747	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.05		0.15	c0.49							
v/s Ratio Perm												0.00
v/c Ratio		0.13		0.29	0.54							0.01
Uniform Delay, d1		36.6		26.4	1.5							34.9
Progression Factor		0.42		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.1	0.2							0.0
Delay (s)		15.6		26.5	1.7							34.9
Level of Service		B		C	A							C
Approach Delay (s)		15.6			7.2			0.0				34.9
Approach LOS		B			A			A				C
Intersection Summary												
HCM 2000 Control Delay		8.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		67.1%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	10	232	0	0	128	230	0	0	0	61	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	12	276	0	0	138	247	0	0	0	67	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	385			276			566	685	276	561	561	261
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	385			276			566	685	276	561	561	261
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	85	100	99
cM capacity (veh/h)	1174			1287			429	367	763	435	432	777
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	288	385	0	71								
Volume Left	12	0	0	67								
Volume Right	0	247	0	4								
cSH	1174	1287	1700	447								
Volume to Capacity	0.01	0.00	0.00	0.16								
Queue Length 95th (ft)	1	0	0	14								
Control Delay (s)	0.4	0.0	0.0	14.6								
Lane LOS	A			B								
Approach Delay (s)	0.4	0.0	0.0	14.6								
Approach LOS				B								
Intersection Summary												
Average Delay				1.6								
Intersection Capacity Utilization				31.1%								A
Analysis Period (min)				15								

NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	284	4	26	334	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	330	5	28	359	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	335	28	385	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.02	0.53	-0.01	-0.45	-0.14						
Departure Headway (s)	6.2	5.7	6.1	5.6	5.5	6.1						
Degree Utilization, x	0.01	0.53	0.05	0.60	0.28	0.07						
Capacity (veh/h)	546	609	561	616	583	479						
Control Delay (s)	8.1	13.8	8.3	15.4	10.6	9.6						
Approach Delay (s)	13.7		14.9		10.6	9.6						
Approach LOS	B		B		B	A						
Intersection Summary												
Delay				13.4								
Level of Service				B								
Intersection Capacity Utilization				37.8%								A
Analysis Period (min)				15								

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

HCM Unsignalized Intersection Capacity Analysis

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	524	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	570	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			574		570	570
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			574		570	570
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			999		483	521
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	570	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	510			
Volume to Capacity	0.34	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.2			
Lane LOS			B			
Approach Delay (s)	0.0		12.2			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			37.6%		ICU Level of Service	A
Analysis Period (min)			15			








NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑↑↑	↑	↑	↑	↑	↑	↑	↑
Volume (vph)	21	659	34	23	1873	42	160	36	1900	88	44	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5048		1770	5069			3323			3363	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5048		1770	5069			3323			3363	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	785	40	25	2058	46	193	43	60	107	54	29
RTOR Reduction (vph)	0	3	0	0	1	0	0	13	0	0	8	0
Lane Group Flow (vph)	25	822	0	25	2103	0	0	283	0	0	182	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2235		118	2159			646			653	
v/s Ratio Prot	0.01	c0.16		c0.01	c0.41			c0.09			c0.05	
v/s Ratio Perm												
v/c Ratio	0.17	0.37		0.21	0.97			0.44			0.28	
Uniform Delay, d1	76.7	33.4		79.5	50.7			63.8			61.7	
Progression Factor	1.00	1.00		1.24	0.76			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.7	12.2			0.5			0.2	
Delay (s)	77.3	33.9		99.7	50.7			64.3			62.0	
Level of Service	E	C		F	D			E			E	
Approach Delay (s)		35.1			51.3			64.3			62.0	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		49.0			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		74.2%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	885	34	20	2044	11	18	4	30	54	10	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5081			1688		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5057		1770	5081			1542		1237	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	994	38	23	2323	12	25	5	41	77	14	20
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	17	0
Lane Group Flow (vph)	2	1030	0	23	2335	0	0	44	0	77	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			257		206	283	
v/s Ratio Prot	0.00	0.20		c0.01	c0.46						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.30		0.19	0.63			0.17		0.37	0.06	
Uniform Delay, d1	86.1	11.1		79.4	12.0			64.3		66.7	63.1	
Progression Factor	1.71	0.27		1.43	0.31			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.5	0.5			0.3		1.1	0.1	
Delay (s)	147.5	3.2		113.8	4.2			64.6		67.8	63.2	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.5			5.3			64.6			66.4	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		7.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		73.2%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	952	62	94	1901	51	143	19	89	165	35	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.85	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5038		1770	5085	1583		1784	1583		3374	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5038		1770	5085	1583		1784	1583		3374	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1070	70	113	2290	61	161	21	100	220	47	19
RTOR Reduction (vph)	0	4	0	0	0	29	0	0	83	0	2	0
Lane Group Flow (vph)	3	1136	0	113	2290	32	0	182	17	0	284	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		581	
v/s Ratio Prot	0.00	0.23		c0.06	c0.45			c0.10			c0.08	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.51		0.58	0.85	0.04		0.59	0.06		0.49	
Uniform Delay, d1	86.2	36.1		76.0	35.9	20.2		68.7	62.3		67.3	
Progression Factor	1.23	0.62		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.8		4.1	3.5	0.1		3.1	0.1		0.6	
Delay (s)	106.5	23.3		80.0	39.4	20.2		71.7	62.4		68.0	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.6			40.8			68.4			68.0	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		39.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		90.6%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	↰
Volume (vph)	13	1216	25	42	2028	11	15	6	48	37	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1670			1722	
Flt Permitted	0.95	1.00		0.95	1.00			0.93			0.78	
Satd. Flow (perm)	1770	5070		1770	5081			1566			1383	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	14	1322	27	49	2358	13	18	7	57	49	3	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	45	0	0	22	0
Lane Group Flow (vph)	14	1348	0	49	2371	0	0	37	0	0	58	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.5		2.9	39.7			15.1			15.1	
Effective Green, g (s)	0.7	37.5		2.9	39.7			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2670		72	2833			332			293	
v/s Ratio Prot	0.01	0.27		c0.03	c0.47							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.82	0.50		0.68	0.84			0.11			0.20	
Uniform Delay, d1	35.2	10.9		33.7	13.1			22.6			23.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	132.1	0.2		23.3	2.3			0.1			0.3	
Delay (s)	167.3	11.0		57.0	15.4			22.8			23.4	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		12.6			16.2			22.8			23.4	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		15.2			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		71.2			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		56.4%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰	↰	↰
Volume (vph)	90	1229	29	241	1969	212	73	71	760	231	91	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1749	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1749	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	105	1429	34	256	2095	226	81	79	844	275	108	89
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	182	0	3	56
Lane Group Flow (vph)	105	1461	0	256	2095	159	81	314	274	275	114	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.4	30.4	10.4	34.1	34.1
Effective Green, g (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.4	30.4	10.4	34.1	34.1
Actuated g/C Ratio	0.05	0.30		0.15	0.41	0.41	0.06	0.26	0.26	0.09	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	177	1543		273	2070	644	102	406	394	308	514	442
v/s Ratio Prot	0.03	0.29		c0.14	c0.41		0.05	c0.20		c0.08	c0.07	
v/s Ratio Perm						0.10		0.18				0.02
v/c Ratio	0.59	0.95		0.94	1.01	0.25	0.79	0.77	0.69	0.89	0.22	0.05
Uniform Delay, d1	53.8	39.4		48.4	34.4	22.6	53.9	39.5	38.6	52.2	30.9	29.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.2	12.4		37.6	22.8	0.2	33.3	8.8	5.3	26.1	0.2	0.1
Delay (s)	59.0	51.8		86.1	57.2	22.8	87.3	48.4	43.8	78.3	31.1	29.4
Level of Service	E	D		F	E	C	F	D	D	E	C	C
Approach Delay (s)		52.2			57.0			49.4			58.3	
Approach LOS		D			E			D			E	
Intersection Summary												
HCM 2000 Control Delay		54.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.94										
Actuated Cycle Length (s)		115.9			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		86.4%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	280	1136	0	153	1288
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	315	1222	0	170	1431
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	315	1222	0	170	1426
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.35		0.10	c0.51
v/s Ratio Perm						
v/c Ratio		0.12	1.05		0.82	0.93
Uniform Delay, d1		2.5	26.8		34.5	16.6
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	39.6		22.3	10.5
Delay (s)		2.5	66.4		56.8	27.1
Level of Service		A	E		E	C
Approach Delay (s)		2.5	66.4		30.2	
Approach LOS		A	E		C	
Intersection Summary						
HCM 2000 Control Delay			41.5		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			1.04			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			67.5%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	434	0	0	418	517	819	1	142	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3246		1681	1633				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3246		1681	1633				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	499	0	0	454	562	890	1	154	0	0	0
RTOR Reduction (vph)	0	0	0	0	354	0	0	28	0	0	0	0
Lane Group Flow (vph)	0	499	0	0	662	0	534	483	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.7			16.7		20.5	20.5				
Effective Green, g (s)		16.7			16.7		20.5	20.5				
Actuated g/C Ratio		0.37			0.37		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1307			1199		762	740				
v/s Ratio Prot		0.14			c0.20							
v/s Ratio Perm							c0.32	0.30				
v/c Ratio		0.38			0.55		0.70	0.65				
Uniform Delay, d1		10.5			11.3		9.9	9.6				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.6		2.9	2.1				
Delay (s)		10.6			11.8		12.8	11.7				
Level of Service		B			B		B	B				
Approach Delay (s)		10.6			11.8		12.2				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					11.8				HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio					0.63							
Actuated Cycle Length (s)					45.2				Sum of lost time (s)		8.0	
Intersection Capacity Utilization					68.6%				ICU Level of Service		C	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱
Volume (veh/h)	0	3	4	192	27	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	267	66	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	344	66	66			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	344	66	66			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	650	998	1536			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	272	66			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	998	1536	1700			
Volume to Capacity	0.01	0.00	0.04			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.7	0.2	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.7	0.2	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			23.3%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Volume (veh/h)	0	4064	17	0	1803	243	0	0	908	0	0	55
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%			0%			0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4233	18	0	1859	251	0	0	1009	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2129			4271			4985	6391	1460	3435	6275	785
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2129			4271			4985	6391	1460	3435	6275	785
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	247			33			0	0	1832	1	0	324
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1693	1693	864	744	744	622	1009	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	251	1009	83				
cSH	1700	1700	1700	1700	1700	1700	1832	324				
Volume to Capacity	1.00	1.00	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	89	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3	19.9				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.3	19.9				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				143.7%								
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2017 Alt 1
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3830	130	0	1840	0	200	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3948	134	0	1917	0	244	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4102		4694	1423	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4102		4694	1423	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			39		1	121	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1579	1579	924	639	639	639	244
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	244
cSH	1700	1700	1700	1700	1700	1700	121
Volume to Capacity	0.93	0.93	0.54	0.38	0.38	0.38	2.01
Queue Length 95th (ft)	0	0	0	0	0	0	498
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	543.6
Lane LOS							F
Approach Delay (s)	0.0			0.0			543.6
Approach LOS							F
Intersection Summary							
Average Delay			21.2				
Intersection Capacity Utilization			97.9%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2017 Alt 1
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑↑			↑↑↑	
Volume (vph)	0	0	0	968	634	109	92	251		0	0	860
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3528	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3528	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1019	667	115	95	259	0	0	887	16
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	509	1280	0	95	259	0	0	901	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1432		98	1989			1568	
v/s Ratio Prot				c0.33	0.28		c0.05	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.08	0.96d1		0.97	0.13			0.57	
Uniform Delay, d1				31.1	29.7		42.4	9.3			18.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				65.7	7.5		80.0	0.0			0.5	
Delay (s)				96.8	37.2		122.4	9.3			19.2	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			54.1			39.7			19.2	
Approach LOS		A			D			D			B	
Intersection Summary												
HCM 2000 Control Delay			42.1			HCM 2000 Level of Service		D				
HCM 2000 Volume to Capacity ratio			0.80									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)		17.2				
Intersection Capacity Utilization		135.6%				ICU Level of Service		H				
Analysis Period (min)			15									
d1 Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔↔	
Volume (vph)	7	2109	108	0	0	0	0	344	452	760	1091	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3125	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3125	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2318	119	0	0	0	0	400	526	792	1136	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2326	90	0	0	0	0	631	260	792	1136	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					948	409	865	2022	
v/s Ratio Prot		c0.46						c0.20		c0.23	0.32	
v/s Ratio Perm			0.06						0.19			
v/c Ratio		1.26	0.16					0.67	0.64	0.92	0.56	
Uniform Delay, d1		55.8	37.7					53.2	52.6	63.6	23.7	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		123.1	0.1					1.8	3.2	14.1	0.4	
Delay (s)		178.9	37.9					55.0	55.8	77.7	24.0	
Level of Service		F	D					D	E	E	C	
Approach Delay (s)		172.0			0.0			55.2			46.1	
Approach LOS		F			A			E			D	
Intersection Summary												
HCM 2000 Control Delay			105.8		HCM 2000 Level of Service					F		
HCM 2000 Volume to Capacity ratio			0.97									
Actuated Cycle Length (s)			175.0		Sum of lost time (s)				14.4			
Intersection Capacity Utilization			135.6%		ICU Level of Service				H			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2017 Alt 1
Timing Plan: PM PEAK













Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔		↔↔			↔↔
Volume (vph)	169	11	879	673	0	1197
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1584		3262			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1584		3262			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	217	14	988	756	0	1287
RTOR Reduction (vph)	2	0	66	0	0	0
Lane Group Flow (vph)	229	0	1678	0	0	1287
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	297		2464			2540
v/s Ratio Prot	c0.14		c0.51			0.38
v/s Ratio Perm						
v/c Ratio	0.77		0.68			0.51
Uniform Delay, d1	61.8		9.8			7.7
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	11.8		1.5			0.7
Delay (s)	73.5		11.4			8.5
Level of Service	E		B			A
Approach Delay (s)	73.5		11.4			8.5
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay			14.6		HCM 2000 Level of Service	
HCM 2000 Volume to Capacity ratio			0.71			B
Actuated Cycle Length (s)			160.0		Sum of lost time (s)	
Intersection Capacity Utilization			79.3%		ICU Level of Service	
Analysis Period (min)			15			D
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2017 Alt 1

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	140	9	28	25	9	24	22	1472	48	65	1416	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1695	1583		1721		1770	3522		1770	3489	
Flt Permitted	0.69	0.69	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1219	1217	1583		1463		1770	3522		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	179	12	36	39	14	38	24	1583	52	71	1539	162
RTOR Reduction (vph)	0	0	30	0	23	0	0	1	0	0	3	0
Lane Group Flow (vph)	95	96	6	0	68	0	24	1634	0	71	1698	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4		4							
Actuated Green, G (s)	18.9	18.9	18.9		18.9		3.1	72.0		8.0	76.9	
Effective Green, g (s)	18.9	18.9	18.9		18.9		3.1	72.0		8.0	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	202	263		243		48	2230		124	2359	
v/s Ratio Prot							0.01	0.46		c0.04	c0.49	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.47	0.48	0.02		0.28		0.50	0.73		0.57	0.72	
Uniform Delay, d1	42.9	42.9	39.7		41.4		54.5	14.3		51.2	11.6	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	1.8	0.0		0.6		8.0	1.3		6.3	1.1	
Delay (s)	44.6	44.7	39.7		42.1		62.5	15.5		57.4	12.7	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.9			42.1			16.2			14.5	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.7			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		113.7			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		73.8%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 1

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	7	0	141	0	1282	0	31	1552	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1619			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1619			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	10	0	204	0	1364	0	33	1669	0
RTOR Reduction (vph)	0	0	0	0	166	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	48	0	0	1364	0	33	1669	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			45.5		1.7	51.4	
Effective Green, g (s)					14.1			45.5		1.7	51.4	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					301			2129		39	2406	
v/s Ratio Prot					c0.03			0.39		0.02	c0.47	
v/s Ratio Perm												
v/c Ratio					0.16			0.64		0.85	0.69	
Uniform Delay, d1					25.8			9.8		36.8	7.3	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.2			0.7		84.9	0.9	
Delay (s)					26.0			10.4		121.7	8.2	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			26.0			10.4			10.4	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay		11.4			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		75.6			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		60.4%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 1

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	286	49	116	6	68	413	27	594	2	136	1378	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1516		1855	1511	1770	3539	1349	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1516		1855	1511	1770	3539	1349	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	376	64	153	7	74	449	30	653	2	145	1466	68
RTOR Reduction (vph)	0	0	124	0	0	220	0	0	1	0	2	0
Lane Group Flow (vph)	376	64	29	0	81	229	30	653	1	145	1532	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.7	27.7	27.7		23.9	23.9	2.9	56.0	56.0	16.8	69.9	
Effective Green, g (s)	27.7	27.7	27.7		23.9	23.9	2.9	56.0	56.0	16.8	69.9	
Actuated g/C Ratio	0.19	0.19	0.19		0.17	0.17	0.02	0.39	0.39	0.12	0.49	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	340	358	292		308	251	35	1378	525	206	1707	
v/s Ratio Prot	c0.21	0.03			0.04		0.02	0.18		c0.08	c0.44	
v/s Ratio Perm			0.02			c0.15		0.00				
v/c Ratio	1.11	0.18	0.10		0.26	0.91	0.86	0.47	0.00	0.70	0.90	
Uniform Delay, d1	58.1	48.5	47.8		52.3	58.9	70.2	32.9	26.8	61.1	33.7	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	80.4	0.2	0.2		0.5	34.1	94.8	1.2	0.0	10.4	7.9	
Delay (s)	138.5	48.8	47.9		52.7	93.0	165.0	34.0	26.8	71.5	41.6	
Level of Service	F	D	D		D	F	F	C	C	E	D	
Approach Delay (s)		105.4			86.9			39.8			44.2	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay		60.2								E		
HCM 2000 Volume to Capacity ratio		0.95										
Actuated Cycle Length (s)		143.8				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		79.2%				ICU Level of Service		D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 1

9: Strand Wy & Guadalcanal Rd

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	309	484	3	40	176	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	343	538	4	56	200	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	436	32			61	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	436	32			61	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	32	48			87	
cM capacity (veh/h)	503	1041			1543	
Direction, Lane #						
Volume Total	881	61	203			
Volume Left	343	0	200			
Volume Right	538	56	0			
cSH	1105	1700	1543			
Volume to Capacity	0.80	0.04	0.13			
Queue Length 95th (ft)	224	0	11			
Control Delay (s)	19.6	0.0	7.6			
Lane LOS	C		A			
Approach Delay (s)	19.6	0.0	7.6			
Approach LOS	C					
Intersection Summary						
Average Delay		16.5				
Intersection Capacity Utilization		40.4%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2017 Alt 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (vph)	312	6	629	43	0	1503
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	395	8	699	48	0	1689
RTOR Reduction (vph)	1	0	0	27	0	0
Lane Group Flow (vph)	402	0	699	21	0	1689
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases			2			
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.23		0.20			c0.48
v/s Ratio Perm			0.01			
v/c Ratio	0.48		0.46	0.03		1.11
Uniform Delay, d1	18.6		21.3	17.3		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.2	0.0		59.9
Delay (s)	19.1		21.5	17.3		89.9
Level of Service	B		C	B		F
Approach Delay (s)	19.1		21.2			89.9
Approach LOS	B		C			F

Intersection Summary

HCM 2000 Control Delay	61.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	9.9
Intersection Capacity Utilization	91.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2017 Alt 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (veh/h)	4	6	489	3	15	1441
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	569	3	16	1584
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1395	286			572	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1395	286			572	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	94	98			98	
cM capacity (veh/h)	130	711			997	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	20	379	193	16	792	792
Volume Left	8	0	0	16	0	0
Volume Right	12	0	3	0	0	0
cSH	255	1700	1700	997	1700	1700
Volume to Capacity	0.08	0.22	0.11	0.02	0.47	0.47
Queue Length 95th (ft)	6	0	0	1	0	0
Control Delay (s)	20.3	0.0	0.0	8.7	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	20.3	0.0		0.1		
Approach LOS	C					

Intersection Summary

Average Delay	0.3		
Intersection Capacity Utilization	49.8%	ICU Level of Service	A
Analysis Period (min)	15		

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2017 Alt 1

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	29	55	436	11	100	1345
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	32	60	495	12	110	1478
RTOR Reduction (vph)	0	44	0	7	0	0
Lane Group Flow (vph)	32	16	495	5	110	1478
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	18	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.3	21.5	27.6	27.6	7.1	43.5
Effective Green, g (s)	9.3	16.4	27.6	27.6	7.1	43.5
Actuated g/C Ratio	0.15	0.26	0.44	0.44	0.11	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	265	418	1572	703	202	2479
v/s Ratio Prot	c0.02	0.01	0.14		0.06	c0.42
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.04	0.31	0.01	0.54	0.60
Uniform Delay, d1	22.9	17.0	11.1	9.6	26.0	4.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.0	3.0	0.4
Delay (s)	23.1	17.0	11.3	9.6	29.0	5.2
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.1		11.2			6.8
Approach LOS	B		B			A

Intersection Summary

HCM 2000 Control Delay	8.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	62.1	Sum of lost time (s)	18.1
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2017 Alt 1

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↕	↕			↕
Volume (veh/h)	0	22	427	18	0	1374
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	29	491	21	0	1493
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1248	256			511	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1248	256			511	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	165	743			1050	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	29	327	184	747	747	
Volume Left	0	0	0	0	0	
Volume Right	29	0	21	0	0	
cSH	743	1700	1700	1700	1700	
Volume to Capacity	0.04	0.19	0.11	0.44	0.44	
Queue Length 95th (ft)	3	0	0	0	0	
Control Delay (s)	10.0	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.0	0.0		0.0		
Approach LOS	B					

Intersection Summary

Average Delay	0.1				
Intersection Capacity Utilization	41.3%	ICU Level of Service	A		
Analysis Period (min)	15				

NBC Coastal Campus

MILCON Year 2017 Alt 1

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↕	↖	↗	↕
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	29	25	420	18	22	1350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	40	35	447	19	24	1484
RTOR Reduction (vph)	0	32	0	8	0	0
Lane Group Flow (vph)	40	3	447	11	24	1484
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.4	27.2	27.2	1.8	36.5
Effective Green, g (s)	2.6	4.4	27.2	27.2	1.8	36.5
Actuated g/C Ratio	0.06	0.10	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	152	2106	942	69	2826
v/s Ratio Prot	c0.02	0.00	0.13		0.01	c0.42
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.40	0.02	0.21	0.01	0.35	0.53
Uniform Delay, d1	20.8	18.7	4.3	3.8	21.4	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.6	0.1	0.1	0.0	3.0	0.2
Delay (s)	23.4	18.8	4.3	3.8	24.4	1.8
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.2		4.3			2.1
Approach LOS	C		A			A

Intersection Summary

HCM 2000 Control Delay	3.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	45.7	Sum of lost time (s)	14.1
Intersection Capacity Utilization	48.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

MILCON Year 2017 Alt 1

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Movement	↖	→	↗	↖	→	↗	↖	→	↗	↖
Lane Configurations	↖	↗	↗	↖	↗	↗	↖	↗	↖	↗
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	10	14	82	7	0	174	12	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	10	15	106	9	0	196	13	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	10	15	116	209						
Volume Left (vph)	0	0	106	0						
Volume Right (vph)	0	15	0	13						
Hadj (s)	0.03	-0.57	0.22	0.00						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.13	0.19						
Capacity (veh/h)	873	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	6.9						
Approach Delay (s)	6.6		7.8	6.9						
Approach LOS	A		A	A						

Intersection Summary

Delay	7.2		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

NBC Coastal Campus

MILCON Year 2017 Alt 1

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑		↰	↑	↰	↰	↑	↰			
Volume (vph)	9	180	0	0	79	134	11	343	67	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1300	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	10	205	0	0	91	154	12	377	74	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	122	0	40	0	0	0	0
Lane Group Flow (vph)	10	205	0	0	91	32	12	377	34	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.5	18.5	18.5			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.5	18.5	18.5			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	270	388			388	329	812	1624	726			
v/s Ratio Prot		c0.11			0.05		0.01	c0.11				
v/s Ratio Perm	0.01					0.02		0.02				
v/c Ratio	0.04	0.53			0.23	0.10	0.01	0.23	0.05			
Uniform Delay, d1	12.7	14.2			13.3	12.9	5.9	6.6	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.3			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.8	15.5			13.6	13.0	5.9	6.7	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.2		6.6			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.4			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		40.3			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		40.4%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 1

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: PM PEAK











Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰		↰	↑	↰	↑	↰
Volume (veh/h)	0	274	12	484	0	1513	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	1096	14	550	0	1681	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1983	841	1681		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1983	841	1681		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	0	96		0		
cM capacity (veh/h)	52	308	377		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	1096	14	275	275	1121	560	0
Volume Left	0	14	0	0	0	0	0
Volume Right	1096	0	0	0	0	0	0
cSH	308	377	1700	1700	1700	1700	1700
Volume to Capacity	3.56	0.04	0.16	0.16	0.66	0.33	0.00
Queue Length 95th (ft)	Err	3	0	0	0	0	0
Control Delay (s)	Err	14.9	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B					
Approach Delay (s)	Err	0.4			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			3280.4				
Intersection Capacity Utilization			65.5%		ICU Level of Service		
Analysis Period (min)			15				C

NBC Coastal Campus

MILCON Year 2017 Alt 1

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

Timing Plan: PM PEAK











Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	115	0	65	1	1	0	71	324	11	1	1348	195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3522		1770	3472	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3522		1770	3472	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	153	0	87	2	2	0	78	356	12	1	1498	217
RTOR Reduction (vph)	0	69	0	0	0	0	0	2	0	0	8	0
Lane Group Flow (vph)	153	18	0	2	2	0	78	366	0	1	1707	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	18.6	18.6		0.8	0.8		5.8	50.3		0.8	45.3	
Effective Green, g (s)	18.6	18.6		0.8	0.8		5.8	50.3		0.8	45.3	
Actuated g/C Ratio	0.21	0.21		0.01	0.01		0.06	0.56		0.01	0.51	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	368	329		15	16		114	1981		15	1759	
v/s Ratio Prot	c0.09	0.01		c0.00	0.00		c0.04	0.10		0.00	c0.49	
v/s Ratio Perm												
v/c Ratio	0.42	0.06		0.13	0.12		0.68	0.18		0.07	0.97	
Uniform Delay, d1	30.7	28.4		44.0	44.0		40.9	9.5		43.9	21.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.1		4.0	3.5		15.7	0.0		1.9	15.0	
Delay (s)	31.5	28.4		48.0	47.5		56.6	9.6		45.8	36.4	
Level of Service	C	C		D	D		E	A		D	D	
Approach Delay (s)		30.4			47.7			17.8			36.4	
Approach LOS		C			D			B			D	
Intersection Summary												
HCM 2000 Control Delay		32.4										
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		89.4										
Intersection Capacity Utilization		72.6%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 1

19: 7th St & SR-75 (Silver Strand Blvd)

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	1305	56	0	361	33	12	38	4	23	25	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5054			5022		1770	1835			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.17	
Satd. Flow (perm)	1770	5054			5022		1313	1835			299	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	62	1483	64	0	384	35	17	54	6	27	29	24
RTOR Reduction (vph)	0	2	0	0	6	0	0	2	0	0	8	0
Lane Group Flow (vph)	62	1545	0	0	413	0	17	58	0	0	72	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1912			2039		255	356			49	
v/s Ratio Prot	c0.04	c0.31			c0.08			c0.03				
v/s Ratio Perm							0.01				c0.24	
v/c Ratio	0.32	0.81			0.20		0.07	0.16			1.46	
Uniform Delay, d1	73.7	50.1			34.6		59.2	60.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.9	3.8			0.2		0.1	0.2			291.2	
Delay (s)	74.6	53.9			34.8		59.3	60.5			366.2	
Level of Service	E	D			C		E	E			F	
Approach Delay (s)		54.7			34.8			60.2			366.2	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		62.5										
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 1

20: SR-75 (Silver Strand Blvd) & Delaware St

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←
Volume (vph)	0	1334	0	508	397	36	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3495							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3495							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1499	0	540	422	38	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1499	0	540	460	0	0	0	0	0	0	3
Turn Type	NA			Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3176							609
v/s Ratio Prot		c0.29		c0.16	c0.13							
v/s Ratio Perm												0.00
v/c Ratio		0.78		0.28	0.14							0.00
Uniform Delay, d1		49.3		20.7	0.9							34.8
Progression Factor		0.19		1.00	1.00							1.00
Incremental Delay, d2		1.8		0.1	0.0							0.0
Delay (s)		11.0		20.8	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		11.0			11.6		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		11.3										B
HCM 2000 Volume to Capacity ratio		0.51										
Actuated Cycle Length (s)		180.0							22.3			
Intersection Capacity Utilization		49.4%							A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2017 Alt 1



















21: Dwy/Silver Strand Blvd & Palm Ave

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		←←			←←			←←			←←	
Volume (veh/h)	3	212	0	0	305	71	0	0	0	228	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	247	0	0	347	81	0	0	0	345	0	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	427			247			654	681	247	640	640	387
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	427			247			654	681	247	640	640	387
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	11	100	98
cM capacity (veh/h)	1132			1319			371	372	792	387	392	661
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	250	427	0	359								
Volume Left	3	0	0	345								
Volume Right	0	81	0	14								
cSH	1132	1319	1700	393								
Volume to Capacity	0.00	0.00	0.00	0.91								
Queue Length 95th (ft)	0	0	0	242								
Control Delay (s)	0.1	0.0	0.0	59.0								
Lane LOS	A		A	F								
Approach Delay (s)	0.1	0.0	0.0	59.0								
Approach LOS			A	F								
Intersection Summary												
Average Delay		20.5										
Intersection Capacity Utilization		40.2%								A		
Analysis Period (min)		15										













NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2017 Alt 1
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop			Stop			Stop			Stop		
Volume (vph)	7	418	12	84	350	24	14	38	67	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	536	15	94	393	27	25	67	118	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	551	94	420	209	161						
Volume Left (vph)	9	0	94	0	25	61						
Volume Right (vph)	0	15	0	27	118	28						
Hadj (s)	0.53	0.01	0.53	-0.01	-0.28	0.00						
Departure Headway (s)	7.5	6.9	7.4	6.9	7.2	7.7						
Degree Utilization, x	0.02	1.06	0.20	0.81	0.42	0.34						
Capacity (veh/h)	464	521	473	511	462	433						
Control Delay (s)	9.4	82.1	11.0	31.4	15.4	14.7						
Approach Delay (s)	81.0		27.7		15.4	14.7						
Approach LOS	F		D		C	B						
Intersection Summary												
Delay			45.1									
Level of Service			E									
Intersection Capacity Utilization			47.1%		ICU Level of Service		A					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2017 Alt 1
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	103	514	477	39	52	148
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	106	530	555	45	61	174
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	600				1320	300
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	600				1320	300
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	89				54	75
cM capacity (veh/h)	973				132	696
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	106	530	370	230	235	
Volume Left	106	0	0	0	61	
Volume Right	0	0	0	45	174	
cSH	973	1700	1700	1700	330	
Volume to Capacity	0.11	0.31	0.22	0.14	0.71	
Queue Length 95th (ft)	9	0	0	0	130	
Control Delay (s)	9.2	0.0	0.0	0.0	38.9	
Lane LOS	A				E	
Approach Delay (s)	1.5		0.0		38.9	
Approach LOS					E	
Intersection Summary						
Average Delay			6.9			
Intersection Capacity Utilization			45.7%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	28	521	30	31	479	3	54	19	22	12	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3510		1770	3536			1754			1841	1583
Flt Permitted	0.46	1.00		0.40	1.00			0.79			0.89	1.00
Satd. Flow (perm)	849	3510		750	3536			1417			1665	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	620	36	34	526	3	66	23	27	16	53	39
RTOR Reduction (vph)	0	6	0	0	0	0	0	21	0	0	0	31
Lane Group Flow (vph)	33	650	0	34	529	0	0	95	0	0	69	8
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	15.9	15.9		15.9	15.9			6.5			6.5	6.5
Effective Green, g (s)	15.9	15.9		15.9	15.9			6.5			6.5	6.5
Actuated g/C Ratio	0.50	0.50		0.50	0.50			0.21			0.21	0.21
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	427	1766		377	1779			291			342	325
v/s Ratio Prot		c0.19			0.15							
v/s Ratio Perm	0.04			0.05			c0.07			0.04	0.01	
v/c Ratio	0.08	0.37		0.09	0.30		0.32			0.20	0.02	
Uniform Delay, d1	4.1	4.8		4.1	4.6		10.7			10.4	10.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00			1.00	1.00	
Incremental Delay, d2	0.1	0.1		0.1	0.1		0.7			0.3	0.0	
Delay (s)	4.1	4.9		4.2	4.7		11.3			10.7	10.1	
Level of Service	A	A		A	A		B			B	B	
Approach Delay (s)		4.9			4.7		11.3			10.5		
Approach LOS		A			A		B			B		
Intersection Summary												
HCM 2000 Control Delay		5.7			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.36										
Actuated Cycle Length (s)		31.6			Sum of lost time (s)		9.2					
Intersection Capacity Utilization		45.4%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↰			↰	↰
Volume (veh/h)	843	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1028	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			1038		1028	1028
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1038		1028	1028
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	99
cM capacity (veh/h)			670		259	284
Direction, Lane #						
Volume Total	1028	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	265			
Volume to Capacity	0.60	0.01	0.05			
Queue Length 95th (ft)	0	0	4			
Control Delay (s)	0.0	0.0	19.2			
Lane LOS			C			
Approach Delay (s)	0.0		19.2			
Approach LOS			C			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			54.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	40	1718	122	57	797	128	95	88	61	169	77	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Flt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5035		1770	4980			3342			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5035		1770	4980			3342			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	43	1828	130	58	805	129	104	97	67	190	87	28
RTOR Reduction (vph)	0	4	0	0	11	0	0	18	0	0	4	0
Lane Group Flow (vph)	43	1954	0	58	923	0	0	250	0	0	301	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2117		157	1983			649			658	
v/s Ratio Prot	0.02	c0.39		c0.03	0.19			c0.07			c0.09	
v/s Ratio Perm												
v/c Ratio	0.22	0.92		0.37	0.47			0.39			0.46	
Uniform Delay, d1	72.9	49.4		77.2	40.0			63.1			64.1	
Progression Factor	1.00	1.00		1.24	0.73			1.00			1.00	
Incremental Delay, d2	0.6	7.3		1.4	0.8			0.4			0.5	
Delay (s)	73.5	56.7		97.3	29.9			63.5			64.6	
Level of Service	E	E		F	C			E			E	
Approach Delay (s)		57.1			33.8			63.5			64.6	
Approach LOS		E			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		51.7			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		117.5%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	
Volume (vph)	20	1995	56	48	1195	54	21	10	34	62	12	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5065		1770	5052			1703		1770	1718	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.63	1.00	
Satd. Flow (perm)	1770	5065		1770	5052			1551		1169	1718	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2036	57	49	1232	56	25	12	41	73	14	15
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	13	0
Lane Group Flow (vph)	20	2092	0	49	1286	0	0	55	0	73	16	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Effective Green, g (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3565		157	3668			190		143	210	
v/s Ratio Prot	0.01	c0.41		c0.03	c0.25						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.59		0.31	0.35			0.29		0.51	0.08	
Uniform Delay, d1	79.3	13.4		76.8	9.1			71.8		73.9	69.9	
Progression Factor	1.43	0.10		1.56	0.30			1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.4		1.0	0.2			0.9		3.1	0.2	
Delay (s)	114.0	1.7		121.1	2.9			72.7		76.9	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		2.7			7.2			72.7			75.0	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		7.9			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		59.5%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	1803	194	154	1268	80	126	39	125	151	43	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5011		1770	5085	1583		1794	1583		3371	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5011		1770	5085	1583		1794	1583		3371	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	28	1918	206	159	1307	82	137	42	136	204	58	27
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	113	0	4	0
Lane Group Flow (vph)	28	2117	0	159	1307	45	0	179	23	0	285	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2218		192	2364	736		305	269		574	
v/s Ratio Prot	0.02	c0.42		c0.09	c0.26			c0.10			c0.08	
v/s Ratio Perm					0.03			0.01				
v/c Ratio	0.18	0.95		0.83	0.55	0.06		0.59	0.09		0.50	
Uniform Delay, d1	75.9	48.4		78.6	34.7	26.5		68.8	62.8		67.6	
Progression Factor	1.03	0.93		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	9.6		24.4	0.9	0.2		8.0	0.6		3.0	
Delay (s)	78.9	54.7		103.0	35.6	26.7		76.8	63.5		70.7	
Level of Service	E	D		F	D	C		E	E		E	
Approach Delay (s)		55.0			42.1			71.1			70.7	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		52.6			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		103.1%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	2007	49	167	1562	15	38	8	80	23	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5067		1770	5078			1678			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.83	
Satd. Flow (perm)	1770	5067		1770	5078			1514			1505	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85		0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	10	2230	54	176	1644	16	45	9	94	28	12	12
RTOR Reduction (vph)	0	2	0	0	1	0	0	75	0	0	10	0
Lane Group Flow (vph)	10	2282	0	176	1659	0	0	73	0	0	42	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4				4	
Actuated Green, G (s)	0.8	40.4		11.2	50.8			17.2			17.2	
Effective Green, g (s)	0.8	40.4		11.2	50.8			17.2			17.2	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2422		234	3052			308			306	
v/s Ratio Prot	0.01	c0.45		c0.10	0.33							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.62	0.94		0.75	0.54			0.24			0.14	
Uniform Delay, d1	41.7	20.9		35.3	10.0			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	57.6	8.3		12.8	0.2			0.4			0.2	
Delay (s)	99.3	29.2		48.1	10.2			28.6			27.8	
Level of Service	F	C		D	B			C			C	
Approach Delay (s)		29.5			13.8			28.6			27.8	
Approach LOS		C			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		22.8			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		84.5			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		70.2%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	186	1949	25	323	1570	548	64	175	526	580	236	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	196	2052	26	347	1688	589	68	186	560	630	257	243
RTOR Reduction (vph)	0	1	0	0	0	87	0	26	271	0	2	131
Lane Group Flow (vph)	196	2077	0	347	1688	502	68	362	87	630	279	88
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.3	36.4		45.0	70.1	70.1	8.6	37.1	37.1	11.8	40.3	40.3
Effective Green, g (s)	11.3	36.4		45.0	70.1	70.1	8.6	37.1	37.1	11.8	40.3	40.3
Actuated g/C Ratio	0.07	0.24		0.30	0.46	0.46	0.06	0.24	0.24	0.08	0.26	0.26
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	254	1213		523	2342	729	100	397	366	266	462	398
v/s Ratio Prot	0.06	c0.41		c0.20	c0.33		0.04	c0.22		c0.18	c0.16	
v/s Ratio Perm						0.32			0.06			0.06
v/c Ratio	0.77	1.71		0.66	0.72	0.69	0.68	0.91	0.24	2.37	0.60	0.22
Uniform Delay, d1	69.2	57.9		47.0	33.1	32.4	70.4	56.0	46.2	70.2	49.0	43.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.5	324.1		3.2	1.1	2.7	17.3	24.8	0.3	627.3	2.2	0.3
Delay (s)	82.7	382.0		50.1	34.3	35.2	87.8	80.8	46.5	697.5	51.2	44.0
Level of Service	F	F		D	C	D	F	F	D	F	D	D
Approach Delay (s)		356.2			36.6			66.3			410.1	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		208.0										F
HCM 2000 Volume to Capacity ratio		1.19										
Actuated Cycle Length (s)		152.2				Sum of lost time (s)		21.9				
Intersection Capacity Utilization		123.9%				ICU Level of Service		H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	↔
Volume (vph)	0	498	842	0	434	1605
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	560	896	0	477	1764
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	0	560	896	0	477	1760
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.16	c0.25		0.27	c0.63
v/s Ratio Perm						
v/c Ratio		0.31	1.04		0.72	0.99
Uniform Delay, d1		11.6	30.3		21.4	14.3
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	42.9		3.7	19.1
Delay (s)		11.7	73.2		25.1	33.4
Level of Service		B	E		C	C
Approach Delay (s)		11.7	73.2		31.6	
Approach LOS		B	E		C	
Intersection Summary						
HCM 2000 Control Delay		38.7				D
HCM 2000 Volume to Capacity ratio		1.08				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		84.6%			ICU Level of Service	E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑↑				
Volume (vph)	0	926	0	0	520	247	429	2	105	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	965	0	0	584	278	461	2	113	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	37	0	0	0	0
Lane Group Flow (vph)	0	965	0	0	764	0	295	244	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.0			19.0		13.9	13.9				
Effective Green, g (s)		19.0			19.0		13.9	13.9				
Actuated g/C Ratio		0.46			0.46		0.34	0.34				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1644			1564		571	548				
v/s Ratio Prot		0.27			0.23							
v/s Ratio Perm							0.18	0.15				
v/c Ratio		0.59			0.49		0.52	0.45				
Uniform Delay, d1		8.1			7.6		10.8	10.5				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.5			0.2		0.8	0.6				
Delay (s)		8.6			7.8		11.6	11.1				
Level of Service		A			A		B	B				
Approach Delay (s)		8.6			7.8		11.3				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		9.0			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		40.9			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		47.4%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	34	161	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	37	233	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	288	233	233			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	288	233	233			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	698	806	1334			
Direction, Lane #						
Volume Total	16	46	233			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	806	1334	1700			
Volume to Capacity	0.02	0.01	0.14			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	9.6	1.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.6	1.5	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.8				
Intersection Capacity Utilization		18.7%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St










MILCON Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1407	34	0	3932	553	0	0	477	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1695	41	0	4274	601	0	0	596	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4895			1756			3192	6631	626	5180	6351	1765
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4895			1756			3192	6631	626	5180	6351	1765
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	83
cM capacity (veh/h)	18			347			3	0	1356	0	0	71
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	678	678	380	1710	1710	1456	596	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	601	596	12				
cSH	1700	1700	1700	1700	1700	1700	1356	71				
Volume to Capacity	0.40	0.40	0.22	1.01	1.01	0.86	0.44	0.17				
Queue Length 95th (ft)	0	0	0	0	0	0	57	14				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	66.1				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	66.1				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				103.4%			ICU Level of Service		G			
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2021 Alt 3north
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1268	202	0	3832	0	232	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1441	230	0	4258	0	252	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1690		3015	635	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1690		3015	635	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	38	
cM capacity (veh/h)			367		10	407	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	576	576	518	1419	1419	1419	252
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	230	0	0	0	252
cSH	1700	1700	1700	1700	1700	1700	407
Volume to Capacity	0.34	0.34	0.30	0.83	0.83	0.83	0.62
Queue Length 95th (ft)	0	0	0	0	0	0	101
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.2
Lane LOS							D
Approach Delay (s)	0.0			0.0			27.2
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			88.9%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1694	1946	343	107	102	0	0	278	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4638		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4638		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1822	2092	369	145	138	0	0	320	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1057	3218	0	145	138	0	0	332	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3211		186	872			397	
v/s Ratio Prot				c0.69	0.69		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				1.00	1.00		0.78	0.16			0.84	
Uniform Delay, d1				29.2	29.2		82.6	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				28.7	16.4		18.4	0.1			14.2	
Delay (s)				57.8	45.5		101.0	56.1			96.5	
Level of Service				E	D		F	E			F	
Approach Delay (s)		0.0			48.6			79.1			96.5	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay				53.6			HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio				0.96								
Actuated Cycle Length (s)				189.5			Sum of lost time (s)			16.8		
Intersection Capacity Utilization				201.0%			ICU Level of Service			H		
Analysis Period (min)				15								
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	584	92	0	0	0	0	199	206	451	1577	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3256	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3256	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	635	100	0	0	0	0	231	224	490	1643	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	19	48	0	0	0
Lane Group Flow (vph)	0	636	71	0	0	0	0	295	93	490	1643	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.6	62.6	35.2	100.6	
Effective Green, g (s)		60.0	60.0					62.6	62.6	35.2	100.6	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.20	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1771	551					1183	523	701	2067	
v/s Ratio Prot								0.09		0.14	c0.46	
v/s Ratio Perm		0.13	0.04						0.06			
v/c Ratio		0.36	0.13					0.25	0.18	0.70	0.79	
Uniform Delay, d1		41.8	38.3					38.4	37.3	63.6	27.8	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.1	2.2	
Delay (s)		41.9	38.4					38.5	37.4	66.6	30.0	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.4			0.0			38.1			38.4	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		39.0						HCM 2000 Level of Service		D		
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		172.2						Sum of lost time (s)		14.4		
Intersection Capacity Utilization		201.0%						ICU Level of Service		H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2021 Alt 3north

Timing Plan: AM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	219	6	1164	608	0	1289
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3316			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3316			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	255	7	1252	654	0	1357
RTOR Reduction (vph)	1	0	54	0	0	0
Lane Group Flow (vph)	261	0	1852	0	0	1357
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	18.8		44.8			44.8
Effective Green, g (s)	18.8		44.8			44.8
Actuated g/C Ratio	0.26		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	411		2043			2071
v/s Ratio Prot	c0.16		c0.56			0.40
v/s Ratio Perm						
v/c Ratio	0.63		0.91			0.66
Uniform Delay, d1	23.9		12.1			9.0
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	3.2		6.3			0.8
Delay (s)	27.1		18.4			9.7
Level of Service	C		B			A
Approach Delay (s)	27.1		18.4			9.7
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			15.7		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.87			
Actuated Cycle Length (s)			72.7		Sum of lost time (s)	12.1
Intersection Capacity Utilization			78.1%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON Year 2021 Alt 3north

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	47	2	10	8	0	5	19	1380	26	40	1432	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1713		1770	3529		1770	3526	
Frt Permitted	0.74	0.78	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1310	1378	1583		1513		1770	3529		1770	3526	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	55	2	12	16	0	10	23	1643	31	43	1557	39
RTOR Reduction (vph)	0	0	10	0	22	0	0	1	0	0	1	0
Lane Group Flow (vph)	29	28	2	0	4	0	23	1673	0	43	1595	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.4	15.4	15.4		15.4		2.7	64.3		4.0	65.6	
Effective Green, g (s)	15.4	15.4	15.4		15.4		2.7	64.3		4.0	65.6	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	206	216	249		238		48	2320		72	2365	
v/s Ratio Prot							0.01	c0.47		c0.02	0.45	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.14	0.13	0.01		0.02		0.48	0.72		0.60	0.67	
Uniform Delay, d1	35.5	35.4	34.8		34.8		46.9	10.9		46.1	9.7	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		7.4	1.1		12.6	0.8	
Delay (s)	35.8	35.7	34.8		34.8		54.2	12.0		58.7	10.5	
Level of Service	D	D	C		C		D	B		E	B	
Approach Delay (s)		35.6			34.8			12.6			11.7	
Approach LOS		D			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.8		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.61									
Actuated Cycle Length (s)			97.8		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			61.1%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2021 Alt 3north

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	23	0	1324	8	431	992	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	35	0	1455	9	440	1012	0
RTOR Reduction (vph)	0	0	0	0	32	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1455	4	440	1012	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.41		c0.25	0.29	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.88	0.01	0.72	0.34	
Uniform Delay, d1					60.6			34.6	20.4	41.4	2.5	
Progression Factor					1.00			0.36	1.00	1.00	1.00	
Incremental Delay, d2					0.1			4.4	0.0	4.2	0.3	
Delay (s)					60.6			17.0	20.5	45.6	2.8	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			17.0			15.8	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		16.9			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		82.9%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2021 Alt 3north











8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	31	55	14	1	70	130	147	1160	5	354	345	333
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3230	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3230	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	48	85	22	1	80	148	163	1289	6	407	397	383
RTOR Reduction (vph)	0	0	20	0	0	125	0	0	3	0	120	0
Lane Group Flow (vph)	48	85	2	0	81	23	163	1289	3	407	660	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1060	
v/s Ratio Prot	0.03	c0.05			c0.04		0.09	c0.36		c0.23	0.20	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.39	0.66	0.02		0.27	0.10	0.30	0.82	0.00	1.19	0.62	
Uniform Delay, d1	64.6	65.9	62.9		53.7	52.1	38.0	35.1	22.3	58.5	41.1	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.92	
Incremental Delay, d2	2.1	12.2	0.1		0.5	0.2	0.3	4.8	0.0	111.8	2.7	
Delay (s)	66.7	78.1	63.0		54.2	52.3	38.3	39.9	22.3	167.9	40.5	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		72.4			53.0			39.7			84.2	
Approach LOS		E			D			D			F	
Intersection Summary												
HCM 2000 Control Delay		59.8			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		87.1%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												











NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON Year 2021 Alt 3north
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	41	200	4	112	394	9
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	48	235	5	140	428	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked	0.99					
vC, conflicting volume	941	75			145	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	938	75			145	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	76	76			70	
cM capacity (veh/h)	205	986			1437	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	284	145	438			
Volume Left	48	0	428			
Volume Right	235	140	0			
cSH	1189	1700	1437			
Volume to Capacity	0.24	0.09	0.30			
Queue Length 95th (ft)	23	0	32			
Control Delay (s)	12.9	0.0	8.4			
Lane LOS	B		A			
Approach Delay (s)	12.9	0.0	8.4			
Approach LOS	B					
Intersection Summary						
Average Delay		8.5				
Intersection Capacity Utilization		39.0%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2021 Alt 3north
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	44	3	1325	437	0	321
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1753		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1753		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	59	4	1395	460	0	502
RTOR Reduction (vph)	4	0	0	139	0	0
Lane Group Flow (vph)	59	0	1395	321	0	502
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		29.7	29.7		29.7
Effective Green, g (s)	3.0		29.7	29.7		29.7
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	123		2467	1059		2467
v/s Ratio Prot	c0.03		c0.39			0.14
v/s Ratio Perm				0.21		
v/c Ratio	0.48		0.57	0.30		0.20
Uniform Delay, d1	19.1		3.2	2.5		2.3
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	3.0		0.3	0.2		0.0
Delay (s)	22.0		3.5	2.6		2.3
Level of Service	C		A	A		A
Approach Delay (s)	22.0		3.3			2.3
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.6		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.56				
Actuated Cycle Length (s)		42.6		Sum of lost time (s)		9.9
Intersection Capacity Utilization		49.0%		ICU Level of Service		A
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2021 Alt 3north

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↑↑
Volume (veh/h)	0	15	2177	5	5	367
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2341	5	7	540
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2628	1173			2346	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2628	1173			2346	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			96	
cM capacity (veh/h)	19	185			207	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1561	786	7	270	270
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	185	1700	1700	207	1700	1700
Volume to Capacity	0.14	0.92	0.46	0.04	0.16	0.16
Queue Length 95th (ft)	12	0	0	3	0	0
Control Delay (s)	27.6	0.0	0.0	23.1	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	27.6	0.0		0.3		
Approach LOS	D					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		70.3%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2021 Alt 3north

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	17	87	2090	12	38	328
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	107	2247	13	55	475
RTOR Reduction (vph)	0	3	0	1	0	0
Lane Group Flow (vph)	21	104	2247	12	55	475
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.8	25.9	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.8	20.8	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	261	307	2253	1008	82	2709
v/s Ratio Prot	0.01	c0.07	c0.63		c0.03	0.13
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.34	1.00	0.01	0.67	0.18
Uniform Delay, d1	39.4	37.2	19.4	7.1	50.2	3.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	18.2	0.0	19.4	0.0
Delay (s)	39.5	37.9	37.6	7.1	69.7	3.4
Level of Service	D	D	D	A	E	A
Approach Delay (s)	38.1		37.4			10.3
Approach LOS	D		D			B
Intersection Summary						
HCM 2000 Control Delay		32.5		HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio		0.86				
Actuated Cycle Length (s)		107.1		Sum of lost time (s)	18.1	
Intersection Capacity Utilization		74.0%		ICU Level of Service	D	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2021 Alt 3north
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↑↑			↑↑
Volume (veh/h)	0	32	2068	26	0	344
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	52	2177	27	0	465
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2423	1102			2204	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2423	1102			2204	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	75			100	
cM capacity (veh/h)	27	206			235	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	52	1451	753	232	232	
Volume Left	0	0	0	0	0	
Volume Right	52	0	27	0	0	
cSH	206	1700	1700	1700	1700	
Volume to Capacity	0.25	0.85	0.44	0.14	0.14	
Queue Length 95th (ft)	24	0	0	0	0	
Control Delay (s)	28.2	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	28.2	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		68.0%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2021 Alt 3north
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	10	6	2094	32	15	321
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	16	10	2181	33	19	396
RTOR Reduction (vph)	0	4	0	7	0	0
Lane Group Flow (vph)	16	6	2181	26	19	396
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.7	59.7	2.0	69.2
Effective Green, g (s)	1.4	3.4	59.7	59.7	2.0	69.2
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2736	1224	45	3172
v/s Ratio Prot	c0.01	0.00	c0.62		c0.01	0.11
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.50	0.09	0.80	0.02	0.42	0.12
Uniform Delay, d1	37.6	35.4	5.2	2.0	37.0	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.8	0.6	1.7	0.0	6.3	0.0
Delay (s)	49.3	36.0	6.9	2.0	43.3	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	44.2		6.8			2.4
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		6.5		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.78				
Actuated Cycle Length (s)		77.2		Sum of lost time (s)		14.1
Intersection Capacity Utilization		70.7%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2021 Alt 3north

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	45	1	0	44	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	83	2	0	70	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	85	70	3					
Volume Left (vph)	0	0	83	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	833	1121	815	841	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.2%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2021 Alt 3north

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	36	0	0	32	226	3	1898	50	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1357	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	48	0	0	44	314	3	2019	53	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	22	0	0	0	0
Lane Group Flow (vph)	3	48	0	0	44	258	3	2019	31	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.5	16.5			16.5	16.5	47.7	43.6	43.6			
Effective Green, g (s)	16.5	16.5			16.5	16.5	47.7	43.6	43.6			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	304	418			418	355	1148	2099	939			
v/s Ratio Prot		0.03			0.02		0.00	c0.57				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.11			0.11	0.73	0.00	0.96	0.03			
Uniform Delay, d1	22.2	22.7			22.6	26.4	4.5	14.2	6.2			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	7.2	0.0	11.9	0.0			
Delay (s)	22.2	22.8			22.7	33.7	4.5	26.1	6.2			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.8			32.3			25.6			0.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay		26.5						HCM 2000 Level of Service			C	
HCM 2000 Volume to Capacity ratio		0.90										
Actuated Cycle Length (s)		73.5				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		86.0%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON Year 2021 Alt 3north

Timing Plan: AM PEAK






















							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	569	1697	0	290	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	593	1768	0	367	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None		None		
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2436	184	367		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2436	184	367		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	50		0		
cM capacity (veh/h)	13	827	1188		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	593	884	884	245	122	0
Volume Left	0	593	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1188	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.50	0.52	0.52	0.14	0.07	0.00
Queue Length 95th (ft)	0	72	0	0	0	0	0
Control Delay (s)	0.0	11.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	B					
Approach Delay (s)	0.0	2.8			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay		2.4					
Intersection Capacity Utilization		56.9%		ICU Level of Service		B	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON Year 2021 Alt 3north

Timing Plan: AM PEAK

























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	406	0	39	2	1	2	26	2132	0	0	133	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3255	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3255	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	461	0	44	6	3	6	27	2244	0	0	193	223
RTOR Reduction (vph)	0	31	0	0	6	0	0	0	0	0	126	0
Lane Group Flow (vph)	461	13	0	6	3	0	27	2244	0	0	290	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	26.3	26.3		1.7	1.7		1.9	43.4			37.3	
Effective Green, g (s)	26.3	26.3		1.7	1.7		1.9	43.4			37.3	
Actuated g/C Ratio	0.31	0.31		0.02	0.02		0.02	0.50			0.43	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	540	483		34	33		39	1783			1410	
v/s Ratio Prot	c0.26	0.01		c0.00	0.00		0.02	c0.63			0.09	
v/s Ratio Perm												
v/c Ratio	0.85	0.03		0.18	0.09		0.69	1.26			0.21	
Uniform Delay, d1	28.1	20.9		41.5	41.4		41.8	21.3			15.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	12.4	0.0		2.5	1.2		41.8	121.1			0.1	
Delay (s)	40.5	21.0		44.0	42.7		83.6	142.4			15.3	
Level of Service	D	C		D	D		F	F			B	
Approach Delay (s)		38.8			43.2			141.7			15.3	
Approach LOS		D			D			F			B	
Intersection Summary												
HCM 2000 Control Delay		108.7						HCM 2000 Level of Service		F		
HCM 2000 Volume to Capacity ratio		1.15										
Actuated Cycle Length (s)		86.1					Sum of lost time (s)	18.9				
Intersection Capacity Utilization		96.5%					ICU Level of Service	F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2021 Alt 3north

Timing Plan: AM PEAK

















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  						  	
Volume (vph)	8	183	14	0	1989	17	39	23	1	19	41	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Frt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5030			5079		1770	1853			1732	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.19	
Satd. Flow (perm)	1770	5030			5079		1239	1853			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	9	206	16	0	2186	19	46	27	1	25	53	66
RTOR Reduction (vph)	0	5	0	0	1	0	0	1	0	0	17	0
Lane Group Flow (vph)	9	217	0	0	2204	0	46	27	0	0	127	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2062		240	360			53	
v/s Ratio Prot	c0.01	0.04			c0.43			0.01				
v/s Ratio Perm							c0.04				c0.39	
v/c Ratio	0.05	0.11			1.07		0.19	0.08			2.40	
Uniform Delay, d1	71.5	36.4			53.5		60.7	59.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			39.7		0.4	0.1			684.8	
Delay (s)	71.6	36.5			93.2		61.1	59.4			759.8	
Level of Service	E	D			F		E	E			F	
Approach Delay (s)		37.8			93.2			60.4			759.8	
Approach LOS		D			F			E			F	
Intersection Summary												
HCM 2000 Control Delay	123.6			HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio	0.99											
Actuated Cycle Length (s)	180.0			Sum of lost time (s)				21.9				
Intersection Capacity Utilization	77.2%			ICU Level of Service				D				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON Year 2021 Alt 3north

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	201	0	714	1997	9	0	0	0	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3537							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3537							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	245	0	760	2124	10	0	0	0	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	245	0	760	2134	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3214							609
v/s Ratio Prot		0.05		0.22	c0.60							
v/s Ratio Perm												0.00
v/c Ratio		0.13		0.44	0.66							0.01
Uniform Delay, d1		36.5		28.9	1.9							34.9
Progression Factor		0.43		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.2	0.5							0.0
Delay (s)		15.7		29.1	2.4							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.7			9.4		0.0				35.0	
Approach LOS		B			A		A				C	
Intersection Summary												
HCM 2000 Control Delay	10.0			HCM 2000 Level of Service				B				
HCM 2000 Volume to Capacity ratio	0.69											
Actuated Cycle Length (s)	180.0			Sum of lost time (s)				21.9				
Intersection Capacity Utilization	77.2%			ICU Level of Service				D				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON Year 2021 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	13	233	0	0	128	538	0	0	0	96	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	15	277	0	0	138	578	0	0	0	105	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	716			277			740	1024	277	735	735	427
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	716			277			740	1024	277	735	735	427
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			100			100	100	100	68	100	99
cM capacity (veh/h)	885			1285			326	231	761	331	341	628
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	293	716	0	110								
Volume Left	15	0	0	105								
Volume Right	0	578	0	4								
cSH	885	1285	1700	337								
Volume to Capacity	0.02	0.00	0.00	0.33								
Queue Length 95th (ft)	1	0	0	35								
Control Delay (s)	0.7	0.0	0.0	20.8								
Lane LOS	A			A			C					
Approach Delay (s)	0.7	0.0	0.0	20.8								
Approach LOS				A			C					
Intersection Summary												
Average Delay				2.2								
Intersection Capacity Utilization				52.1%			ICU Level of Service			A		
Analysis Period (min)				15								

NBC Coastal Campus

22: 3rd St & Palm Ave

MILCON Year 2021 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	321	4	26	643	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	373	5	28	691	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	378	28	717	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.03	0.53	0.01	-0.45	-0.14						
Departure Headway (s)	6.6	6.1	6.4	5.8	6.2	7.0						
Degree Utilization, x	0.01	0.64	0.05	1.16	0.32	0.09						
Capacity (veh/h)	536	572	551	623	551	462						
Control Delay (s)	8.5	18.0	8.5	109.2	12.1	10.6						
Approach Delay (s)	17.8		105.4		12.1	10.6						
Approach LOS	C		F		B	B						
Intersection Summary												
Delay				64.8								
Level of Service				F								
Intersection Capacity Utilization				51.5%			ICU Level of Service			A		
Analysis Period (min)				15								


















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↑	↕	↕	↕	↕
Volume (veh/h)	238	462	657	152	17	179
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	301	585	801	185	24	252
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked	0.91				0.91	0.91
vC, conflicting volume	987				2081	493
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	789				1991	247
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	60				17	63
cM capacity (veh/h)	753				29	686
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	301	585	534	452	276	
Volume Left	301	0	0	0	24	
Volume Right	0	0	0	185	252	
cSH	753	1700	1700	1700	231	
Volume to Capacity	0.40	0.34	0.31	0.27	1.20	
Queue Length 95th (ft)	48	0	0	0	335	
Control Delay (s)	12.9	0.0	0.0	0.0	166.9	
Lane LOS	B				F	
Approach Delay (s)	4.4		0.0		166.9	
Approach LOS					F	
Intersection Summary						
Average Delay			23.3			
Intersection Capacity Utilization			58.2%		ICU Level of Service	B
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2021 Alt 3north
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	455	15	26	654	0	70	36	81	1	21	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	1.00		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3523		1770	3539			1722			1858	1583
Flt Permitted	0.28	1.00		0.41	1.00			0.87			0.98	1.00
Satd. Flow (perm)	518	3523		764	3539			1522			1831	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	591	19	34	849	0	106	55	123	2	36	47
RTOR Reduction (vph)	0	3	0	0	0	0	0	34	0	0	0	31
Lane Group Flow (vph)	21	607	0	34	849	0	0	250	0	0	38	16
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	19.2	19.2		19.2	19.2			14.3			14.3	14.3
Effective Green, g (s)	19.2	19.2		19.2	19.2			14.3			14.3	14.3
Actuated g/C Ratio	0.45	0.45		0.45	0.45			0.33			0.33	0.33
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	232	1584		343	1591			509			613	530
v/s Ratio Prot		0.17			c0.24							
v/s Ratio Perm	0.04			0.04				c0.16			0.02	0.01
v/c Ratio	0.09	0.38		0.10	0.53			0.49			0.06	0.03
Uniform Delay, d1	6.7	7.8		6.8	8.5			11.3			9.6	9.5
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.2	0.2		0.1	0.3			0.7			0.0	0.0
Delay (s)	6.9	8.0		6.9	8.9			12.1			9.7	9.6
Level of Service	A	A		A	A			B			A	A
Approach Delay (s)		7.9			8.8			12.1			9.6	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM 2000 Control Delay			9.0		HCM 2000 Level of Service				A			
HCM 2000 Volume to Capacity ratio			0.52									
Actuated Cycle Length (s)			42.7		Sum of lost time (s)				9.2			
Intersection Capacity Utilization			48.6%		ICU Level of Service				A			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	540	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	587	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			591		587	587
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			591		587	587
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			984		472	510
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	587	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	498			
Volume to Capacity	0.35	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.3			
Lane LOS			B			
Approach Delay (s)	0.0		12.3			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			38.4%		ICU Level of Service	A
Analysis Period (min)			15			









NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑↑↑	↑	↑	↑	↑	↑	↑	↑
Volume (vph)	21	689	35	23	2457	43	168	37	51	90	46	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5048		1770	5072			3325			3365	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5048		1770	5072			3325			3365	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	820	42	25	2700	47	202	45	61	110	56	29
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	859	0	25	2746	0	0	296	0	0	187	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2235		118	2161			646			654	
v/s Ratio Prot	0.01	c0.17		c0.01	c0.54			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.17	0.38		0.21	1.27			0.46			0.29	
Uniform Delay, d1	76.7	33.7		79.5	51.6			64.1			61.8	
Progression Factor	1.00	1.00		1.11	0.97			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.5	124.1			0.5			0.2	
Delay (s)	77.3	34.2		88.6	174.0			64.6			62.1	
Level of Service	E	C		F	F			E			E	
Approach Delay (s)		35.4			173.3			64.6			62.1	
Approach LOS		D			F			E			E	
Intersection Summary												
HCM 2000 Control Delay		130.6			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		85.5%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	921	35	20	2632	12	18	4	31	55	11	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5058		1770	5082			1687		1770	1704	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5058		1770	5082			1542		1231	1704	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	1035	39	23	2991	14	25	5	42	79	16	21
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	18	0
Lane Group Flow (vph)	2	1072	0	23	3005	0	0	44	0	79	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3718			257		205	284	
v/s Ratio Prot	0.00	0.21		c0.01	c0.59						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.31		0.19	0.81			0.17		0.39	0.07	
Uniform Delay, d1	86.1	11.2		79.4	15.9			64.3		66.8	63.2	
Progression Factor	1.70	0.26		1.42	0.40			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.1	0.2			0.3		1.2	0.1	
Delay (s)	146.8	3.1		112.9	6.6			64.6		68.0	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.4			7.4			64.6			66.5	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.9			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		84.5%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	992	64	96	2482	52	150	19	91	170	36	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1783	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1783	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1115	72	116	2990	63	169	21	102	227	48	20
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	84	0	3	0
Lane Group Flow (vph)	3	1183	0	116	2990	33	0	190	18	0	292	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.23		c0.07	c0.59			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.53		0.59	1.11	0.04		0.62	0.06		0.50	
Uniform Delay, d1	86.2	36.5		76.1	42.1	20.2		69.0	62.4		67.5	
Progression Factor	1.22	0.62		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.9		4.7	53.9	0.1		3.7	0.1		0.7	
Delay (s)	105.9	23.5		80.8	96.1	20.3		72.7	62.5		68.2	
Level of Service	F	C		F	F	C		E	E		E	
Approach Delay (s)		23.7			94.0			69.1			68.2	
Approach LOS		C			F			E			E	
Intersection Summary												
HCM 2000 Control Delay		74.1			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.89										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		101.9%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	↰
Volume (vph)	14	1260	25	43	2612	12	16	6	49	38	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5071		1770	5082			1670			1723	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.78	
Satd. Flow (perm)	1770	5071		1770	5082			1562			1377	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	15	1370	27	50	3037	14	19	7	58	50	3	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	46	0	0	22	0
Lane Group Flow (vph)	15	1396	0	50	3051	0	0	38	0	0	59	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.8		2.8	39.9			15.1			15.1	
Effective Green, g (s)	0.7	37.8		2.8	39.9			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2684		69	2839			330			291	
v/s Ratio Prot	0.01	0.28		c0.03	c0.60							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.88	0.52		0.72	1.07			0.12			0.20	
Uniform Delay, d1	35.3	10.9		33.9	15.8			22.8			23.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	159.7	0.2		31.2	41.0			0.2			0.3	
Delay (s)	195.0	11.1		65.1	56.8			22.9			23.5	
Level of Service	F	B		E	E			C			C	
Approach Delay (s)		13.0			56.9			22.9			23.5	
Approach LOS		B			E			C			C	
Intersection Summary												
HCM 2000 Control Delay		42.5			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.86										
Actuated Cycle Length (s)		71.4			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		67.7%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰↰	↰	↰
Volume (vph)	92	1273	30	247	2548	217	79	73	780	238	93	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.90	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	107	1480	35	263	2711	231	88	81	867	283	111	92
RTOR Reduction (vph)	0	2	0	0	0	67	0	155	182	0	3	60
Lane Group Flow (vph)	107	1513	0	263	2711	164	88	325	286	283	117	23
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.4	30.1	30.1	10.4	32.1	32.1
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.4	30.1	30.1	10.4	32.1	32.1
Actuated g/C Ratio	0.05	0.30		0.15	0.41	0.41	0.07	0.26	0.26	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	178	1544		274	2073	645	128	403	391	309	486	417
v/s Ratio Prot	0.03	0.30		c0.15	c0.53		0.05	c0.21		c0.08	0.07	
v/s Ratio Perm						0.10			0.19			0.02
v/c Ratio	0.60	0.98		0.96	1.31	0.25	0.69	0.81	0.73	0.92	0.24	0.06
Uniform Delay, d1	53.6	39.8		48.4	34.2	22.6	52.3	40.0	39.0	52.1	32.3	30.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.6	18.1		42.9	142.1	0.2	14.3	11.3	6.9	30.2	0.3	0.1
Delay (s)	59.2	57.8		91.3	176.3	22.8	66.5	51.3	45.9	82.3	32.5	30.6
Level of Service	E	E		F	F	C	E	D	D	F	C	C
Approach Delay (s)		57.9			158.3			50.2			61.2	
Approach LOS		E			F			D			E	
Intersection Summary												
HCM 2000 Control Delay		107.6			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.11										
Actuated Cycle Length (s)		115.5			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		98.3%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2021 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↘	↘
Volume (vph)	0	288	1285	0	157	1730
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	324	1382	0	174	1922
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	324	1382	0	174	1919
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.39		0.10	c0.69
v/s Ratio Perm						
v/c Ratio		0.12	1.18		0.84	1.25
Uniform Delay, d1		2.5	26.8		34.6	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	91.9		25.2	119.3
Delay (s)		2.5	118.7		59.8	137.3
Level of Service		A	F		E	F
Approach Delay (s)		2.5	118.7		130.9	
Approach LOS		A	F		F	
Intersection Summary						
HCM 2000 Control Delay		115.5			HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio		1.31				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		83.1%			ICU Level of Service	E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2021 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↘	↘				
Volume (vph)	0	446	0	0	438	530	950	1	145	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.96				
Flt Protected		1.00			1.00		0.95	0.96				
Satd. Flow (prot)		3539			3249		1681	1638				
Flt Permitted		1.00			1.00		0.95	0.96				
Satd. Flow (perm)		3539			3249		1681	1638				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	513	0	0	476	576	1033	1	158	0	0	0
RTOR Reduction (vph)	0	0	0	0	367	0	0	24	0	0	0	0
Lane Group Flow (vph)	0	513	0	0	685	0	609	559	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		17.2			17.2		22.3	22.3				
Effective Green, g (s)		17.2			17.2		22.3	22.3				
Actuated g/C Ratio		0.36			0.36		0.47	0.47				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1281			1176		789	768				
v/s Ratio Prot		0.14			c0.21							
v/s Ratio Perm							c0.36	0.34				
v/c Ratio		0.40			0.58		0.77	0.73				
Uniform Delay, d1		11.3			12.2		10.5	10.2				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		4.7	3.5				
Delay (s)		11.5			13.0		15.2	13.6				
Level of Service		B			B		B	B				
Approach Delay (s)		11.5			13.0		14.4				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay		13.3							HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		47.5							Sum of lost time (s)		8.0	
Intersection Capacity Utilization		73.2%							ICU Level of Service		D	
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰		↰	↰	↰	↰
Volume (veh/h)	0	3	4	504	62	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	700	151	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	862	151	151			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	862	151	151			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	324	895	1430			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	706	151			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	895	1430	1700			
Volume to Capacity	0.01	0.00	0.09			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	9.1	0.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.1	0.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			39.7%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰
Volume (veh/h)	0	4112	17	0	1816	244	0	0	909	0	0	55
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%			0%			0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4283	18	0	1872	252	0	0	1010	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2144			4321			5040	6456	1477	3466	6339	790
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2144			4321			5040	6456	1477	3466	6339	790
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	244			32			0	0	1842	1	0	322
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1713	1713	874	749	749	626	1010	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	252	1010	83				
cSH	1700	1700	1700	1700	1700	1700	1842	322				
Volume to Capacity	1.01	1.01	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	88	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3	20.0				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.3	20.0				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				144.7%	ICU Level of Service		H					
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2021 Alt 3north
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3878	130	0	1853	0	201	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3998	134	0	1930	0	245	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4152		4748	1440	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4152		4748	1440	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			37		1	118	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1599	1599	934	643	643	643	245
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	245
cSH	1700	1700	1700	1700	1700	1700	118
Volume to Capacity	0.94	0.94	0.55	0.38	0.38	0.38	2.08
Queue Length 95th (ft)	0	0	0	0	0	0	510
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	572.8
Lane LOS							F
Approach Delay (s)	0.0			0.0			572.8
Approach LOS							F
Intersection Summary							
Average Delay			22.3				
Intersection Capacity Utilization			98.9%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2021 Alt 3north
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↖	↑↑↑			↗	
Volume (vph)	0	0	0	980	635	109	108	252		0	0	861
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4636		1770	3539				3528
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4636		1770	3539				3528
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1032	668	115	111	260	0	0	888	16
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	516	1287	0	111	260	0	0	902	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1432		98	1989				1568
v/s Ratio Prot				c0.34	0.28		c0.06	0.07				c0.26
v/s Ratio Perm												
v/c Ratio				1.10	0.98dl		1.13	0.13				0.58
Uniform Delay, d1				31.1	29.8		42.5	9.3				18.7
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				70.8	7.9		131.1	0.0				0.5
Delay (s)				101.9	37.6		173.6	9.3				19.2
Level of Service				F	D		F	A				B
Approach Delay (s)		0.0			55.9			58.5				19.2
Approach LOS		A			E			E				B
Intersection Summary												
HCM 2000 Control Delay			45.5			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			0.81									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			17.2			
Intersection Capacity Utilization		135.7%				ICU Level of Service			H			
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔↔	
Volume (vph)	7	2111	111	0	0	0	0	360	495	761	1103	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3115	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3115	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2320	122	0	0	0	0	419	576	793	1149	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2328	93	0	0	0	0	678	282	793	1149	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					945	409	865	2022	
v/s Ratio Prot		c0.46						c0.22		c0.23	0.32	
v/s Ratio Perm			0.06						0.21			
v/c Ratio		1.26	0.16					0.72	0.69	0.92	0.57	
Uniform Delay, d1		55.8	37.8					54.3	53.7	63.7	23.8	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		123.5	0.1					2.6	4.8	14.2	0.4	
Delay (s)		179.3	37.9					56.9	58.5	77.9	24.2	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		172.3			0.0			57.4			46.1	
Approach LOS		F			A			E			D	
Intersection Summary												
HCM 2000 Control Delay		105.6									F	
HCM 2000 Volume to Capacity ratio		0.99										
Actuated Cycle Length (s)		175.0							14.4			
Intersection Capacity Utilization		135.7%							H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2021 Alt 3north
Timing Plan: PM PEAK













Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔		↔↔			↔↔
Volume (vph)	175	12	970	694	0	1249
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3272			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3272			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	224	15	1090	780	0	1343
RTOR Reduction (vph)	2	0	62	0	0	0
Lane Group Flow (vph)	237	0	1808	0	0	1343
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	296		2472			2540
v/s Ratio Prot	c0.15		c0.55			0.40
v/s Ratio Perm						
v/c Ratio	0.80		0.73			0.53
Uniform Delay, d1	62.2		10.7			8.0
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	14.4		2.0			0.8
Delay (s)	76.6		12.6			8.7
Level of Service	E		B			A
Approach Delay (s)	76.6		12.6			8.7
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay		15.5				B
HCM 2000 Volume to Capacity ratio		0.76				
Actuated Cycle Length (s)		160.0				12.1
Intersection Capacity Utilization		82.5%				E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2021 Alt 3north

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

Timing Plan: PM PEAK





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	145	10	29	26	10	25	23	1582	49	68	1475	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1724		1770	3523		1770	3489	
Flt Permitted	0.68	0.68	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1201	1203	1583		1460		1770	3523		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	186	13	37	41	16	39	25	1701	53	74	1603	166
RTOR Reduction (vph)	0	0	31	0	22	0	0	1	0	0	2	0
Lane Group Flow (vph)	99	100	6	0	74	0	25	1753	0	74	1767	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	19.1	19.1	19.1		19.1		3.1	71.9		8.1	76.9	
Effective Green, g (s)	19.1	19.1	19.1		19.1		3.1	71.9		8.1	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	201	201	265		244		48	2223		125	2355	
v/s Ratio Prot							0.01	c0.50		c0.04	0.51	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.49	0.50	0.02		0.30		0.52	0.79		0.59	0.75	
Uniform Delay, d1	43.0	43.0	39.6		41.6		54.7	15.4		51.3	12.2	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.9	1.9	0.0		0.7		9.8	1.9		7.3	1.4	
Delay (s)	44.9	45.0	39.6		42.2		64.5	17.4		58.6	13.6	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		44.1			42.2			18.0			15.4	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		18.9			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		113.9			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		75.6%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2021 Alt 3north

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	8	0	146	0	1386	0	32	1615	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	12	0	212	0	1474	0	34	1737	0
RTOR Reduction (vph)	0	0	0	0	172	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	52	0	0	1474	0	34	1737	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			45.1		1.7	51.0	
Effective Green, g (s)					14.1			45.1		1.7	51.0	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					303			2122		40	2400	
v/s Ratio Prot					c0.03			0.42		0.02	c0.49	
v/s Ratio Perm												
v/c Ratio					0.17			0.69		0.85	0.72	
Uniform Delay, d1					25.6			10.3		36.6	7.6	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			1.0		84.3	1.1	
Delay (s)					25.9			11.3		121.0	8.8	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			25.9			11.3			10.9	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					12.1			HCM 2000 Level of Service			B	
HCM 2000 Volume to Capacity ratio					0.70							
Actuated Cycle Length (s)					75.2			Sum of lost time (s)			18.9	
Intersection Capacity Utilization					62.5%			ICU Level of Service			B	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON Year 2021 Alt 3north

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	295	50	120	6	70	425	28	677	2	140	1436	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1515		1855	1510	1770	3539	1344	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1515		1855	1510	1770	3539	1344	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	388	66	158	7	76	462	31	744	2	149	1528	70
RTOR Reduction (vph)	0	0	128	0	0	205	0	0	1	0	2	0
Lane Group Flow (vph)	388	66	30	0	83	257	31	744	1	149	1596	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.7	27.7	27.7		26.2	26.2	4.0	56.3	56.3	17.3	69.6	
Effective Green, g (s)	27.7	27.7	27.7		26.2	26.2	4.0	56.3	56.3	17.3	69.6	
Actuated g/C Ratio	0.19	0.19	0.19		0.18	0.18	0.03	0.38	0.38	0.12	0.47	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	333	351	285		330	269	48	1356	515	208	1663	
v/s Ratio Prot	c0.22	0.04			0.04		0.02	0.21		c0.08	c0.45	
v/s Ratio Perm			0.02			c0.17		0.00				
v/c Ratio	1.17	0.19	0.10		0.25	0.95	0.65	0.55	0.00	0.72	0.96	
Uniform Delay, d1	59.6	50.1	49.3		51.9	59.8	70.7	35.4	28.0	62.4	37.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	102.1	0.3	0.2		0.4	42.1	26.1	1.6	0.0	11.1	14.4	
Delay (s)	161.7	50.4	49.5		52.3	101.8	96.8	37.0	28.0	73.6	51.7	
Level of Service	F	D	D		D	F	F	D	C	E	D	
Approach Delay (s)		120.7			94.3			39.3			53.5	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay		67.7			HCM 2000 Level of Service					E		
HCM 2000 Volume to Capacity ratio		1.00										
Actuated Cycle Length (s)		146.9			Sum of lost time (s)					19.4		
Intersection Capacity Utilization		81.4%			ICU Level of Service					D		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON Year 2021 Alt 3north

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	321	499	3	53	181	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	357	554	4	75	206	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	456	42			79	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	456	42			79	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	27	46			86	
cM capacity (veh/h)	486	1029			1519	
Direction, Lane #						
Volume Total	911	79	209			
Volume Left	357	0	206			
Volume Right	554	75	0			
cSH	979	1700	1519			
Volume to Capacity	0.93	0.05	0.14			
Queue Length 95th (ft)	368	0	12			
Control Delay (s)	35.3	0.0	7.6			
Lane LOS	E		A			
Approach Delay (s)	35.3	0.0	7.6			
Approach LOS	E					
Intersection Summary						
Average Delay		28.2				
Intersection Capacity Utilization		41.3%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2021 Alt 3north

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	324	6	713	57	0	1565
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	410	8	792	63	0	1758
RTOR Reduction (vph)	1	0	0	36	0	0
Lane Group Flow (vph)	417	0	792	27	0	1758
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.24		0.22			c0.50
v/s Ratio Perm				0.02		
v/c Ratio	0.50		0.52	0.04		1.16
Uniform Delay, d1	18.9		22.0	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.5		0.3	0.0		78.3
Delay (s)	19.3		22.3	17.4		108.3
Level of Service	B		C	B		F
Approach Delay (s)	19.3		22.0			108.3
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay			71.7		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			0.81			
Actuated Cycle Length (s)			105.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			93.2%		ICU Level of Service	F
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2021 Alt 3north

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (veh/h)	4	6	580	3	15	1503
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	674	3	16	1652
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1535	339			678	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1535	339			678	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	98			98	
cM capacity (veh/h)	105	657			910	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	20	450	228	16	826	826
Volume Left	8	0	0	16	0	0
Volume Right	12	0	3	0	0	0
cSH	212	1700	1700	910	1700	1700
Volume to Capacity	0.09	0.26	0.13	0.02	0.49	0.49
Queue Length 95th (ft)	8	0	0	1	0	0
Control Delay (s)	23.8	0.0	0.0	9.0	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	23.8	0.0		0.1		
Approach LOS	C					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			51.5%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2021 Alt 3north

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	30	57	525	12	103	1405
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	33	62	597	14	113	1544
RTOR Reduction (vph)	0	46	0	8	0	0
Lane Group Flow (vph)	33	16	597	6	113	1544
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.3	21.6	27.9	27.9	7.2	43.9
Effective Green, g (s)	9.3	16.5	27.9	27.9	7.2	43.9
Actuated g/C Ratio	0.15	0.26	0.45	0.45	0.12	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	263	417	1579	706	203	2485
v/s Ratio Prot	c0.02	0.01	0.17		0.06	c0.44
v/s Ratio Perm				0.00		
v/c Ratio	0.13	0.04	0.38	0.01	0.56	0.62
Uniform Delay, d1	23.1	17.1	11.5	9.6	26.1	4.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.2	0.0	3.3	0.5
Delay (s)	23.3	17.1	11.7	9.6	29.4	5.4
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.3		11.6			7.0
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			8.7		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.64			
Actuated Cycle Length (s)			62.5		Sum of lost time (s)	18.1
Intersection Capacity Utilization			50.8%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2021 Alt 3north

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↩	↕	↕		↕
Volume (veh/h)	0	23	516	18	0	1435
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	31	593	21	0	1560
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1383	307			614	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1383	307			614	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	135	689			962	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	31	395	218	780	780	
Volume Left	0	0	0	0	0	
Volume Right	31	0	21	0	0	
cSH	689	1700	1700	1700	1700	
Volume to Capacity	0.04	0.23	0.13	0.46	0.46	
Queue Length 95th (ft)	3	0	0	0	0	
Control Delay (s)	10.5	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.5	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			43.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2021 Alt 3north

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↖	↗	↖	↗
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (vph)	30	26	509	18	23	1410
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	42	36	541	19	25	1549
RTOR Reduction (vph)	0	33	0	8	0	0
Lane Group Flow (vph)	42	3	541	11	25	1549
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	27.6	27.6	1.7	36.8
Effective Green, g (s)	2.6	4.3	27.6	27.6	1.7	36.8
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	147	2123	949	65	2831
v/s Ratio Prot	c0.02	0.00	0.15		0.01	c0.44
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.42	0.02	0.25	0.01	0.38	0.55
Uniform Delay, d1	21.0	18.9	4.3	3.7	21.6	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.8	0.1	0.1	0.0	3.8	0.2
Delay (s)	23.8	19.0	4.4	3.7	25.4	1.9
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.6		4.4			2.2
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.5		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.67			
Actuated Cycle Length (s)			46.0		Sum of lost time (s)	14.1
Intersection Capacity Utilization			49.9%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON Year 2021 Alt 3north

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Movement	↖	→	↗	↖	→	↗	↖	→	↗	↖
Lane Configurations	↖	↗	↖	↖	↗	↖	↖	↗	↖	↗
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	11	14	85	8	0	179	13	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	11	15	110	10	0	201	15	0	0
Direction, Lane #										
Volume Total (vph)	11	15	121	216						
Volume Left (vph)	0	0	110	0						
Volume Right (vph)	0	15	0	15						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.19						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2021 Alt 3north

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑		↰	↑	↰	↰	↑	↰			
Volume (vph)	10	185	0	0	81	138	12	430	69	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1298	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	11	210	0	0	93	159	13	473	76	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	126	0	41	0	0	0	0
Lane Group Flow (vph)	11	210	0	0	93	33	13	473	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.3	18.3	18.3			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.3	18.3	18.3			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	271	390			390	331	807	1615	722			
v/s Ratio Prot		c0.11			0.05		0.01	c0.13				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.54			0.24	0.10	0.02	0.29	0.05			
Uniform Delay, d1	12.6	14.1			13.2	12.8	6.0	6.8	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.4			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.7	15.6			13.5	12.9	6.0	6.9	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.1		6.8			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.2			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.37										
Actuated Cycle Length (s)		40.1			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		40.6%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2021 Alt 3north

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: PM PEAK






















Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰		↰	↑	↰	↑	↰
Volume (veh/h)	0	688	0	575	0	1578	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	2752	0	653	0	1753	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2080	877	1753		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2080	877	1753		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	0	100		0		
cM capacity (veh/h)	46	292	353		0		
Direction, Lane #							
Volume Total	2752	0	327	327	1169	584	0
Volume Left	0	0	0	0	0	0	0
Volume Right	2752	0	0	0	0	0	0
cSH	292	1700	1700	1700	1700	1700	1700
Volume to Capacity	9.43	0.00	0.19	0.19	0.69	0.34	0.00
Queue Length 95th (ft)	Err	0	0	0	0	0	0
Control Delay (s)	Err	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F						
Approach Delay (s)	Err	0.0			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			5334.1				
Intersection Capacity Utilization			92.9%		ICU Level of Service		
Analysis Period (min)			15				F

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON Year 2021 Alt 3north

Timing Plan: PM PEAK

















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	195	0	68	1	1	0	73	322	12	1	1795	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.85		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3520		1770	3481	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3520		1770	3481	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	260	0	91	2	2	0	80	354	13	1	1994	244
RTOR Reduction (vph)	0	70	0	0	0	0	0	2	0	0	7	0
Lane Group Flow (vph)	260	21	0	2	2	0	80	365	0	1	2231	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	21.4	21.4		0.8	0.8		5.7	49.1		0.8	44.2	
Effective Green, g (s)	21.4	21.4		0.8	0.8		5.7	49.1		0.8	44.2	
Actuated g/C Ratio	0.24	0.24		0.01	0.01		0.06	0.54		0.01	0.49	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	416	372		15	16		110	1899		15	1690	
v/s Ratio Prot	c0.15	0.01		c0.00	0.00		c0.05	0.10		0.00	c0.64	
v/s Ratio Perm												
v/c Ratio	0.62	0.06		0.13	0.12		0.73	0.19		0.07	1.32	
Uniform Delay, d1	31.2	27.0		44.8	44.8		41.9	10.8		44.7	23.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.9	0.1		4.0	3.5		21.1	0.0		1.9	148.3	
Delay (s)	34.1	27.0		48.8	48.3		63.0	10.8		46.6	171.7	
Level of Service	C	C		D	D		E	B		D	F	
Approach Delay (s)		32.3			48.5			20.2			171.6	
Approach LOS		C			D			C			F	
Intersection Summary												
HCM 2000 Control Delay	133.1			HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio	1.05											
Actuated Cycle Length (s)	91.0			Sum of lost time (s)				18.9				
Intersection Capacity Utilization	86.6%			ICU Level of Service				E				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2021 Alt 3north

Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	57	1750	58	0	359	34	13	40	4	24	26	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Frt	1.00	1.00			0.99		1.00	0.99			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5061			5020		1770	1836			1760	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.16	
Satd. Flow (perm)	1770	5061			5020		1310	1836			284	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	65	1989	66	0	382	36	19	57	6	28	31	24
RTOR Reduction (vph)	0	2	0	0	6	0	0	2	0	0	8	0
Lane Group Flow (vph)	65	2053	0	0	412	0	19	61	0	0	75	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1914			2038		254	357			47	
v/s Ratio Prot	c0.04	c0.41			c0.08			c0.03				
v/s Ratio Perm							0.01				c0.26	
v/c Ratio	0.33	1.07			0.20		0.07	0.17			1.59	
Uniform Delay, d1	73.8	56.0			34.6		59.3	60.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	43.2			0.2		0.1	0.2			344.4	
Delay (s)	74.8	99.2			34.8		59.4	60.6			419.4	
Level of Service	E	F			C		E	E			F	
Approach Delay (s)		98.4			34.8			60.3			419.4	
Approach LOS		F			C			E			F	
Intersection Summary												
HCM 2000 Control Delay	97.3			HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio	0.85											
Actuated Cycle Length (s)	180.0			Sum of lost time (s)				22.3				
Intersection Capacity Utilization	73.5%			ICU Level of Service				D				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2021 Alt 3north

20: SR-75 (Silver Strand Blvd) & Delaware St

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←
Volume (vph)	0	1780	0	579	397	38	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3493							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3493							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	2000	0	616	422	40	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	2000	0	616	462	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3174							609
v/s Ratio Prot		c0.39		c0.18	c0.13							
v/s Ratio Perm												0.00
v/c Ratio		1.04		0.32	0.15							0.00
Uniform Delay, d1		56.0		21.2	0.9							34.8
Progression Factor		0.34		1.00	1.00							1.00
Incremental Delay, d2		20.0		0.1	0.0							0.0
Delay (s)		38.9		21.3	0.9							34.9
Level of Service		D		C	A							C
Approach Delay (s)		38.9			12.6		0.0				34.9	
Approach LOS		D			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		29.7										C
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		180.0						22.3				
Intersection Capacity Utilization		60.1%										B
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2021 Alt 3north



















21: Dwy/Silver Strand Blvd & Palm Ave

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		←←			←←			←←			←←	
Volume (veh/h)	4	213	0	0	306	147	0	0	0	533	0	12
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	5	248	0	0	348	167	0	0	0	808	0	18
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	515			248			706	772	248	688	688	431
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	515			248			706	772	248	688	688	431
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	0	100	97
cM capacity (veh/h)	1051			1318			339	329	791	359	367	624
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	252	515	0	826								
Volume Left	5	0	0	808								
Volume Right	0	167	0	18								
cSH	1051	1318	1700	363								
Volume to Capacity	0.00	0.00	0.00	2.28								
Queue Length 95th (ft)	0	0	0	1571								
Control Delay (s)	0.2	0.0	0.0	607.1								
Lane LOS	A		A	F								
Approach Delay (s)	0.2	0.0	0.0	607.1								
Approach LOS			A	F								
Intersection Summary												
Average Delay		314.7										
Intersection Capacity Utilization		62.0%									B	
Analysis Period (min)		15										










NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2021 Alt 3north
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop			Stop				Stop			Stop	
Volume (vph)	7	724	12	85	427	24	14	38	68	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	928	15	96	480	27	25	67	119	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	944	96	507	211	161						
Volume Left (vph)	9	0	96	0	25	61						
Volume Right (vph)	0	15	0	27	119	28						
Hadj (s)	0.53	0.02	0.53	0.00	-0.28	0.00						
Departure Headway (s)	7.7	7.2	7.5	7.0	7.5	8.0						
Degree Utilization, x	0.02	1.89	0.20	0.98	0.44	0.36						
Capacity (veh/h)	460	507	472	507	454	429						
Control Delay (s)	9.7	423.6	11.2	60.8	16.2	15.4						
Approach Delay (s)	419.7		53.0		16.2	15.4						
Approach LOS	F		F		C	C						
Intersection Summary												
Delay			227.2									
Level of Service			F									
Intersection Capacity Utilization			63.3%		ICU Level of Service		B					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2021 Alt 3north
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	181	743	536	39	52	167
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	187	766	623	45	61	196
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	669				1785	334
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	669				1785	334
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	80				0	70
cM capacity (veh/h)	917				58	661
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	187	766	416	253	258	
Volume Left	187	0	0	0	61	
Volume Right	0	0	0	45	196	
cSH	917	1700	1700	1700	191	
Volume to Capacity	0.20	0.45	0.24	0.15	1.35	
Queue Length 95th (ft)	19	0	0	0	372	
Control Delay (s)	9.9	0.0	0.0	0.0	236.5	
Lane LOS	A				F	
Approach Delay (s)	1.9		0.0		236.5	
Approach LOS					F	
Intersection Summary						
Average Delay			33.4			
Intersection Capacity Utilization			58.9%		ICU Level of Service	
Analysis Period (min)			15		B	

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↱		↰	↰↱			↱			↱	↱
Volume (vph)	28	748	33	31	537	1900	56	19	22	12	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3517		1770	3537			1755			1841	1583
Flt Permitted	0.43	1.00		0.29	1.00			0.78			0.89	1.00
Satd. Flow (perm)	797	3517		536	3537			1414			1661	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	890	39	34	590	3	68	23	27	16	53	39
RTOR Reduction (vph)	0	4	0	0	0	0	0	22	0	0	0	32
Lane Group Flow (vph)	33	925	0	34	593	0	0	96	0	0	69	7
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	19.7	19.7		19.7	19.7			6.5			6.5	6.5
Effective Green, g (s)	19.7	19.7		19.7	19.7			6.5			6.5	6.5
Actuated g/C Ratio	0.56	0.56		0.56	0.56			0.18			0.18	0.18
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	443	1957		298	1968			259			304	290
v/s Ratio Prot		c0.26			0.17							
v/s Ratio Perm	0.04			0.06				c0.07			0.04	0.00
v/c Ratio	0.07	0.47		0.11	0.30			0.37			0.23	0.02
Uniform Delay, d1	3.6	4.7		3.7	4.2			12.7			12.3	11.9
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.1			0.9			0.4	0.0
Delay (s)	3.7	4.9		3.9	4.3			13.6			12.7	11.9
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)		4.9			4.2			13.6			12.4	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay		5.7			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.45										
Actuated Cycle Length (s)		35.4			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		45.5%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↰			↰	↰
Volume (veh/h)	1484	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1810	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			1820		1810	1810
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1820		1810	1810
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		90	97
cM capacity (veh/h)			336		87	98
Direction, Lane #						
Volume Total	EB 1	EB 2	NB 1			
Volume Left	1810	10	12			
Volume Right	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	89			
Volume to Capacity	1.06	0.01	0.13			
Queue Length 95th (ft)	0	0	11			
Control Delay (s)	0.0	0.0	51.6			
Lane LOS			F			
Approach Delay (s)	0.0		51.6			
Approach LOS			F			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			88.1%		ICU Level of Service	E
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Volume (vph)	41	2389	128	58	861	131	99	90	63	174	80	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Flt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5047		1770	4985			3341			3386	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5047		1770	4985			3341			3386	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	44	2541	136	59	870	132	109	99	69	196	90	28
RTOR Reduction (vph)	0	3	0	0	11	0	0	18	0	0	4	0
Lane Group Flow (vph)	44	2674	0	59	991	0	0	259	0	0	310	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2122		157	1985			649			658	
v/s Ratio Prot	0.02	c0.53		c0.03	0.20			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.22	1.26		0.38	0.50			0.40			0.47	
Uniform Delay, d1	72.9	52.1		77.3	40.7			63.3			64.3	
Progression Factor	1.00	1.00		1.23	0.80			1.00			1.00	
Incremental Delay, d2	0.6	121.1		1.4	0.9			0.4			0.5	
Delay (s)	73.5	173.2		96.6	33.3			63.7			64.8	
Level of Service	E	F		F	C			E			E	
Approach Delay (s)		171.6			36.8			63.7			64.8	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		124.4			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		119.1%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Volume (vph)	20	2673	57	49	1269	55	21	11	35	64	13	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	0.99			0.93			1.00	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.95	
Satd. Flow (prot)	1770	5069		1770	5053			1704			1770	
Flt Permitted	0.95	1.00		0.95	1.00			0.90			0.62	
Satd. Flow (perm)	1770	5069		1770	5053			1554			1156	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2728	58	51	1308	57	25	13	42	75	15	16
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	14	0
Lane Group Flow (vph)	20	2785	0	51	1363	0	0	57	0	75	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2			22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2			22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12			0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	118	3565		157	3666			191			142	
v/s Ratio Prot	0.01	c0.55		c0.03	c0.27						0.01	
v/s Ratio Perm								0.04			c0.06	
v/c Ratio	0.17	0.78		0.32	0.37			0.30			0.53	
Uniform Delay, d1	79.3	17.6		76.9	9.3			71.8			74.0	
Progression Factor	1.47	0.46		1.55	0.28			1.00			1.00	
Incremental Delay, d2	0.1	0.2		1.0	0.2			0.9			3.5	
Delay (s)	116.3	8.3		119.9	2.9			72.7			77.5	
Level of Service	F	A		F	A			E			E	
Approach Delay (s)		9.1			7.1			72.7			75.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		11.2			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		72.6%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	2353	202	158	1344	82	130	40	128	155	45	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5025		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5025		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	29	2503	215	163	1386	85	141	43	139	209	61	27
RTOR Reduction (vph)	0	6	0	0	0	37	0	0	115	0	4	0
Lane Group Flow (vph)	29	2712	0	163	1386	48	0	184	24	0	293	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2224		192	2364	736		305	269		575	
v/s Ratio Prot	0.02	c0.54		c0.09	c0.27			c0.10			c0.09	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.18	1.22		0.85	0.59	0.07		0.60	0.09		0.51	
Uniform Delay, d1	76.0	50.1		78.7	35.4	26.6		69.0	62.9		67.8	
Progression Factor	0.90	1.07		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.4	101.6		27.8	1.1	0.2		8.6	0.6		3.2	
Delay (s)	68.9	155.2		106.6	36.5	26.7		77.6	63.5		71.0	
Level of Service	E	F		F	D	C		E	E		E	
Approach Delay (s)		154.3			43.0			71.5			71.0	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		107.6			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.92										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		113.9%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2021 Alt 3north
Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	2681	50	172	1645	16	39	8	82	23	11	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1770	5071		1770	5078			1677			1756	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.84	
Satd. Flow (perm)	1770	5071		1770	5078			1511			1515	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	11	2979	56	181	1732	17	46	9	96	28	14	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	76	0	0	11	0
Lane Group Flow (vph)	11	3033	0	181	1748	0	0	75	0	0	45	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4				4	
Actuated Green, G (s)	0.8	40.4		11.2	50.8			17.3			17.3	
Effective Green, g (s)	0.8	40.4		11.2	50.8			17.3			17.3	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2421		234	3049			308			309	
v/s Ratio Prot	0.01	c0.60		c0.10	0.34							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.69	1.25		0.77	0.57			0.24			0.15	
Uniform Delay, d1	41.8	22.1		35.5	10.3			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	80.1	117.4		14.7	0.3			0.4			0.2	
Delay (s)	121.9	139.5		50.1	10.6			28.6			27.8	
Level of Service	F	F		D	B			C			C	
Approach Delay (s)		139.4			14.3			28.6			27.8	
Approach LOS		F			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		88.4			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.92										
Actuated Cycle Length (s)		84.6			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		83.8%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2021 Alt 3north

Timing Plan: PM PEAK







Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	191	2619	28	332	1652	562	67	179	540	595	242	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5077		1770	5085	1583	1770	1631	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5077		1770	5085	1583	1770	1631	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	201	2757	29	357	1776	604	71	190	574	647	263	250
RTOR Reduction (vph)	0	1	0	0	0	85	0	26	276	0	2	128
Lane Group Flow (vph)	201	2785	0	357	1776	519	71	371	91	647	286	97
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.4	36.4		45.0	70.0	70.0	8.7	37.8	37.8	11.8	40.9	40.9
Effective Green, g (s)	11.4	36.4		45.0	70.0	70.0	8.7	37.8	37.8	11.8	40.9	40.9
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1208		520	2327	724	100	403	371	264	467	402
v/s Ratio Prot	0.06	c0.55		c0.20	c0.35		0.04	c0.23		c0.19	c0.16	
v/s Ratio Perm					0.33			0.06				0.06
v/c Ratio	0.79	2.31		0.69	0.76	0.72	0.71	0.92	0.24	2.45	0.61	0.24
Uniform Delay, d1	69.6	58.3		47.7	34.5	33.4	70.9	56.1	46.1	70.5	49.1	43.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.8	590.2		3.8	1.5	3.4	20.6	26.3	0.3	664.2	2.4	0.3
Delay (s)	84.4	648.4		51.5	36.1	36.8	91.4	82.4	46.5	734.7	51.4	44.2
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		610.5			38.3			67.3			431.1	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		321.9			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.38										
Actuated Cycle Length (s)		152.9			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		139.4%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2021 Alt 3north

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	517	873	0	445	1678
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	581	929	0	489	1844
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	581	929	0	489	1841
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.16	c0.26		0.28	c0.66
v/s Ratio Perm						
v/c Ratio		0.33	1.08		0.74	1.04
Uniform Delay, d1		11.7	30.3		21.6	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	55.6		4.3	31.4
Delay (s)		11.8	85.9		25.9	45.9
Level of Service		B	F		C	D
Approach Delay (s)		11.8	85.9		41.7	
Approach LOS		B	F		D	
Intersection Summary						
HCM 2000 Control Delay		47.9			HCM 2000 Level of Service	
HCM 2000 Volume to Capacity ratio		1.12				D
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	
Intersection Capacity Utilization		87.7%			ICU Level of Service	
Analysis Period (min)		15				E
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑				
Volume (vph)	0	956	0	0	534	253	448	2	108	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3369		1681	1616				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3369		1681	1616				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	996	0	0	600	284	482	2	116	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	33	0	0	0	0
Lane Group Flow (vph)	0	996	0	0	786	0	308	259	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.4			19.4		14.6	14.6				
Effective Green, g (s)		19.4			19.4		14.6	14.6				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1634			1556		584	561				
v/s Ratio Prot		0.28			0.23							
v/s Ratio Perm							0.18	0.16				
v/c Ratio		0.61			0.51		0.53	0.46				
Uniform Delay, d1		8.5			7.9		10.9	10.6				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.7			0.3		0.9	0.6				
Delay (s)		9.1			8.2		11.8	11.2				
Level of Service		A			A		B	B				
Approach Delay (s)		9.1			8.2		11.5				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		9.4					HCM 2000 Level of Service	A				
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		42.0					Sum of lost time (s)	8.0				
Intersection Capacity Utilization		48.8%					ICU Level of Service	A				
Analysis Period (min)		15										
c Critical Lane Group												















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	111	469	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	121	680	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	818	680	680			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	818	680	680			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	96	99			
cM capacity (veh/h)	342	451	913			
Direction, Lane #						
Volume Total	16	129	680			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	451	913	1700			
Volume to Capacity	0.04	0.01	0.40			
Queue Length 95th (ft)	3	1	0			
Control Delay (s)	13.3	0.7	0.0			
Lane LOS	B	A				
Approach Delay (s)	13.3	0.7	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay		0.4				
Intersection Capacity Utilization		34.7%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St










MILCON Year 2022 Alt 3north
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1410	34	0	3957	553	0	0	477	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1699	41	0	4301	601	0	0	596	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4922			1760			3205	6661	627	5208	6381	1774
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4922			1760			3205	6661	627	5208	6381	1774
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	83
cM capacity (veh/h)	18			345			3	0	1357	0	0	70
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	680	680	381	1720	1720	1461	596	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	601	596	12				
cSH	1700	1700	1700	1700	1700	1700	1357	70				
Volume to Capacity	0.40	0.40	0.22	1.01	1.01	0.86	0.44	0.17				
Queue Length 95th (ft)	0	0	0	0	0	0	57	14				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	67.1				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	67.1				
Approach LOS							A	F				
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			103.9%	ICU Level of Service					G			
Analysis Period (min)			15									

* User Entered Value



















NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2022 Alt 3north
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1270	202	0	3856	0	232	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1443	230	0	4284	0	252	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1693		3026	636	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1693		3026	636	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	38	
cM capacity (veh/h)			367		10	407	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	577	577	518	1428	1428	1428	252
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	230	0	0	0	252
cSH	1700	1700	1700	1700	1700	1700	407
Volume to Capacity	0.34	0.34	0.30	0.84	0.84	0.84	0.62
Queue Length 95th (ft)	0	0	0	0	0	0	101
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.2
Lane LOS							D
Approach Delay (s)	0.0			0.0			27.2
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			89.4%		ICU Level of Service		E
Analysis Period (min)			15				


























NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2022 Alt 3north
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1717	1946	343	108	102	0	0	278	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4638		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4638		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1846	2092	369	146	138	0	0	320	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1071	3228	0	146	138	0	0	332	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3211		186	872			397	
v/s Ratio Prot				c0.70	0.70		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				1.02	1.01		0.78	0.16			0.84	
Uniform Delay, d1				29.2	29.2		82.7	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				32.1	17.2		19.2	0.1			14.2	
Delay (s)				61.2	46.3		101.9	56.1			96.5	
Level of Service				E	D		F	E			F	
Approach Delay (s)		0.0			50.0			79.6			96.5	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay			54.9	HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio			0.97									
Actuated Cycle Length (s)			189.5	Sum of lost time (s)				16.8				
Intersection Capacity Utilization			201.0%	ICU Level of Service				H				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2022 Alt 3north
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  						 		  	 	
Volume (vph)	1	584	100	0	0	0	0	200	208	452	1600	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3255	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3255	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	635	109	0	0	0	0	233	226	491	1667	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	19	48	0	0	0
Lane Group Flow (vph)	0	636	80	0	0	0	0	298	94	491	1667	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.6	62.6	35.2	100.6	
Effective Green, g (s)		60.0	60.0					62.6	62.6	35.2	100.6	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.20	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1771	551					1183	523	701	2067	
v/s Ratio Prot								0.09		0.14	c0.47	
v/s Ratio Perm		0.13	0.05						0.06			
v/c Ratio		0.36	0.14					0.25	0.18	0.70	0.81	
Uniform Delay, d1		41.8	38.5					38.4	37.3	63.6	28.1	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.2	2.4	
Delay (s)		41.9	38.6					38.5	37.5	66.8	30.5	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.4			0.0			38.2			38.8	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		39.3		HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		172.2		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		201.0%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2022 Alt 3north

Timing Plan: AM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	220	6	1176	612	0	1332
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3316			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3316			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	256	7	1265	658	0	1402
RTOR Reduction (vph)	1	0	53	0	0	0
Lane Group Flow (vph)	262	0	1870	0	0	1402
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	18.8		45.4			45.4
Effective Green, g (s)	18.8		45.4			45.4
Actuated g/C Ratio	0.26		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	408		2053			2082
v/s Ratio Prot	c0.16		c0.56			0.42
v/s Ratio Perm						
v/c Ratio	0.64		0.91			0.67
Uniform Delay, d1	24.2		12.2			9.1
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	3.4		6.6			0.9
Delay (s)	27.7		18.8			10.0
Level of Service	C		B			A
Approach Delay (s)	27.7		18.8			10.0
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			16.0		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.87			
Actuated Cycle Length (s)			73.3		Sum of lost time (s)	12.1
Intersection Capacity Utilization			78.6%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON Year 2022 Alt 3north

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	48	2	10	8	0	5	19	1394	26	40	1475	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1713		1770	3529		1770	3526	
Frt Permitted	0.74	0.78	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1310	1372	1583		1512		1770	3529		1770	3526	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	56	2	12	16	0	10	23	1660	31	43	1603	40
RTOR Reduction (vph)	0	0	10	0	22	0	0	1	0	0	1	0
Lane Group Flow (vph)	29	29	2	0	4	0	23	1690	0	43	1642	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.4	15.4	15.4		15.4		2.7	65.1		4.0	66.4	
Effective Green, g (s)	15.4	15.4	15.4		15.4		2.7	65.1		4.0	66.4	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	204	214	247		236		48	2329		71	2374	
v/s Ratio Prot							0.01	c0.48		c0.02	0.47	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.14	0.14	0.01		0.02		0.48	0.73		0.61	0.69	
Uniform Delay, d1	35.9	35.9	35.1		35.2		47.3	10.9		46.5	9.8	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		7.4	1.2		13.7	0.9	
Delay (s)	36.2	36.2	35.2		35.2		54.6	12.1		60.3	10.7	
Level of Service	D	D	D		D		D	B		E	B	
Approach Delay (s)		36.0			35.2			12.6			12.0	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			13.0		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.61									
Actuated Cycle Length (s)			98.6		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			62.4%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2022 Alt 3north

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	23	0	1338	8	434	1033	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	35	0	1470	9	443	1054	0
RTOR Reduction (vph)	0	0	0	0	32	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1470	4	443	1054	0
Turn Type	Split			Split	NA		NA	Perm		Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.42		c0.25	0.30	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.88	0.01	0.73	0.35	
Uniform Delay, d1					60.6			34.9	20.4	41.5	2.5	
Progression Factor					1.00			0.36	1.00	1.00	1.00	
Incremental Delay, d2					0.1			4.7	0.0	4.3	0.3	
Delay (s)					60.6			17.4	20.5	45.8	2.9	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			17.4			15.6	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.0			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		84.4%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2022 Alt 3north







8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	31	56	14	1	71	131	148	1173	5	356	381	335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3245	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3245	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	48	86	22	1	81	149	164	1303	6	409	438	385
RTOR Reduction (vph)	0	0	20	0	0	125	0	0	3	0	110	0
Lane Group Flow (vph)	48	86	2	0	82	24	164	1303	3	409	713	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1065	
v/s Ratio Prot	0.03	c0.05			c0.04		0.09	c0.37		c0.23	0.22	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.39	0.67	0.02		0.28	0.10	0.30	0.83	0.00	1.20	0.67	
Uniform Delay, d1	64.6	65.9	62.9		53.7	52.1	38.0	35.3	22.3	58.5	41.9	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.92	
Incremental Delay, d2	2.1	13.0	0.1		0.5	0.2	0.3	5.1	0.0	114.0	3.2	
Delay (s)	66.7	78.9	63.0		54.2	52.3	38.3	40.4	22.3	170.1	41.9	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		72.9			53.0			40.1			84.5	
Approach LOS		E			D			D			F	
Intersection Summary												
HCM 2000 Control Delay		60.4			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.80										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		88.4%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												







NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	47	202	4	114	397	9
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	55	238	5	142	432	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked	0.99					
vC, conflicting volume	949	76			148	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	945	76			148	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	73	76			70	
cM capacity (veh/h)	202	985			1434	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	293	148	441			
Volume Left	55	0	432			
Volume Right	238	142	0			
cSH	1069	1700	1434			
Volume to Capacity	0.27	0.09	0.30			
Queue Length 95th (ft)	28	0	32			
Control Delay (s)	13.5	0.0	8.5			
Lane LOS	B		A			
Approach Delay (s)	13.5	0.0	8.5			
Approach LOS	B					
Intersection Summary						
Average Delay			8.7			
Intersection Capacity Utilization			39.1%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	50	3	1339	441	0	357
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1756		3539	1520		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1756		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	67	4	1409	464	0	558
RTOR Reduction (vph)	4	0	0	139	0	0
Lane Group Flow (vph)	67	0	1409	325	0	558
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		30.3	30.3		30.3
Effective Green, g (s)	3.0		30.3	30.3		30.3
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	121		2482	1066		2482
v/s Ratio Prot	c0.04		c0.40			0.16
v/s Ratio Perm				0.21		
v/c Ratio	0.56		0.57	0.31		0.22
Uniform Delay, d1	19.5		3.2	2.5		2.3
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	5.4		0.3	0.2		0.0
Delay (s)	24.9		3.5	2.6		2.3
Level of Service	C		A	A		A
Approach Delay (s)	24.9		3.3			2.3
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.7		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.57			
Actuated Cycle Length (s)			43.2		Sum of lost time (s)	9.9
Intersection Capacity Utilization			49.4%		ICU Level of Service	A
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2022 Alt 3north

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↑↑
Volume (veh/h)	0	15	2198	5	5	409
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2363	5	7	601
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2682	1184			2369	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2682	1184			2369	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			96	
cM capacity (veh/h)	17	182			202	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1576	793	7	301	301
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	182	1700	1700	202	1700	1700
Volume to Capacity	0.14	0.93	0.47	0.04	0.18	0.18
Queue Length 95th (ft)	12	0	0	3	0	0
Control Delay (s)	28.1	0.0	0.0	23.5	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	28.1	0.0		0.3		
Approach LOS	D					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		70.9%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2022 Alt 3north

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	17	87	2111	12	38	370
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	107	2270	13	55	536
RTOR Reduction (vph)	0	3	0	1	0	0
Lane Group Flow (vph)	21	104	2270	12	55	536
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.8	25.9	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.8	20.8	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	261	307	2253	1008	82	2709
v/s Ratio Prot	0.01	c0.07	c0.64		c0.03	0.15
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.34	1.01	0.01	0.67	0.20
Uniform Delay, d1	39.4	37.2	19.4	7.1	50.2	3.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	20.8	0.0	19.4	0.0
Delay (s)	39.5	37.9	40.3	7.1	69.7	3.5
Level of Service	D	D	D	A	E	A
Approach Delay (s)	38.1		40.1			9.7
Approach LOS	D		D			A
Intersection Summary						
HCM 2000 Control Delay		34.0		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio		0.87				
Actuated Cycle Length (s)		107.1		Sum of lost time (s)		18.1
Intersection Capacity Utilization		74.6%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2022 Alt 3north
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↑↑			↑↑
Volume (veh/h)	0	32	2088	26	0	386
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	52	2198	27	0	522
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2472	1113			2225	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2472	1113			2225	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	75			100	
cM capacity (veh/h)	25	203			231	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	52	1465	760	261	261	
Volume Left	0	0	0	0	0	
Volume Right	52	0	27	0	0	
cSH	203	1700	1700	1700	1700	
Volume to Capacity	0.25	0.86	0.45	0.15	0.15	
Queue Length 95th (ft)	24	0	0	0	0	
Control Delay (s)	28.7	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	28.7	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		68.5%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2022 Alt 3north
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	10	6	2114	32	15	362
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	16	10	2202	33	19	447
RTOR Reduction (vph)	0	4	0	7	0	0
Lane Group Flow (vph)	16	6	2202	26	19	447
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.7	59.7	2.0	69.2
Effective Green, g (s)	1.4	3.4	59.7	59.7	2.0	69.2
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2736	1224	45	3172
v/s Ratio Prot	c0.01	0.00	c0.62		c0.01	0.13
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.50	0.09	0.80	0.02	0.42	0.14
Uniform Delay, d1	37.6	35.4	5.3	2.0	37.0	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.8	0.6	1.8	0.0	6.3	0.0
Delay (s)	49.3	36.0	7.1	2.0	43.3	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	44.2		7.0			2.2
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		6.5		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.79				
Actuated Cycle Length (s)		77.2		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		71.3%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2022 Alt 3north

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Movement										
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	45	1	0	44	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	83	2	0	70	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	85	70	3					
Volume Left (vph)	0	0	83	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	833	1121	815	841	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.2%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2022 Alt 3north

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK













	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations		↑			↑	↑	↑	↑	↑			
Volume (vph)	2	37	0	0	32	228	3	1917	51	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1357	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	49	0	0	44	317	3	2039	54	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	2	22	0	0	0
Lane Group Flow (vph)	3	49	0	0	44	261	3	2039	32	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.6	16.6			16.6	16.6	47.7	43.6	43.6			
Effective Green, g (s)	16.6	16.6			16.6	16.6	47.7	43.6	43.6			
Actuated g/C Ratio	0.23	0.23			0.23	0.23	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	306	420			420	357	1147	2096	937			
v/s Ratio Prot		0.03			0.02		0.00	c0.58				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.12			0.10	0.73	0.00	0.97	0.03			
Uniform Delay, d1	22.1	22.7			22.6	26.4	4.6	14.4	6.2			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	7.5	0.0	13.8	0.0			
Delay (s)	22.1	22.8			22.7	34.0	4.6	28.2	6.3			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.8			32.6			27.6			0.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay			28.2				HCM 2000 Level of Service		C			
HCM 2000 Volume to Capacity ratio			0.91									
Actuated Cycle Length (s)			73.6			Sum of lost time (s)			13.4			
Intersection Capacity Utilization			86.7%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON Year 2022 Alt 3north

Timing Plan: AM PEAK






















							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	253	1715	0	331	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	264	1786	0	419	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None			None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1839	209	419		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1839	209	419		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	77		0		
cM capacity (veh/h)	51	796	1137		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	264	893	893	279	140	0
Volume Left	0	264	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1137	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.23	0.53	0.53	0.16	0.08	0.00
Queue Length 95th (ft)	0	22	0	0	0	0	0
Control Delay (s)	0.0	9.1	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	A					
Approach Delay (s)	0.0	1.2			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay		1.0					
Intersection Capacity Utilization		57.4%		ICU Level of Service		B	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON Year 2022 Alt 3north

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	414	0	39	2	1	2	26	1828	0	0	134	194
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3225	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3225	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	470	0	44	6	3	6	27	1924	0	0	194	281
RTOR Reduction (vph)	0	30	0	0	6	0	0	0	0	0	160	0
Lane Group Flow (vph)	470	14	0	6	3	0	27	1924	0	0	315	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	26.7	26.7		1.7	1.7		1.9	43.3			37.2	
Effective Green, g (s)	26.7	26.7		1.7	1.7		1.9	43.3			37.2	
Actuated g/C Ratio	0.31	0.31		0.02	0.02		0.02	0.50			0.43	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	546	489		34	32		38	1773			1388	
v/s Ratio Prot	c0.27	0.01		c0.00	0.00		0.02	c0.54			0.10	
v/s Ratio Perm												
v/c Ratio	0.86	0.03		0.18	0.10		0.71	1.09			0.23	
Uniform Delay, d1	28.1	20.8		41.7	41.6		42.0	21.6			15.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	13.1	0.0		2.5	1.3		47.3	48.5			0.1	
Delay (s)	41.2	20.8		44.1	42.9		89.2	70.1			15.6	
Level of Service	D	C		D	D		F	E			B	
Approach Delay (s)		39.4			43.4			70.4			15.6	
Approach LOS		D			D			E			B	
Intersection Summary												
HCM 2000 Control Delay		56.0						HCM 2000 Level of Service		E		
HCM 2000 Volume to Capacity ratio		1.04										
Actuated Cycle Length (s)		86.4					Sum of lost time (s)	18.9				
Intersection Capacity Utilization		88.6%					ICU Level of Service	E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2022 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰↰↰	↰↰↰		↰	↰		↰	↰↰	
Volume (vph)	8	184	14	0	1683	17	39	23	1	19	41	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5031			5078		1770	1853			1731	
Flt Permitted	0.95	1.00			1.00		0.66	1.00			0.19	
Satd. Flow (perm)	1770	5031			5078		1237	1853			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	
Adj. Flow (vph)	9	207	16	0	1849	19	46	27	1	25	53	68
RTOR Reduction (vph)	0	5	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	9	218	0	0	1867	0	46	27	0	0	129	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2062		240	360			53	
v/s Ratio Prot	c0.01	0.04			c0.37			0.01				
v/s Ratio Perm							c0.04				c0.40	
v/c Ratio	0.05	0.11			0.91		0.19	0.08			2.42	
Uniform Delay, d1	71.5	36.4			50.2		60.7	59.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			6.4		0.4	0.1			694.4	
Delay (s)	71.6	36.5			56.6		61.1	59.4			769.4	
Level of Service	E	D			E		E	E			F	
Approach Delay (s)		37.8			56.6			60.4			769.4	
Approach LOS		D			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		99.7			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.92										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		71.3%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON Year 2022 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰↰	↰↰↰							↰
Volume (vph)	0	202	0	834	1692	9	0	0	0	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	246	0	887	1800	10	0	0	0	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	246	0	887	1810	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.05		c0.26	c0.51							
v/s Ratio Perm												0.00
v/c Ratio		0.13		0.52	0.56							0.01
Uniform Delay, d1		36.6		30.3	1.5							34.9
Progression Factor		0.42		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.3	0.2							0.0
Delay (s)		15.6		30.6	1.8							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.6			11.2			0.0				35.0
Approach LOS		B			B			A				C
Intersection Summary												
HCM 2000 Control Delay		11.7			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		68.7%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON Year 2022 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	15	233	0	0	128	697	0	0	0	113	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	18	277	0	0	138	749	0	0	0	124	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	887			277			831	1200	277	825	825	512
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	887			277			831	1200	277	825	825	512
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			100			100	100	100	57	100	99
cM capacity (veh/h)	763			1285			281	181	761	286	300	562
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	295	887	0	130								
Volume Left	18	0	0	124								
Volume Right	0	749	0	5								
cSH	763	1285	1700	292								
Volume to Capacity	0.02	0.00	0.00	0.44								
Queue Length 95th (ft)	2	0	0	54								
Control Delay (s)	0.9	0.0	0.0	26.8								
Lane LOS	A			D								
Approach Delay (s)	0.9	0.0	0.0	26.8								
Approach LOS				D								
Intersection Summary												
Average Delay				2.8								
Intersection Capacity Utilization				63.0%								B
Analysis Period (min)				15								

NBC Coastal Campus

22: 3rd St & Palm Ave

MILCON Year 2022 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	338	4	26	802	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	393	5	28	862	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	398	28	888	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.03	0.53	0.01	-0.45	-0.14						
Departure Headway (s)	6.6	6.1	6.4	5.9	6.3	7.1						
Degree Utilization, x	0.01	0.67	0.05	1.45	0.32	0.09						
Capacity (veh/h)	535	573	548	618	547	457						
Control Delay (s)	8.5	19.5	8.5	225.7	12.2	10.7						
Approach Delay (s)	19.3		219.1		12.2	10.7						
Approach LOS	C		F		B	B						
Intersection Summary												
Delay				136.1								
Level of Service				F								
Intersection Capacity Utilization				59.8%								B
Analysis Period (min)				15								




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑	↱	↱	↰	↰
Volume (veh/h)	243	476	777	153	17	219
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	308	603	948	187	24	308
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked	0.84				0.84	0.84
vC, conflicting volume	1134				2259	567
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	791				2122	120
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	56				0	60
cM capacity (veh/h)	697				20	768
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	308	603	632	502	332	
Volume Left	308	0	0	0	24	
Volume Right	0	0	0	187	308	
cSH	697	1700	1700	1700	210	
Volume to Capacity	0.44	0.35	0.37	0.30	1.58	
Queue Length 95th (ft)	57	0	0	0	529	
Control Delay (s)	14.2	0.0	0.0	0.0	323.6	
Lane LOS	B				F	
Approach Delay (s)	4.8		0.0		323.6	
Approach LOS					F	
Intersection Summary						
Average Delay			47.1			
Intersection Capacity Utilization			64.3%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2022 Alt 3north
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	468	16	26	772	0	72	36	81	1	21	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1722			1858	1583
Flt Permitted	0.22	1.00		0.40	1.00			0.86			0.98	1.00
Satd. Flow (perm)	409	3521		741	3539			1516			1831	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	608	21	34	1003	0	109	55	123	2	36	47
RTOR Reduction (vph)	0	3	0	0	0	0	0	34	0	0	0	32
Lane Group Flow (vph)	21	626	0	34	1003	0	0	253	0	0	38	15
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	23.6	23.6		23.6	23.6			15.1			15.1	15.1
Effective Green, g (s)	23.6	23.6		23.6	23.6			15.1			15.1	15.1
Actuated g/C Ratio	0.49	0.49		0.49	0.49			0.32			0.32	0.32
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	201	1734		365	1743			477			577	499
v/s Ratio Prot		0.18			c0.28							
v/s Ratio Perm	0.05			0.05				c0.17			0.02	0.01
v/c Ratio	0.10	0.36		0.09	0.58			0.53			0.07	0.03
Uniform Delay, d1	6.5	7.5		6.5	8.6			13.5			11.5	11.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.2	0.1		0.1	0.5			1.1			0.0	0.0
Delay (s)	6.7	7.6		6.6	9.1			14.5			11.5	11.4
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)		7.6			9.0			14.5			11.4	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay	9.4			HCM 2000 Level of Service					A			
HCM 2000 Volume to Capacity ratio	0.56											
Actuated Cycle Length (s)	47.9			Sum of lost time (s)					9.2			
Intersection Capacity Utilization	52.0%			ICU Level of Service					A			
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	553	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	601	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			605		601	601
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			605		601	601
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			973		463	500
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	601	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	489			
Volume to Capacity	0.35	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.5			
Lane LOS			B			
Approach Delay (s)	0.0		12.5			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			39.1%		ICU Level of Service	A
Analysis Period (min)			15			

















NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑↑↑	↑	↑	↑	↑	↑	↑	↑
Volume (vph)	21	706	36	23	2267	44	171	37	51	91	46	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5048		1770	5071			3326			3364	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5048		1770	5071			3326			3364	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	840	43	25	2491	48	206	45	61	111	56	30
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	880	0	25	2538	0	0	300	0	0	189	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2235		118	2160			646			654	
v/s Ratio Prot	0.01	c0.17		c0.01	c0.50			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.17	0.39		0.21	1.17			0.46			0.29	
Uniform Delay, d1	76.7	33.8		79.5	51.6			64.2			61.9	
Progression Factor	1.00	1.00		1.15	0.92			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.6	82.3			0.5			0.2	
Delay (s)	77.3	34.4		92.2	130.0			64.7			62.1	
Level of Service	E	C		F	F			E			E	
Approach Delay (s)		35.6			129.6			64.7			62.1	
Approach LOS		D			F			E			E	
Intersection Summary												
HCM 2000 Control Delay		99.7			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		81.9%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												













NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Volume (vph)	2	940	35	20	2443	12	18	4	31	55	11	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5058		1770	5081			1687		1770	1704	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5058		1770	5081			1542		1231	1704	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	1056	39	23	2776	14	25	5	42	79	16	21
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	18	0
Lane Group Flow (vph)	2	1093	0	23	2790	0	0	44	0	79	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			257		205	284	
v/s Ratio Prot	0.00	0.22		c0.01	c0.55						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.31		0.19	0.75			0.17		0.39	0.07	
Uniform Delay, d1	86.1	11.2		79.4	14.4			64.3		66.8	63.2	
Progression Factor	1.69	0.26		1.43	0.38			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.2	0.4			0.3		1.2	0.1	
Delay (s)	146.4	3.1		113.5	5.8			64.6		68.0	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.4			6.7			64.6			66.5	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.5			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		80.9%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Volume (vph)	3	1011	65	97	2290	52	153	19	92	171	36	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.91	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1783	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1783	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1136	73	117	2759	63	172	21	103	228	48	20
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	85	0	3	0
Lane Group Flow (vph)	3	1205	0	117	2759	33	0	193	18	0	293	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.24		c0.07	c0.54			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.54		0.60	1.02	0.04		0.63	0.07		0.50	
Uniform Delay, d1	86.2	36.7		76.2	42.1	20.2		69.2	62.4		67.5	
Progression Factor	1.22	0.62		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.9		4.8	22.8	0.1		4.0	0.1		0.7	
Delay (s)	106.2	23.5		81.0	64.9	20.3		73.2	62.5		68.2	
Level of Service	F	C		F	E	C		E	E		E	
Approach Delay (s)		23.7			64.6			69.4			68.2	
Approach LOS		C			E			E			E	
Intersection Summary												
HCM 2000 Control Delay		54.7			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.84										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		98.2%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	14	1281	26	44	2421	12	16	6	49	38	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5082			1670			1723	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.78	
Satd. Flow (perm)	1770	5070		1770	5082			1562			1377	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	15	1392	28	51	2815	14	19	7	58	50	3	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	46	0	0	22	0
Lane Group Flow (vph)	15	1419	0	51	2829	0	0	38	0	0	59	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.9		2.8	40.0			15.1			15.1	
Effective Green, g (s)	0.7	37.9		2.8	40.0			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2687		69	2843			329			290	
v/s Ratio Prot	0.01	0.28		c0.03	c0.56							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.88	0.53		0.74	0.99			0.12			0.20	
Uniform Delay, d1	35.4	11.0		34.0	15.6			22.8			23.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	159.7	0.2		33.5	15.6			0.2			0.3	
Delay (s)	195.1	11.2		67.5	31.2			23.0			23.6	
Level of Service	F	B		E	C			C			C	
Approach Delay (s)		13.1			31.9			23.0			23.6	
Approach LOS		B			C			C			C	
Intersection Summary												
HCM 2000 Control Delay		25.5			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.80										
Actuated Cycle Length (s)		71.5			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		64.0%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	93	1294	31	249	2354	219	82	74	786	239	94	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1750	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1750	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.90	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	108	1505	36	265	2504	233	91	82	873	285	112	93
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	181	0	2	60
Lane Group Flow (vph)	108	1539	0	265	2504	166	91	331	290	285	119	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.4	30.6	30.6	10.4	32.6	32.6
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.4	30.6	30.6	10.4	32.6	32.6
Actuated g/C Ratio	0.05	0.30		0.15	0.41	0.41	0.07	0.26	0.26	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	177	1537		273	2064	642	128	408	396	307	491	422
v/s Ratio Prot	0.03	0.30		c0.15	c0.49		0.05	c0.21		c0.08	0.07	
v/s Ratio Perm						0.10			0.19			0.02
v/c Ratio	0.61	1.00		0.97	1.21	0.26	0.71	0.81	0.73	0.93	0.24	0.06
Uniform Delay, d1	53.9	40.4		48.8	34.5	22.9	52.6	40.0	39.0	52.4	32.2	30.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.1	23.3		46.2	100.7	0.2	17.0	11.6	6.8	32.8	0.3	0.1
Delay (s)	59.9	63.7		95.0	135.1	23.1	69.6	51.6	45.8	85.3	32.4	30.5
Level of Service	E	E		F	F	C	E	D	D	F	C	C
Approach Delay (s)		63.4			122.9			50.5			62.8	
Approach LOS		E			F			D			E	
Intersection Summary												
HCM 2000 Control Delay		90.0			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.06										
Actuated Cycle Length (s)		116.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		94.7%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2022 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕	↕↕
Volume (vph)	0	290	1255	0	158	1569
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	326	1349	0	176	1743
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	326	1349	0	176	1740
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.38		0.10	c0.62
v/s Ratio Perm						
v/c Ratio		0.12	1.16		0.85	1.14
Uniform Delay, d1		2.5	26.8		34.6	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	80.2		26.8	69.8
Delay (s)		2.5	107.0		61.4	87.8
Level of Service		A	F		E	F
Approach Delay (s)		2.5	107.0		85.4	
Approach LOS		A	F		F	
Intersection Summary						
HCM 2000 Control Delay			86.0		HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio			1.22			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			77.6%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2022 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕		↕	↕		↕	↕	↕
Volume (vph)	0	449	0	0	444	534	914	1	146	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.96				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3250		1681	1636				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3250		1681	1636				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	516	0	0	483	580	993	1	159	0	0	0
RTOR Reduction (vph)	0	0	0	0	366	0	0	25	0	0	0	0
Lane Group Flow (vph)	0	516	0	0	697	0	586	542	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		17.5			17.5		22.0	22.0				
Effective Green, g (s)		17.5			17.5		22.0	22.0				
Actuated g/C Ratio		0.37			0.37		0.46	0.46				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1303			1197		778	757				
v/s Ratio Prot		0.15			c0.21							
v/s Ratio Perm							c0.35	0.33				
v/c Ratio		0.40			0.58		0.75	0.72				
Uniform Delay, d1		11.1			12.1		10.5	10.2				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		4.2	3.2				
Delay (s)		11.3			12.8		14.7	13.5				
Level of Service		B			B		B	B				
Approach Delay (s)		11.3			12.8		14.1				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					13.0					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.68							
Actuated Cycle Length (s)					47.5					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					72.6%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰			↱	↰	↱
Volume (veh/h)	0	3	4	665	80	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	924	195	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1130	195	195			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1130	195	195			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	224	846	1378			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	929	195			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	846	1378	1700			
Volume to Capacity	0.01	0.00	0.11			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	9.3	0.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.3	0.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			48.2%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↱			↰↱				↰			↱
Volume (veh/h)	0	4136	17	0	1823	244	0	0	909	0	0	55
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4308	18	0	1879	252	0	0	1010	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2151			4346			5067	6488	1485	3481	6371	792
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2151			4346			5067	6488	1485	3481	6371	792
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	243			31			0	0	1848	1	0	321
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1723	1723	879	752	752	627	1010	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	252	1010	83				
cSH	1700	1700	1700	1700	1700	1700	1848	321				
Volume to Capacity	1.01	1.01	0.52	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	88	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3	20.1				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.3	20.1				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				145.2%								H
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2022 Alt 3north
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3901	130	0	1860	0	201	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	4022	134	0	1938	0	245	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4176		4774	1448	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4176		4774	1448	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			37		1	117	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1609	1609	938	646	646	646	245
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	245
cSH	1700	1700	1700	1700	1700	1700	117
Volume to Capacity	0.95	0.95	0.55	0.38	0.38	0.38	2.10
Queue Length 95th (ft)	0	0	0	0	0	0	513
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	585.0
Lane LOS							F
Approach Delay (s)	0.0			0.0			585.0
Approach LOS							F
Intersection Summary							
Average Delay			22.6				
Intersection Capacity Utilization			99.4%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2022 Alt 3north
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↖	↑↑↑			↑↑↑	
Volume (vph)	0	0	0	986	635	109	116	252		0	0	862
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4636		1770	3539				3528
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4636		1770	3539				3528
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1038	668	115	120	260	0	0	0	889
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	0	2
Lane Group Flow (vph)	0	0	0	519	1290	0	120	260	0	0	0	903
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA				NA
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1432		98	1989				1568
v/s Ratio Prot				c0.34	0.28		c0.07	0.07				c0.26
v/s Ratio Perm												
v/c Ratio				1.10	0.98dl		1.22	0.13				0.58
Uniform Delay, d1				31.1	29.8		42.5	9.3				18.7
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				73.0	8.1		163.1	0.0				0.5
Delay (s)				104.1	37.9		205.6	9.3				19.2
Level of Service				F	D		F	A				B
Approach Delay (s)		0.0			56.8			71.3				19.2
Approach LOS		A			E			E				B
Intersection Summary												
HCM 2000 Control Delay			47.6				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.82									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)			17.2		
Intersection Capacity Utilization		135.8%					ICU Level of Service			H		
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔↔	
Volume (vph)	7	2112	113	0	0	0	0	368	517	761	1110	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3111	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3111	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2321	124	0	0	0	0	428	601	793	1156	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2329	95	0	0	0	0	698	296	793	1156	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					943	409	865	2022	
v/s Ratio Prot		c0.46						c0.22		c0.23	0.33	
v/s Ratio Perm			0.06						0.22			
v/c Ratio		1.27	0.17					0.74	0.72	0.92	0.57	
Uniform Delay, d1		55.8	37.9					54.8	54.4	63.7	23.9	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		123.8	0.1					3.2	6.2	14.2	0.4	
Delay (s)		179.6	38.0					57.9	60.6	77.9	24.3	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		172.4			0.0			58.8			46.1	
Approach LOS		F			A			E			D	
Intersection Summary												
HCM 2000 Control Delay		105.5			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.00										
Actuated Cycle Length (s)		175.0			Sum of lost time (s)			14.4				
Intersection Capacity Utilization		135.8%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔
Volume (vph)	176	12	1010	700	0	1266
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1584		3277			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1584		3277			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	226	15	1135	787	0	1361
RTOR Reduction (vph)	2	0	60	0	0	0
Lane Group Flow (vph)	239	0	1862	0	0	1361
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	297		2476			2540
v/s Ratio Prot	c0.15		c0.57			0.40
v/s Ratio Perm						
v/c Ratio	0.81		0.75			0.54
Uniform Delay, d1	62.2		11.1			8.0
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	14.7		2.2			0.8
Delay (s)	76.9		13.2			8.8
Level of Service	E		B			A
Approach Delay (s)	76.9		13.2			8.8
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay		15.9		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.78				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		83.7%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON Year 2022 Alt 3north

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	297	51	121	6	70	429	28	714	2	141	1455	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1515		1855	1509	1770	3539	1344	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1515		1855	1509	1770	3539	1344	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	391	67	159	7	76	466	31	785	2	150	1548	71
RTOR Reduction (vph)	0	0	129	0	0	201	0	0	1	0	2	0
Lane Group Flow (vph)	391	67	30	0	83	265	31	785	1	150	1617	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.6	27.6	27.6		26.9	26.9	4.0	56.2	56.2	17.4	69.6	
Effective Green, g (s)	27.6	27.6	27.6		26.9	26.9	4.0	56.2	56.2	17.4	69.6	
Actuated g/C Ratio	0.19	0.19	0.19		0.18	0.18	0.03	0.38	0.38	0.12	0.47	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	331	348	283		338	275	48	1348	512	208	1657	
v/s Ratio Prot	c0.22	0.04			0.04		0.02	0.22		c0.08	c0.46	
v/s Ratio Perm			0.02			c0.18		0.00				
v/c Ratio	1.18	0.19	0.11		0.25	0.96	0.65	0.58	0.00	0.72	0.98	
Uniform Delay, d1	60.0	50.6	49.7		51.6	59.8	71.0	36.3	28.3	62.7	38.1	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	108.3	0.3	0.2		0.4	43.9	26.1	1.8	0.0	11.6	17.1	
Delay (s)	168.2	50.8	49.9		52.0	103.7	97.1	38.2	28.3	74.3	55.2	
Level of Service	F	D	D		D	F	F	D	C	E	E	
Approach Delay (s)		125.0			95.9			40.4			56.8	
Approach LOS		F			F			D			E	
Intersection Summary												
HCM 2000 Control Delay			70.2			HCM 2000 Level of Service				E		
HCM 2000 Volume to Capacity ratio			1.02									
Actuated Cycle Length (s)			147.5			Sum of lost time (s)				19.4		
Intersection Capacity Utilization			82.1%			ICU Level of Service				E		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON Year 2022 Alt 3north

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	326	503	3	61	182	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	362	559	4	86	207	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	464	47			90	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	464	47			90	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	25	45			86	
cM capacity (veh/h)	480	1022			1505	
Direction, Lane #						
Volume Total	921	90	210			
Volume Left	362	0	207			
Volume Right	559	86	0			
cSH	964	1700	1505			
Volume to Capacity	0.96	0.05	0.14			
Queue Length 95th (ft)	403	0	12			
Control Delay (s)	40.1	0.0	7.7			
Lane LOS	E		A			
Approach Delay (s)	40.1	0.0	7.7			
Approach LOS	E					
Intersection Summary						
Average Delay			31.5			
Intersection Capacity Utilization			41.7%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2022 Alt 3north

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	329	6	751	64	0	1584
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	416	8	834	71	0	1780
RTOR Reduction (vph)	1	0	0	41	0	0
Lane Group Flow (vph)	423	0	834	30	0	1780
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases			2			
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.24		0.24			c0.50
v/s Ratio Perm			0.02			
v/c Ratio	0.50		0.55	0.05		1.17
Uniform Delay, d1	18.9		22.4	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.5		0.4	0.0		84.4
Delay (s)	19.4		22.8	17.5		114.3
Level of Service	B		C	B		F
Approach Delay (s)	19.4		22.3			114.3
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay		74.6		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		0.82				
Actuated Cycle Length (s)		105.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		93.7%		ICU Level of Service		F
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2022 Alt 3north

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (veh/h)	4	6	623	3	15	1524
Sign Control	Stop		Free		Free	
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	724	3	16	1675
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1596	364			728	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1596	364			728	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	98			98	
cM capacity (veh/h)	95	633			871	
Direction, Lane #						
Volume Total	20	483	245	16	837	837
Volume Left	8	0	0	16	0	0
Volume Right	12	0	3	0	0	0
cSH	195	1700	1700	871	1700	1700
Volume to Capacity	0.10	0.28	0.14	0.02	0.49	0.49
Queue Length 95th (ft)	8	0	0	1	0	0
Control Delay (s)	25.6	0.0	0.0	9.2	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	25.6	0.0		0.1		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			52.1%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2022 Alt 3north

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	30	57	568	12	104	1425
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	33	62	645	14	114	1566
RTOR Reduction (vph)	0	46	0	8	0	0
Lane Group Flow (vph)	33	16	645	6	114	1566
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	18	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.4	21.7	27.9	27.9	7.2	43.9
Effective Green, g (s)	9.4	16.6	27.9	27.9	7.2	43.9
Actuated g/C Ratio	0.15	0.27	0.45	0.45	0.12	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	265	419	1577	705	203	2481
v/s Ratio Prot	c0.02	0.01	0.18		0.06	c0.44
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.04	0.41	0.01	0.56	0.63
Uniform Delay, d1	23.0	17.1	11.8	9.7	26.2	5.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.2	0.0	3.5	0.5
Delay (s)	23.2	17.1	11.9	9.7	29.7	5.5
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.2		11.9			7.2
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			8.9		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.65			
Actuated Cycle Length (s)			62.6		Sum of lost time (s)	18.1
Intersection Capacity Utilization			51.3%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2022 Alt 3north

Timing Plan: PM PEAK







	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↕	↕	↕		↕
Volume (veh/h)	0	23	559	18	0	1455
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	31	643	21	0	1582
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1444	332			663	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1444	332			663	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	123	664			922	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	31	428	235	791	791	
Volume Left	0	0	0	0	0	
Volume Right	31	0	21	0	0	
cSH	664	1700	1700	1700	1700	
Volume to Capacity	0.05	0.25	0.14	0.47	0.47	
Queue Length 95th (ft)	4	0	0	0	0	
Control Delay (s)	10.7	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.7	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			43.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2022 Alt 3north

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	30	26	552	18	23	1431
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	42	36	587	19	25	1573
RTOR Reduction (vph)	0	33	0	8	0	0
Lane Group Flow (vph)	42	3	587	11	25	1573
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	28.1	28.1	1.7	37.3
Effective Green, g (s)	2.6	4.3	28.1	28.1	1.7	37.3
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	98	146	2138	956	64	2838
v/s Ratio Prot	c0.02	0.00	0.17		0.01	c0.44
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.43	0.02	0.27	0.01	0.39	0.55
Uniform Delay, d1	21.2	19.2	4.4	3.7	21.9	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.1	0.1	0.0	3.9	0.2
Delay (s)	24.2	19.3	4.4	3.7	25.8	1.9
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.9		4.4			2.2
Approach LOS	C		A			A

Intersection Summary











HCM 2000 Control Delay	3.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	46.5	Sum of lost time (s)	14.1
Intersection Capacity Utilization	50.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON Year 2022 Alt 3north

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	11	14	85	8	0	180	13	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	11	15	110	10	0	202	15	0	0
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1	SB 2	NB 1	NB 2
Volume Total (vph)	11	15	121	217						
Volume Left (vph)	0	0	110	0						
Volume Right (vph)	0	15	0	15						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.19						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						

Intersection Summary

Delay	7.2		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

NBC Coastal Campus

MILCON Year 2022 Alt 3north

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	187	0	0	82	139	12	472	69	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1297	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	11	212	0	0	94	160	13	519	76	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	126	0	41	0	0	0	0
Lane Group Flow (vph)	11	212	0	0	94	34	13	519	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.3	18.3	18.3			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.3	18.3	18.3			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	271	390			390	331	807	1615	722			
v/s Ratio Prot		c0.11			0.05		0.01	c0.15				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.54			0.24	0.10	0.02	0.32	0.05			
Uniform Delay, d1	12.6	14.1			13.2	12.8	6.0	6.9	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.5			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.7	15.7			13.5	12.9	6.0	7.1	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.5			13.2		6.9			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.1			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.39										
Actuated Cycle Length (s)		40.1			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		41.2%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2022 Alt 3north

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: PM PEAK











Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	372	0	618	0	1600	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	1488	0	702	0	1778	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2129	889	1778		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2129	889	1778		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	0	100		0		
cM capacity (veh/h)	43	286	346		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	1488	0	351	351	1185	593	0
Volume Left	0	0	0	0	0	0	0
Volume Right	1488	0	0	0	0	0	0
cSH	286	1700	1700	1700	1700	1700	1700
Volume to Capacity	5.20	0.00	0.21	0.21	0.70	0.35	0.00
Queue Length 95th (ft)	Err	0	0	0	0	0	0
Control Delay (s)	Err	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F						
Approach Delay (s)	Err	0.0			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			3749.6				
Intersection Capacity Utilization			73.9%		ICU Level of Service		
Analysis Period (min)			15				D

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON Year 2022 Alt 3north

Timing Plan: PM PEAK











Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	235	0	68	1	1	0	73	324	12	1	1487	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3521		1770	3468	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3521		1770	3468	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	313	0	91	2	2	0	80	356	13	1	1652	257
RTOR Reduction (vph)	0	68	0	0	0	0	0	2	0	0	10	0
Lane Group Flow (vph)	313	23	0	2	2	0	80	367	0	1	1899	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	22.9	22.9		0.8	0.8		5.7	48.9		0.8	44.0	
Effective Green, g (s)	22.9	22.9		0.8	0.8		5.7	48.9		0.8	44.0	
Actuated g/C Ratio	0.25	0.25		0.01	0.01		0.06	0.53		0.01	0.48	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	439	392		15	16		109	1865		15	1653	
v/s Ratio Prot	c0.18	0.01		c0.00	0.00		c0.05	0.10		0.00	c0.55	
v/s Ratio Perm												
v/c Ratio	0.71	0.06		0.13	0.12		0.73	0.20		0.07	1.15	
Uniform Delay, d1	31.7	26.5		45.4	45.4		42.6	11.4		45.4	24.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.4	0.1		4.0	3.5		22.3	0.1		1.9	74.5	
Delay (s)	37.1	26.5		49.4	48.9		64.9	11.4		47.3	98.7	
Level of Service	D	C		D	D		E	B		D	F	
Approach Delay (s)		34.7			49.2			21.0			98.7	
Approach LOS		C			D			C			F	
Intersection Summary												
HCM 2000 Control Delay		76.6										
HCM 2000 Volume to Capacity ratio		0.97										
Actuated Cycle Length (s)		92.3										
Intersection Capacity Utilization		84.2%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2022 Alt 3north

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	57	1442	58	0	362	35	13	40		4	24	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6				5.6
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00				1.00
Flt	1.00	0.99			0.99		1.00	0.99				0.96
Flt Protected	0.95	1.00			1.00		0.95	1.00				0.98
Satd. Flow (prot)	1770	5056			5018		1770	1836				1759
Flt Permitted	0.95	1.00			1.00		0.70	1.00				0.16
Satd. Flow (perm)	1770	5056			5018		1308	1836				284
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	65	1639	66	0	385	37	19	57	6	28	31	25
RTOR Reduction (vph)	0	2	0	0	7	0	0	2	0	0	8	0
Lane Group Flow (vph)	65	1703	0	0	415	0	19	61	0	0	76	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1912			2037		254	357			47	
v/s Ratio Prot	c0.04	c0.34			c0.08			c0.03				
v/s Ratio Perm							0.01				c0.27	
v/c Ratio	0.33	0.89			0.20		0.07	0.17			1.61	
Uniform Delay, d1	73.8	52.5			34.6		59.3	60.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	6.7			0.2		0.1	0.2			353.1	
Delay (s)	74.8	59.2			34.8		59.4	60.6			428.1	
Level of Service	E	E			C		E	E			F	
Approach Delay (s)		59.8			34.8			60.3			428.1	
Approach LOS		E			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		68.4										
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON Year 2022 Alt 3north

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑↑			↑↑	↑↑							↑
Volume (vph)	0	1472	0	612	400	38	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3494							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3494							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1654	0	651	426	40	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1654	0	651	466	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3175							609
v/s Ratio Prot		c0.33		c0.19	c0.13							
v/s Ratio Perm												0.00
v/c Ratio		0.86		0.34	0.15							0.00
Uniform Delay, d1		51.6		21.5	0.9							34.8
Progression Factor		0.23		1.00	1.00							1.00
Incremental Delay, d2		2.3		0.1	0.0							0.0
Delay (s)		14.4		21.6	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		14.4			13.0		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		13.9				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		55.1%				ICU Level of Service		B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave




















MILCON Year 2022 Alt 3north

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑				↑↑
Volume (veh/h)	4	213	0	0	306	187	0	0	0	689	0	14
Sign Control		Free			Free			Stop				Stop
Grade		0%			0%			0%				0%
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	5	248	0	0	348	212	0	0	0	1044	0	21
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	560			248			732	817	248	711	711	454
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	560			248			732	817	248	711	711	454
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	0	100	96
cM capacity (veh/h)	1011			1318			324	309	791	347	356	606
Direction, Lane #												
Volume Total	252	560	0	1065								
Volume Left	5	0	0	1044								
Volume Right	0	212	0	21								
cSH	1011	1318	1700	350								
Volume to Capacity	0.00	0.00	0.00	3.05								
Queue Length 95th (ft)	0	0	0	Err								
Control Delay (s)	0.2	0.0	0.0	Err								
Lane LOS	A			A	F							
Approach Delay (s)	0.2	0.0	0.0	Err								
Approach LOS				A	F							
Intersection Summary												
Average Delay		5672.1										
Intersection Capacity Utilization		73.2%				ICU Level of Service		D				
Analysis Period (min)		15										











NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2022 Alt 3north
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop			Stop			Stop			Stop		
Volume (vph)	7	880	12	85	467	24	14	38	68	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	1128	15	96	525	27	25	67	119	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	1144	96	552	211	161						
Volume Left (vph)	9	0	96	0	25	61						
Volume Right (vph)	0	15	0	27	119	28						
Hadj (s)	0.53	0.02	0.53	0.00	-0.28	0.00						
Departure Headway (s)	7.6	7.1	7.5	7.0	7.6	8.1						
Degree Utilization, x	0.02	2.26	0.20	1.07	0.44	0.36						
Capacity (veh/h)	460	515	471	523	453	429						
Control Delay (s)	9.6	589.7	11.2	85.8	16.4	15.5						
Approach Delay (s)	585.2		74.8		16.4	15.5						
Approach LOS	F		F		C	C						
Intersection Summary												
Delay			335.7									
Level of Service			F									
Intersection Capacity Utilization			71.5%		ICU Level of Service		C					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2022 Alt 3north
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	221	860	567	39	53	177
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	228	887	659	45	62	208
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	705				2024	352
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	705				2024	352
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	74				0	68
cM capacity (veh/h)	889				37	644
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	228	887	440	265	271	
Volume Left	228	0	0	0	62	
Volume Right	0	0	0	45	208	
cSH	889	1700	1700	1700	136	
Volume to Capacity	0.26	0.52	0.26	0.16	1.99	
Queue Length 95th (ft)	26	0	0	0	539	
Control Delay (s)	10.4	0.0	0.0	0.0	526.9	
Lane LOS	B				F	
Approach Delay (s)	2.1		0.0		526.9	
Approach LOS					F	
Intersection Summary						
Average Delay			69.4			
Intersection Capacity Utilization			65.8%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↱		↰	↰↱			↱		↰	↰↱	↱
Volume (vph)	28	864	35	31	567		56	19	22	12	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3518		1770	3537			1755			1841	1583
Flt Permitted	0.41	1.00		0.22	1.00			0.78			0.91	1.00
Satd. Flow (perm)	772	3518		407	3537			1414			1703	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	1029	42	34	623	3	68	23	27	16	53	39
RTOR Reduction (vph)	0	4	0	0	0	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	1067	0	34	626	0	0	97	0	0	69	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	21.2	21.2		21.2	21.2			9.3			9.3	9.3
Effective Green, g (s)	21.2	21.2		21.2	21.2			9.3			9.3	9.3
Actuated g/C Ratio	0.53	0.53		0.53	0.53			0.23			0.23	0.23
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	412	1878		217	1888			331			398	370
v/s Ratio Prot		c0.30			0.18							
v/s Ratio Perm	0.04			0.08				c0.07			0.04	0.01
v/c Ratio	0.08	0.57		0.16	0.33			0.29			0.17	0.02
Uniform Delay, d1	4.5	6.2		4.7	5.2			12.5			12.1	11.7
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.4		0.3	0.1			0.5			0.2	0.0
Delay (s)	4.6	6.6		5.0	5.3			13.0			12.3	11.7
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)		6.5			5.3			13.0			12.1	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay		6.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.48										
Actuated Cycle Length (s)		39.7			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		45.5%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												







NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↰			↰	↰
Volume (veh/h)	1283	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1565	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			1574		1565	1565
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1574		1565	1565
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		93	98
cM capacity (veh/h)			418		123	137
Direction, Lane #						
Volume Total	1565	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	126			
Volume to Capacity	0.92	0.01	0.09			
Queue Length 95th (ft)	0	0	8			
Control Delay (s)	0.0	0.0	36.5			
Lane LOS			E			
Approach Delay (s)	0.0		36.5			
Approach LOS			E			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			77.5%		ICU Level of Service	D
Analysis Period (min)			15			








NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	2196	131	59	895	132	99	91	63	175	80	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5042		1770	4987			3342			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5042		1770	4987			3342			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	45	2336	139	60	904	133	109	100	69	197	90	29
RTOR Reduction (vph)	0	4	0	0	10	0	0	18	0	0	4	0
Lane Group Flow (vph)	45	2471	0	60	1027	0	0	260	0	0	312	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2008		196	1986			649			658	
v/s Ratio Prot	0.03	c0.49		c0.03	0.21			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.23	1.23		0.31	0.52			0.40			0.47	
Uniform Delay, d1	73.0	54.1		73.6	41.0			63.3			64.3	
Progression Factor	1.00	1.00		1.23	0.83			1.00			1.00	
Incremental Delay, d2	0.6	108.4		0.8	0.9			0.4			0.5	
Delay (s)	73.6	162.6		91.2	34.8			63.8			64.9	
Level of Service	E	F		F	C			E			E	
Approach Delay (s)		161.0			37.9			63.8			64.9	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		115.3			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		119.1%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	2482	58	49	1306	55	21	11	35	64	13	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5068		1770	5054			1704		1770	1719	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.62	1.00	
Satd. Flow (perm)	1770	5068		1770	5054			1554		1156	1719	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2533	59	51	1346	57	25	13	42	75	15	16
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	14	0
Lane Group Flow (vph)	20	2591	0	51	1401	0	0	57	0	75	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3564		157	3666			191		142	212	
v/s Ratio Prot	0.01	c0.51		c0.03	c0.28						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.73		0.32	0.38			0.30		0.53	0.08	
Uniform Delay, d1	79.3	16.2		76.9	9.4			71.8		74.0	69.9	
Progression Factor	1.47	0.34		1.55	0.27			1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		1.0	0.2			0.9		3.5	0.2	
Delay (s)	116.4	5.7		120.5	2.8			72.7		77.5	70.0	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		6.5			6.9			72.7			75.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		9.6			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		69.0%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰		↰↰	
Volume (vph)	27	2251	206	159	1380	82	131	41	129	156	45	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5021		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5021		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	29	2395	219	164	1423	85	142	45	140	211	61	27
RTOR Reduction (vph)	0	6	0	0	0	37	0	0	116	0	4	0
Lane Group Flow (vph)	29	2608	0	164	1423	48	0	187	24	0	295	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2			4				
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2223		192	2364	736		306	269		575	
v/s Ratio Prot	0.02	c0.52		c0.09	c0.28			c0.10			c0.09	
v/s Ratio Perm					0.03			0.02				
v/c Ratio	0.18	1.17		0.85	0.60	0.07		0.61	0.09		0.51	
Uniform Delay, d1	76.0	50.1		78.8	35.8	26.6		69.1	62.9		67.9	
Progression Factor	0.95	1.12		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.4	81.6		29.0	1.1	0.2		8.8	0.7		3.2	
Delay (s)	72.3	137.6		107.8	36.9	26.7		77.9	63.5		71.1	
Level of Service	E	F		F	D	C		E	E		E	
Approach Delay (s)		136.9			43.3			71.8			71.1	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		97.0			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		0.90										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		112.0%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰	↰		↰↰	
Volume (vph)	10	2489	50	173	1683	16	39	9	82	23	11	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1770	5070		1770	5078			1680			1756	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.84	
Satd. Flow (perm)	1770	5070		1770	5078			1515			1514	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	11	2766	56	182	1772	17	46	11	96	28	14	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	76	0	0	11	0
Lane Group Flow (vph)	11	2820	0	182	1788	0	0	77	0	0	45	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.3			17.3	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.3			17.3	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2418		234	3046			310			309	
v/s Ratio Prot	0.01	c0.56		c0.10	0.35							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.69	1.17		0.78	0.59			0.25			0.15	
Uniform Delay, d1	41.7	22.1		35.4	10.4			28.1			27.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	80.1	79.8		14.9	0.3			0.4			0.2	
Delay (s)	121.8	101.9		50.4	10.7			28.6			27.8	
Level of Service	F	F		D	B			C			C	
Approach Delay (s)		102.0			14.4			28.6			27.8	
Approach LOS		F			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		64.5			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		84.5			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		80.2%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	192	2424	31	334	1690	566	67	180	543	599	243	232
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	202	2552	33	359	1817	609	71	191	578	651	264	252
RTOR Reduction (vph)	0	1	0	0	0	84	0	26	278	0	2	128
Lane Group Flow (vph)	202	2584	0	359	1817	525	71	373	92	651	287	99
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2			4				8
Actuated Green, G (s)	11.4	36.4		45.0	70.0	70.0	8.7	37.9	37.9	11.8	41.0	41.0
Effective Green, g (s)	11.4	36.4		45.0	70.0	70.0	8.7	37.9	37.9	11.8	41.0	41.0
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1207		520	2326	724	100	404	372	264	468	403
v/s Ratio Prot	0.06	c0.51		c0.20	c0.36		0.04	c0.23		c0.19	c0.16	
v/s Ratio Perm					0.33			0.06				0.07
v/c Ratio	0.79	2.14		0.69	0.78	0.73	0.71	0.92	0.25	2.47	0.61	0.25
Uniform Delay, d1	69.6	58.3		47.8	35.0	33.7	70.9	56.2	46.1	70.6	49.0	43.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.4	516.3		3.9	1.8	3.6	20.6	26.6	0.3	670.9	2.4	0.3
Delay (s)	85.0	574.6		51.8	36.8	37.3	91.5	82.8	46.5	741.5	51.4	44.2
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		539.1			38.8			67.5			435.0	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		287.0			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.34										
Actuated Cycle Length (s)		153.0			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		136.6%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Volume (vph)	0	523	885	0	448	1711
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	588	941	0	492	1880
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	588	941	0	492	1877
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.17	c0.27		0.28	c0.67
v/s Ratio Perm						
v/c Ratio		0.33	1.10		0.74	1.06
Uniform Delay, d1		11.8	30.3		21.6	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	60.6		4.5	38.2
Delay (s)		11.9	90.9		26.1	52.7
Level of Service		B	F		C	D
Approach Delay (s)		11.9	90.9		47.2	
Approach LOS		B	F		D	
Intersection Summary						
HCM 2000 Control Delay		52.4			HCM 2000 Level of Service	
HCM 2000 Volume to Capacity ratio		1.14				D
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	
Intersection Capacity Utilization		89.0%			ICU Level of Service	
Analysis Period (min)		15				E
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	965	0	0	539	255	456	2	109	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3369		1681	1616				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3369		1681	1616				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1005	0	0	606	287	490	2	117	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	32	0	0	0	0
Lane Group Flow (vph)	0	1005	0	0	795	0	314	263	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.4			19.4		14.8	14.8				
Effective Green, g (s)		19.4			19.4		14.8	14.8				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1626			1548		589	566				
v/s Ratio Prot		0.28			0.24							
v/s Ratio Perm							0.19	0.16				
v/c Ratio		0.62			0.51		0.53	0.46				
Uniform Delay, d1		8.6			8.1		10.9	10.6				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.7			0.3		0.9	0.6				
Delay (s)		9.3			8.4		11.9	11.2				
Level of Service		A			A		B	B				
Approach Delay (s)		9.3			8.4		11.6				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		9.5			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		42.2			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		49.3%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	151	627	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	164	909	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1090	909	909			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1090	909	909			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	95	99			
cM capacity (veh/h)	235	333	749			
Direction, Lane #						
Volume Total	16	173	909			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	333	749	1700			
Volume to Capacity	0.05	0.01	0.53			
Queue Length 95th (ft)	4	1	0			
Control Delay (s)	16.4	0.6	0.0			
Lane LOS	C	A				
Approach Delay (s)	16.4	0.6	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		43.0%		ICU Level of Service		
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St
















MILCON Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1413	34	0	3956	553	0	0	477	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1702	41	0	4300	601	0	0	596	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4921			1763			3208	6664	628	5208	6384	1774
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4921			1763			3208	6664	628	5208	6384	1774
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	83
cM capacity (veh/h)	18			344			3	0	1357	0	0	70
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	681	681	381	1720	1720	1461	596	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	601	596	12				
cSH	1700	1700	1700	1700	1700	1700	1357	70				
Volume to Capacity	0.40	0.40	0.22	1.01	1.01	0.86	0.44	0.17				
Queue Length 95th (ft)	0	0	0	0	0	0	57	14				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	67.1				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	67.1				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				103.9%			ICU Level of Service		G			
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2023 Alt 3north
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	  			  		  	
Volume (veh/h)	1279	202	0	3855	0	232	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1453	230	0	4283	0	252	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1703		3036	639	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1703		3036	639	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	38	
cM capacity (veh/h)			363		10	405	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	581	581	520	1428	1428	1428	252
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	230	0	0	0	252
cSH	1700	1700	1700	1700	1700	1700	405
Volume to Capacity	0.34	0.34	0.31	0.84	0.84	0.84	0.62
Queue Length 95th (ft)	0	0	0	0	0	0	102
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.5
Lane LOS							D
Approach Delay (s)	0.0			0.0			27.5
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			89.3%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1716	1947	343	109	102	0	0	278	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4638		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4638		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1845	2094	369	147	138	0	0	320	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1070	3230	0	147	138	0	0	332	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3211		186	872			397	
v/s Ratio Prot				c0.70	0.70		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				1.02	1.01		0.79	0.16			0.84	
Uniform Delay, d1				29.2	29.2		82.7	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				31.8	17.3		20.0	0.1			14.2	
Delay (s)				61.0	46.5		102.7	56.1			96.5	
Level of Service				E	D		F	E			F	
Approach Delay (s)		0.0			50.1			80.1			96.5	
Approach LOS		A			D			F			F	
Intersection Summary												
HCM 2000 Control Delay			55.0			HCM 2000 Level of Service					D	
HCM 2000 Volume to Capacity ratio			0.97									
Actuated Cycle Length (s)			189.5			Sum of lost time (s)					16.8	
Intersection Capacity Utilization			201.0%			ICU Level of Service					H	
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	584	106	0	0	0	0	201	216	452	1599	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3250	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3250	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	635	115	0	0	0	0	234	235	491	1666	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	21	48	0	0	0
Lane Group Flow (vph)	0	636	86	0	0	0	0	302	98	491	1666	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.6	62.6	35.2	100.6	
Effective Green, g (s)		60.0	60.0					62.6	62.6	35.2	100.6	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.20	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1771	551					1181	523	701	2067	
v/s Ratio Prot								0.09		0.14	c0.47	
v/s Ratio Perm		0.13	0.05						0.07			
v/c Ratio		0.36	0.16					0.26	0.19	0.70	0.81	
Uniform Delay, d1		41.8	38.6					38.5	37.4	63.6	28.1	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.2	2.4	
Delay (s)		41.9	38.8					38.6	37.6	66.8	30.5	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.4			0.0			38.3			38.8	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		39.3				HCM 2000 Level of Service					D	
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		172.2				Sum of lost time (s)				14.4		
Intersection Capacity Utilization		201.0%				ICU Level of Service					H	
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2023 Alt 3north

Timing Plan: AM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	222	7	1194	617	0	1348
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0		5.0	
Lane Util. Factor	1.00		0.95		0.95	
Flpb, ped/bikes	1.00		0.99		1.00	
Flpb, ped/bikes	1.00		1.00		1.00	
Frt	1.00		0.95		1.00	
Flt Protected	0.95		1.00		1.00	
Satd. Flow (prot)	1591		3317		3362	
Flt Permitted	0.95		1.00		1.00	
Satd. Flow (perm)	1591		3317		3362	
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	258	8	1284	663	0	1419
RTOR Reduction (vph)	1	0	52	0	0	0
Lane Group Flow (vph)	265	0	1895	0	0	1419
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2		6	
Permitted Phases						
Actuated Green, G (s)	18.9		45.5		45.5	
Effective Green, g (s)	18.9		45.5		45.5	
Actuated g/C Ratio	0.26		0.62		0.62	
Clearance Time (s)	4.1		5.0		5.0	
Vehicle Extension (s)	3.0		3.0		3.0	
Lane Grp Cap (vph)	409		2053		2081	
v/s Ratio Prot	c0.17		c0.57		0.42	
v/s Ratio Perm						
v/c Ratio	0.65		0.92		0.68	
Uniform Delay, d1	24.3		12.4		9.2	
Progression Factor	1.00		1.00		1.00	
Incremental Delay, d2	3.5		7.5		0.9	
Delay (s)	27.8		20.0		10.2	
Level of Service	C		B		B	
Approach Delay (s)	27.8		20.0		10.2	
Approach LOS	C		B		B	
Intersection Summary						
HCM 2000 Control Delay			16.7		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.88			
Actuated Cycle Length (s)			73.5		Sum of lost time (s)	12.1
Intersection Capacity Utilization			79.3%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON Year 2023 Alt 3north

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↕	↕	↔	↔	↔
Volume (vph)	48	2	10	8	0	5	20	1415	26	40	1493	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	1.00	
Flt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1713		1770	3530		1770	3526	
Flt Permitted	0.74	0.78	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1310	1372	1583		1512		1770	3530		1770	3526	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	56	2	12	16	0	10	24	1685	31	43	1623	40
RTOR Reduction (vph)	0	0	10	0	22	0	0	1	0	0	1	0
Lane Group Flow (vph)	29	29	2	0	4	0	24	1715	0	43	1662	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.5	15.5	15.5		15.5		2.8	66.2		3.9	67.3	
Effective Green, g (s)	15.5	15.5	15.5		15.5		2.8	66.2		3.9	67.3	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.68	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	203	213	246		235		49	2343		69	2380	
v/s Ratio Prot							0.01	c0.49		c0.02	0.47	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.14	0.14	0.01		0.02		0.49	0.73		0.62	0.70	
Uniform Delay, d1	36.4	36.3	35.6		35.7		47.7	11.0		47.2	10.0	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		7.5	1.2		16.2	0.9	
Delay (s)	36.7	36.6	35.6		35.7		55.3	12.2		63.4	10.9	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		36.5			35.7			12.8			12.2	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			13.1		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.62									
Actuated Cycle Length (s)			99.7		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			62.9%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2023 Alt 3north

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	23	0	1358	8	437	1047	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	35	0	1492	9	446	1068	0
RTOR Reduction (vph)	0	0	0	0	32	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1492	4	446	1068	0
Turn Type	Split			Split	NA		NA	Perm		Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.42		c0.25	0.30	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.90	0.01	0.73	0.36	
Uniform Delay, d1					60.6			35.3	20.4	41.6	2.5	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			5.1	0.0	4.5	0.3	
Delay (s)					60.6			18.1	20.5	46.1	2.9	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			18.1			15.6	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.3			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		85.3%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2023 Alt 3north

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	54	14	1	69	135	146	1186	5	339	417	332
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3260	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3260	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	52	83	22	1	78	153	162	1318	6	390	479	382
RTOR Reduction (vph)	0	0	20	0	0	129	0	0	3	0	100	0
Lane Group Flow (vph)	52	83	2	0	79	24	162	1318	3	390	761	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1070	
v/s Ratio Prot	0.03	c0.04			c0.04		0.09	c0.37		c0.22	0.23	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.43	0.65	0.02		0.27	0.10	0.30	0.84	0.00	1.14	0.71	
Uniform Delay, d1	64.7	65.8	62.9		53.6	52.2	38.0	35.5	22.3	58.5	42.7	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.93	
Incremental Delay, d2	2.4	10.8	0.1		0.5	0.2	0.3	5.4	0.0	93.0	3.9	
Delay (s)	67.1	76.6	63.0		54.1	52.4	38.3	41.0	22.3	149.0	43.4	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		71.5			52.9			40.6			76.3	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		57.4			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		89.6%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON Year 2023 Alt 3north
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑	↘	↙	↓
Volume (veh/h)	54	206	4	106	377	9
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	64	242	5	132	410	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked	1.00					
vC, conflicting volume	901	71			138	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	898	71			138	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	71	76			72	
cM capacity (veh/h)	221	991			1446	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	306	138	420			
Volume Left	64	0	410			
Volume Right	242	132	0			
cSH	1065	1700	1446			
Volume to Capacity	0.29	0.08	0.28			
Queue Length 95th (ft)	30	0	29			
Control Delay (s)	13.5	0.0	8.3			
Lane LOS	B		A			
Approach Delay (s)	13.5	0.0	8.3			
Approach LOS	B					
Intersection Summary						
Average Delay		8.8				
Intersection Capacity Utilization		38.0%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2023 Alt 3north
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑	↘	↙	↓
Volume (vph)	57	3	1349	436	0	392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1758		3539	1520		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1758		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	76	4	1420	459	0	612
RTOR Reduction (vph)	4	0	0	140	0	0
Lane Group Flow (vph)	76	0	1420	319	0	612
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		29.3	29.3		29.3
Effective Green, g (s)	3.0		29.3	29.3		29.3
Actuated g/C Ratio	0.07		0.69	0.69		0.69
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	124		2457	1055		2457
v/s Ratio Prot	c0.04		c0.40			0.17
v/s Ratio Perm				0.21		
v/c Ratio	0.62		0.58	0.30		0.25
Uniform Delay, d1	19.0		3.3	2.5		2.4
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	8.7		0.3	0.2		0.1
Delay (s)	27.8		3.6	2.7		2.4
Level of Service	C		A	A		A
Approach Delay (s)	27.8		3.4			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.9		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.58				
Actuated Cycle Length (s)		42.2		Sum of lost time (s)	9.9	
Intersection Capacity Utilization		49.7%		ICU Level of Service	A	
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2023 Alt 3north

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↑↑
Volume (veh/h)	0	15	2209	5	5	454
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2375	5	7	668
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2726	1190			2381	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2726	1190			2381	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			96	
cM capacity (veh/h)	16	180			200	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1584	797	7	334	334
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	180	1700	1700	200	1700	1700
Volume to Capacity	0.14	0.93	0.47	0.04	0.20	0.20
Queue Length 95th (ft)	12	0	0	3	0	0
Control Delay (s)	28.3	0.0	0.0	23.7	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	28.3	0.0		0.3		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			71.2%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2023 Alt 3north

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	17	88	2121	12	38	414
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	109	2281	13	55	600
RTOR Reduction (vph)	0	3	0	1	0	0
Lane Group Flow (vph)	21	106	2281	12	55	600
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.9	26.0	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.9	20.9	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	262	308	2251	1007	82	2707
v/s Ratio Prot	0.01	c0.07	c0.64		c0.03	0.17
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.34	1.01	0.01	0.67	0.22
Uniform Delay, d1	39.3	37.2	19.5	7.1	50.3	3.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	22.3	0.0	19.4	0.0
Delay (s)	39.5	37.9	41.8	7.2	69.7	3.6
Level of Service	D	D	D	A	E	A
Approach Delay (s)	38.2		41.6			9.2
Approach LOS	D		D			A
Intersection Summary						
HCM 2000 Control Delay			34.6		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.87			
Actuated Cycle Length (s)			107.2		Sum of lost time (s)	18.1
Intersection Capacity Utilization			74.9%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2023 Alt 3north
Timing Plan: AM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement						
Lane Configurations		↑↑	↑↑↑			↑↑↑
Volume (veh/h)	0	33	2098	26	0	431
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	53	2208	27	0	582
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2513	1118			2236	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2513	1118			2236	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	74			100	
cM capacity (veh/h)	23	201			228	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	53	1472	764	291	291	
Volume Left	0	0	0	0	0	
Volume Right	53	0	27	0	0	
cSH	201	1700	1700	1700	1700	
Volume to Capacity	0.26	0.87	0.45	0.17	0.17	
Queue Length 95th (ft)	26	0	0	0	0	
Control Delay (s)	29.2	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	29.2	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			68.8%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2023 Alt 3north
Timing Plan: AM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement						
Lane Configurations		↑↑	↑↑↑	↑↑	↑↑	↑↑↑
Volume (vph)	10	7	2124	33	15	407
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	16	11	2212	34	19	502
RTOR Reduction (vph)	0	4	0	8	0	0
Lane Group Flow (vph)	16	7	2212	26	19	502
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.5	59.5	59.5	2.1	69.1
Effective Green, g (s)	1.4	3.5	59.5	59.5	2.1	69.1
Actuated g/C Ratio	0.02	0.05	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	71	2731	1221	48	3171
v/s Ratio Prot	c0.01	0.00	c0.62		c0.01	0.14
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.50	0.10	0.81	0.02	0.40	0.16
Uniform Delay, d1	37.5	35.3	5.4	2.0	36.9	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.8	0.6	1.9	0.0	5.3	0.0
Delay (s)	49.3	35.9	7.2	2.0	42.2	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	43.8		7.1			2.0
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay			6.5		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.79			
Actuated Cycle Length (s)			77.1		Sum of lost time (s)	14.1
Intersection Capacity Utilization			71.5%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

MILCON Year 2023 Alt 3north

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	46	1	0	45	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	85	2	0	71	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	87	71	3					
Volume Left (vph)	0	0	85	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	831	1121	815	839	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.3%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2023 Alt 3north

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: AM PEAK








Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	37	0	0	33	230	3	1925	51	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1354	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	49	0	0	46	319	3	2048	54	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	2	22	0	0	0
Lane Group Flow (vph)	3	49	0	0	46	263	3	2048	32	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.7	16.7			16.7	16.7	47.7	43.6	43.6			
Effective Green, g (s)	16.7	16.7			16.7	16.7	47.7	43.6	43.6			
Actuated g/C Ratio	0.23	0.23			0.23	0.23	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	306	422			422	358	1145	2093	936			
v/s Ratio Prot		0.03			0.02		0.00	c0.58				
v/s Ratio Perm	0.00					c0.17			0.02			
v/c Ratio	0.01	0.12			0.11	0.74	0.00	0.98	0.03			
Uniform Delay, d1	22.1	22.6			22.6	26.5	4.6	14.6	6.3			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	7.6	0.0	14.8	0.0			
Delay (s)	22.1	22.8			22.7	34.1	4.6	29.4	6.3			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.7			32.7			28.7			0.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay		29.2						HCM 2000 Level of Service		C		
HCM 2000 Volume to Capacity ratio		0.91										
Actuated Cycle Length (s)		73.7				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		87.0%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON Year 2023 Alt 3north

Timing Plan: AM PEAK













Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	0	1721	0	375	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	0	1793	0	475	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked				0.00			
vC, conflicting volume	1371	237	475		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1371	237	475		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	137	764	1084		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	896	896	316	158	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.53	0.53	0.19	0.09	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			50.9%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr



















MILCON Year 2023 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	421	0	39	2	1	2	26	1577	0	137	236	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3204	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3204	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	478	0	44	6	3	6	27	1660	0	0	199	342
RTOR Reduction (vph)	0	30	0	0	6	0	0	0	0	0	195	0
Lane Group Flow (vph)	478	14	0	6	3	0	27	1660	0	0	346	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	27.1	27.1		1.7	1.7		1.9	43.3			37.2	
Effective Green, g (s)	27.1	27.1		1.7	1.7		1.9	43.3			37.2	
Actuated g/C Ratio	0.31	0.31		0.02	0.02		0.02	0.50			0.43	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	552	494		34	32		38	1765			1373	
v/s Ratio Prot	c0.27	0.01		c0.00	0.00		0.02	c0.47			0.11	
v/s Ratio Perm												
v/c Ratio	0.87	0.03		0.18	0.10		0.71	0.94			0.25	
Uniform Delay, d1	28.1	20.7		41.9	41.8		42.2	20.5			15.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	13.4	0.0		2.5	1.3		47.3	10.5			0.1	
Delay (s)	41.5	20.7		44.3	43.1		89.4	31.0			16.0	
Level of Service	D	C		D	D		F	C			B	
Approach Delay (s)		39.8			43.6			31.9			16.0	
Approach LOS		D			D			C			B	
Intersection Summary												
HCM 2000 Control Delay			30.4				HCM 2000 Level of Service			C		
HCM 2000 Volume to Capacity ratio			0.95									
Actuated Cycle Length (s)			86.8				Sum of lost time (s)			18.9		
Intersection Capacity Utilization			82.0%				ICU Level of Service			D		
Analysis Period (min)			15									
c Critical Lane Group												






















NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2023 Alt 3north
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	187	14	0	1433	17	39	23	1	20	41	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5031			5076		1770	1853			1731	
Flt Permitted	0.95	1.00			1.00		0.66	1.00			0.18	
Satd. Flow (perm)	1770	5031			5076		1236	1853			307	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	9	210	16	0	1575	19	46	27	1	26	53	68
RTOR Reduction (vph)	0	5	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	9	221	0	0	1593	0	46	27	0	0	130	0
Turn Type	Prot	NA			NA	Perm	NA	NA	Perm	NA	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2061		240	360			51	
v/s Ratio Prot	c0.01	0.04			c0.31			0.01				
v/s Ratio Perm							c0.04				c0.42	
v/c Ratio	0.05	0.12			0.77		0.19	0.08			2.54	
Uniform Delay, d1	71.5	36.4			46.3		60.7	59.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			2.7		0.4	0.1			746.7	
Delay (s)	71.6	36.5			49.0		61.1	59.4			821.7	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		37.8			49.0			60.4			821.7	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay	103.5			HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio	0.89											
Actuated Cycle Length (s)	180.0			Sum of lost time (s)				21.9				
Intersection Capacity Utilization	66.5%			ICU Level of Service				C				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON Year 2023 Alt 3north
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		   		 	 							
Volume (vph)	0	206	0	956	1441	9	0	0	0	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	251	0	1017	1533	10	0	0	0	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	251	0	1017	1543	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.05		c0.30	c0.44							
v/s Ratio Perm												0.00
v/c Ratio		0.13		0.59	0.48							0.01
Uniform Delay, d1		36.6		32.0	1.3							34.9
Progression Factor		0.43		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.6	0.1							0.0
Delay (s)		15.8		32.5	1.4							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.8			13.8		0.0				35.0	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay	14.1			HCM 2000 Level of Service				B				
HCM 2000 Volume to Capacity ratio	0.56											
Actuated Cycle Length (s)	180.0			Sum of lost time (s)				21.9				
Intersection Capacity Utilization	61.8%			ICU Level of Service				B				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON Year 2023 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	17	234	0	0	128	857	0	0	0	131	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	20	279	0	0	138	922	0	0	0	144	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1059			279			923	1378	279	917	917	598
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1059			279			923	1378	279	917	917	598
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			100			100	100	100	42	100	99
cM capacity (veh/h)	658			1284			242	140	760	247	263	502

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	299	1059	0	149
Volume Left	20	0	0	144
Volume Right	0	922	0	5
cSH	658	1284	1700	251
Volume to Capacity	0.03	0.00	0.00	0.59
Queue Length 95th (ft)	2	0	0	87
Control Delay (s)	1.1	0.0	0.0	38.4
Lane LOS	A		A	E
Approach Delay (s)	1.1	0.0	0.0	38.4
Approach LOS			A	E

Intersection Summary

Average Delay	4.0			
Intersection Capacity Utilization	73.9%		ICU Level of Service	D
Analysis Period (min)	15			

NBC Coastal Campus

22: 3rd St & Palm Ave

MILCON Year 2023 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	355	4	26	962	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	413	5	28	1034	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	417	28	1060	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.03	0.53	0.02	-0.45	-0.14						
Departure Headway (s)	6.6	6.1	6.4	5.9	6.3	7.1						
Degree Utilization, x	0.01	0.71	0.05	1.74	0.33	0.09						
Capacity (veh/h)	535	574	544	616	542	451						
Control Delay (s)	8.5	21.3	8.6	352.9	12.3	10.8						
Approach Delay (s)	21.1		344.1		12.3	10.8						
Approach LOS	C		F		B	B						

Intersection Summary

Delay	221.4			
Level of Service	F			
Intersection Capacity Utilization	68.3%		ICU Level of Service	C
Analysis Period (min)	15			



















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	248	489	897	153	17	260
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	314	619	1094	187	24	366
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked	0.79				0.79	0.79
vC, conflicting volume	1280				2434	640
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	818				2282	5
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	51				0	57
cM capacity (veh/h)	635				13	848
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	314	619	729	551	390	
Volume Left	314	0	0	0	24	
Volume Right	0	0	0	187	366	
cSH	635	1700	1700	1700	175	
Volume to Capacity	0.49	0.36	0.43	0.32	2.23	
Queue Length 95th (ft)	69	0	0	0	788	
Control Delay (s)	16.1	0.0	0.0	0.0	612.2	
Lane LOS	C				F	
Approach Delay (s)	5.4		0.0		612.2	
Approach LOS					F	
Intersection Summary						
Average Delay			93.7			
Intersection Capacity Utilization			70.4%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2023 Alt 3north
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	481	16	26	891	0	74	36	81	1	21	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	1.00		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3522		1770	3539			1723			1858	1583
Flt Permitted	0.17	1.00		0.39	1.00			0.86			0.98	1.00
Satd. Flow (perm)	323	3522		723	3539			1510			1832	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	625	21	34	1157	0	112	55	123	2	36	47
RTOR Reduction (vph)	0	2	0	0	0	0	0	34	0	0	0	33
Lane Group Flow (vph)	21	644	0	34	1157	0	0	256	0	0	38	14
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	28.5	28.5		28.5	28.5			16.1			16.1	16.1
Effective Green, g (s)	28.5	28.5		28.5	28.5			16.1			16.1	16.1
Actuated g/C Ratio	0.53	0.53		0.53	0.53			0.30			0.30	0.30
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	171	1865		383	1874			451			548	473
v/s Ratio Prot		0.18			c0.33							
v/s Ratio Perm	0.07			0.05				c0.17			0.02	0.01
v/c Ratio	0.12	0.35		0.09	0.62			0.57			0.07	0.03
Uniform Delay, d1	6.4	7.3		6.2	8.8			15.9			13.5	13.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.3	0.1		0.1	0.6			1.6			0.1	0.0
Delay (s)	6.7	7.4		6.3	9.5			17.5			13.5	13.4
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)		7.4			9.4			17.5			13.4	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay	10.0			HCM 2000 Level of Service				A				
HCM 2000 Volume to Capacity ratio	0.60											
Actuated Cycle Length (s)	53.8			Sum of lost time (s)				9.2				
Intersection Capacity Utilization	55.4%			ICU Level of Service				B				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	566	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	615	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			620		615	615
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			620		615	615
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			961		455	491
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	615	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	480			
Volume to Capacity	0.36	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.6			
Lane LOS			B			
Approach Delay (s)	0.0		12.6			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			39.8%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑↑↑	↑	↑	↑	↑	↑	↑	↑
Volume (vph)	21	725	36	24	2132	44	174	38	1900	91	46	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5049		1770	5070			3325			3364	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5049		1770	5070			3325			3364	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	863	43	26	2343	48	210	46	63	111	56	30
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	903	0	26	2390	0	0	307	0	0	189	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2235		118	2160			646			654	
v/s Ratio Prot	0.01	c0.18		c0.01	c0.47			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.17	0.40		0.22	1.11			0.48			0.29	
Uniform Delay, d1	76.7	34.0		79.6	51.6			64.3			61.9	
Progression Factor	1.00	1.00		1.18	0.87			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.7	53.5			0.6			0.2	
Delay (s)	77.3	34.6		94.9	98.6			64.9			62.1	
Level of Service	E	C		F	F			E			E	
Approach Delay (s)		35.7			98.6			64.9			62.1	
Approach LOS		D			F			E			E	
Intersection Summary												
HCM 2000 Control Delay		78.8			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		79.3%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

27: Florida St & SR-75 (Palm Ave)

MILCON Year 2023 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Volume (vph)	2	961	35	20	2309	12	18	4	31	56	11	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5059		1770	5081			1687		1770	1704	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5059		1770	5081			1542		1231	1704	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	1080	39	23	2624	14	25	5	42	80	16	21
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	18	0
Lane Group Flow (vph)	2	1117	0	23	2638	0	0	44	0	80	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3476		118	3717			257		205	284	
v/s Ratio Prot	0.00	0.22		c0.01	c0.52						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.32		0.19	0.71			0.17		0.39	0.07	
Uniform Delay, d1	86.1	11.3		79.4	13.5			64.3		66.8	63.2	
Progression Factor	1.69	0.25		1.43	0.37			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.3	0.5			0.3		1.2	0.1	
Delay (s)	146.4	3.1		113.8	5.5			64.6		68.1	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.3			6.4			64.6			66.6	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.4			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		78.3%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

28: 13th St & SR-75 (Palm Ave)

MILCON Year 2023 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Volume (vph)	3	1031	65	98	2153	53	156	19	92	172	37	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5040		1770	5085	1583		1783	1583		3374	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5040		1770	5085	1583		1783	1583		3374	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1158	73	118	2594	64	175	21	103	229	49	20
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	85	0	3	0
Lane Group Flow (vph)	3	1227	0	118	2594	34	0	196	18	0	295	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		581	
v/s Ratio Prot	0.00	0.24		c0.07	c0.51			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.55		0.60	0.96	0.04		0.64	0.07		0.51	
Uniform Delay, d1	86.2	36.9		76.2	40.3	20.2		69.3	62.4		67.6	
Progression Factor	1.23	0.61		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.9		5.1	10.2	0.1		4.3	0.1		0.7	
Delay (s)	106.9	23.4		81.3	50.5	20.3		73.6	62.5		68.3	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.6			51.1			69.8			68.3	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		46.0			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		95.5%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	↰
Volume (vph)	14	1302	26	44	2285	12	16	6	49	39	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1670			1723	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.77	
Satd. Flow (perm)	1770	5070		1770	5081			1561			1374	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	15	1415	28	51	2657	14	19	7	58	51	3	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	46	0	0	22	0
Lane Group Flow (vph)	15	1442	0	51	2671	0	0	38	0	0	60	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.9		2.8	40.0			15.1			15.1	
Effective Green, g (s)	0.7	37.9		2.8	40.0			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2687		69	2842			329			290	
v/s Ratio Prot	0.01	0.28		c0.03	c0.53							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.88	0.54		0.74	0.94			0.12			0.21	
Uniform Delay, d1	35.4	11.0		34.0	14.6			22.8			23.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	159.7	0.2		33.5	7.0			0.2			0.4	
Delay (s)	195.1	11.2		67.5	21.6			23.0			23.6	
Level of Service	F	B		E	C			C			C	
Approach Delay (s)		13.1			22.5			23.0			23.6	
Approach LOS		B			C			C			C	
Intersection Summary												
HCM 2000 Control Delay		19.4			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		71.5			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		61.5%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰↰	↰	↰
Volume (vph)	93	1315	31	250	2217	220	84	74	791	241	95	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	108	1529	36	266	2359	234	93	82	879	287	113	93
RTOR Reduction (vph)	0	2	0	0	0	67	0	154	181	0	2	60
Lane Group Flow (vph)	108	1563	0	266	2359	167	93	332	294	287	120	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.5	30.7	30.7	10.4	32.6	32.6
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.5	30.7	30.7	10.4	32.6	32.6
Actuated g/C Ratio	0.05	0.30		0.15	0.41	0.41	0.07	0.26	0.26	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	177	1536		272	2062	642	129	409	397	307	491	422
v/s Ratio Prot	0.03	0.31		c0.15	c0.46		0.05	c0.21		c0.08	0.07	
v/s Ratio Perm						0.11			0.20			0.02
v/c Ratio	0.61	1.02		0.98	1.14	0.26	0.72	0.81	0.74	0.93	0.24	0.06
Uniform Delay, d1	53.9	40.4		48.9	34.5	22.9	52.6	40.0	39.1	52.5	32.2	30.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.1	27.4		47.9	71.1	0.2	17.9	11.7	7.3	34.4	0.3	0.1
Delay (s)	60.0	67.9		96.8	105.6	23.1	70.6	51.7	46.3	86.9	32.5	30.6
Level of Service	E	E		F	F	C	E	D	D	F	C	C
Approach Delay (s)		67.4			98.1			50.9			63.8	
Approach LOS		E			F			D			E	
Intersection Summary												
HCM 2000 Control Delay		78.7			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		1.03										
Actuated Cycle Length (s)		116.1			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		92.3%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2023 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕	↕↕
Volume (vph)	0	293	1232	0	159	1458
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	329	1325	0	177	1620
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	329	1325	0	177	1617
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.37		0.10	c0.58
v/s Ratio Perm						
v/c Ratio		0.12	1.14		0.86	1.06
Uniform Delay, d1		2.5	26.8		34.6	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	71.9		27.4	39.2
Delay (s)		2.5	98.7		62.1	57.2
Level of Service		A	F		E	E
Approach Delay (s)		2.5	98.7		57.7	
Approach LOS		A	F		E	
Intersection Summary						
HCM 2000 Control Delay			68.2		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			1.16			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			73.8%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)







MILCON Year 2023 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕		↕	↕↕				
Volume (vph)	0	453	0	0	449	537	887	1	147	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.96				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3250		1681	1635				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3250		1681	1635				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	521	0	0	488	584	964	1	160	0	0	0
RTOR Reduction (vph)	0	0	0	0	367	0	0	26	0	0	0	0
Lane Group Flow (vph)	0	521	0	0	705	0	569	530	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		17.5			17.5		21.7	21.7				
Effective Green, g (s)		17.5			17.5		21.7	21.7				
Actuated g/C Ratio		0.37			0.37		0.46	0.46				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1312			1204		772	751				
v/s Ratio Prot		0.15			c0.22							
v/s Ratio Perm							c0.34	0.32				
v/c Ratio		0.40			0.59		0.74	0.71				
Uniform Delay, d1		11.0			11.9		10.4	10.2				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		3.7	3.0				
Delay (s)		11.2			12.7		14.1	13.2				
Level of Service		B			B		B	B				
Approach Delay (s)		11.2			12.7		13.7				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					12.8		HCM 2000 Level of Service			B		
HCM 2000 Volume to Capacity ratio					0.67							
Actuated Cycle Length (s)					47.2		Sum of lost time (s)			8.0		
Intersection Capacity Utilization					72.1%		ICU Level of Service			C		
Analysis Period (min)					15							
c Critical Lane Group												













NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	3	4	827	97	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	1149	237	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1396	237	237			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1396	237	237			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	155	802	1331			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	1154	237			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	802	1331	1700			
Volume to Capacity	0.01	0.00	0.14			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	9.6	0.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.6	0.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			56.7%	ICU Level of Service	B	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	4159	17	0	1842	244	0	0	910	0	0	55
Sign Control	Free				Free			Stop			Stop	
Grade	0%				0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4332	18	0	1899	252	0	0	1011	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2171			4370			5097	6532	1493	3509	6415	799
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2171			4370			5097	6532	1493	3509	6415	799
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	238			30			0	0	1852	1	0	318
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1733	1733	884	760	760	631	1011	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	252	1011	83				
cSH	1700	1700	1700	1700	1700	1700	1852	318				
Volume to Capacity	1.02	1.02	0.52	0.45	0.45	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	87	26				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3	20.3				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.3	20.3				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				145.7%	ICU Level of Service		H					
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON Year 2023 Alt 3north
Timing Plan: PM PEAK

	→	↘	↙	←	↗	↖	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑↱			↑↑↑		↰	
Volume (veh/h)	3967	131	0	1879	0	205	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	4090	135	0	1957	0	250	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4245		4850	1471	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4245		4850	1471	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			34		0	112	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1636	1636	953	652	652	652	250
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	135	0	0	0	250
cSH	1700	1700	1700	1700	1700	1700	112
Volume to Capacity	0.96	0.96	0.56	0.38	0.38	0.38	2.22
Queue Length 95th (ft)	0	0	0	0	0	0	539
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	640.6
Lane LOS							F
Approach Delay (s)	0.0			0.0			640.6
Approach LOS							F
Intersection Summary							
Average Delay			24.9				
Intersection Capacity Utilization			100.9%		ICU Level of Service		G
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON Year 2023 Alt 3north
Timing Plan: PM PEAK

[illegible]

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔	
Volume (vph)	7	2113	116	0	0	0	0	380	583	762	1128	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.97	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3089	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3089	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2322	127	0	0	0	0	442	678	794	1175	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2330	98	0	0	0	0	761	324	794	1175	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					937	409	865	2022	
v/s Ratio Prot		c0.46						c0.25		c0.23	0.33	
v/s Ratio Perm			0.06						0.24			
v/c Ratio		1.27	0.17					0.81	0.79	0.92	0.58	
Uniform Delay, d1		55.8	37.9					56.4	55.9	63.7	24.1	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		124.0	0.1					5.4	10.1	14.3	0.4	
Delay (s)		179.8	38.1					61.8	65.9	78.0	24.5	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		172.5		0.0				63.1			46.1	
Approach LOS		F		A				E			D	
Intersection Summary												
HCM 2000 Control Delay		105.5		HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio		1.02										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		136.1%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔		↔↔			↔↔
Volume (vph)	177	12	1101	709	0	1296
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1584		3288			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1584		3288			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	227	15	1237	797	0	1394
RTOR Reduction (vph)	2	0	50	0	0	0
Lane Group Flow (vph)	240	0	1984	0	0	1394
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	297		2484			2540
v/s Ratio Prot	c0.15		c0.60			0.41
v/s Ratio Perm						
v/c Ratio	0.81		0.80			0.55
Uniform Delay, d1	62.3		12.0			8.2
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	14.9		2.8			0.9
Delay (s)	77.2		14.8			9.0
Level of Service	E		B			A
Approach Delay (s)	77.2		14.8			9.0
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay		16.7		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.82				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		86.5%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON Year 2023 Alt 3north

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	147	10	29	26	10	25	23	1726	50	69	1526	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3	5.3	5.3	5.3	4.2	5.3	4.2	5.3	5.3	5.3
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	0.95
Frt	1.00	1.00	0.85	0.95	0.95	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Flt Protected	0.95	0.96	1.00	0.98	0.95	1.00	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1681	1696	1583	1724	1770	3524	1770	3524	1770	3490	3490	3490
Flt Permitted	0.68	0.68	1.00	0.83	0.95	1.00	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1201	1202	1583	1459	1770	3524	1770	3524	1770	3490	3490	3490
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	188	13	37	41	16	39	25	1856	54	75	1659	170
RTOR Reduction (vph)	0	0	31	0	22	0	0	1	0	0	2	0
Lane Group Flow (vph)	100	101	6	0	74	0	25	1909	0	75	1827	0
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Prot	NA	Prot	NA	NA
Protected Phases	4	4	4	4	4	5	2	1	6	6	6	6
Permitted Phases	4	4	4	4	4	5	2	1	6	6	6	6
Actuated Green, G (s)	19.1	19.1	19.1	19.1	19.1	3.1	71.9	8.1	76.9	8.1	76.9	76.9
Effective Green, g (s)	19.1	19.1	19.1	19.1	19.1	3.1	71.9	8.1	76.9	8.1	76.9	76.9
Actuated g/C Ratio	0.17	0.17	0.17	0.17	0.17	0.03	0.63	0.07	0.68	0.07	0.68	0.68
Clearance Time (s)	5.3	5.3	5.3	5.3	5.3	4.2	5.3	4.2	5.3	4.2	5.3	5.3
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	201	201	265	244	48	2224	125	2356	125	2356	2356	2356
v/s Ratio Prot	0.08	c0.08	0.00	0.05	0.05	0.01	c0.54	c0.04	0.52	c0.04	0.52	0.52
v/s Ratio Perm	0.50	0.50	0.02	0.30	0.30	0.52	0.86	0.60	0.78	0.60	0.78	0.78
v/c Ratio	0.50	0.50	0.02	0.30	0.30	0.52	0.86	0.60	0.78	0.60	0.78	0.78
Uniform Delay, d1	43.0	43.1	39.6	41.6	54.7	16.9	51.3	12.6	51.3	12.6	51.3	51.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.9	2.0	0.0	0.7	9.8	3.5	7.5	1.7	7.5	1.7	7.5	7.5
Delay (s)	45.0	45.1	39.6	42.2	64.5	20.4	58.9	14.3	58.9	14.3	58.9	58.9
Level of Service	D	D	D	D	E	C	E	B	E	B	E	E
Approach Delay (s)	44.2	44.2	42.2	42.2	21.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Approach LOS	D	D	D	D	C	B	B	B	B	B	B	B
Intersection Summary												
HCM 2000 Control Delay	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5
HCM 2000 Volume to Capacity ratio	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Actuated Cycle Length (s)	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9
Intersection Capacity Utilization	77.1%	77.1%	77.1%	77.1%	77.1%	77.1%	77.1%	77.1%	77.1%	77.1%	77.1%	77.1%
Analysis Period (min)	15	15	15	15	15	15	15	15	15	15	15	15
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON Year 2023 Alt 3north

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	0	0	0	8	0	148	0	1527	0	33	1668	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6	4.6	4.6	4.6	5.5	4.2	5.5	4.2	5.5	5.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	0.95
Frt	0.87	0.87	0.87	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00
Flt Protected	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Satd. Flow (prot)	1620	1620	1620	1620	1620	1620	3539	1770	3539	1770	3539	3539
Flt Permitted	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1620	1620	1620	1620	1620	1620	3539	1770	3539	1770	3539	3539
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	12	0	214	0	1624	0	35	1794	0
RTOR Reduction (vph)	0	0	0	0	174	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	52	0	0	1624	0	35	1794	0
Turn Type	Split	Split	Split	NA	NA	NA	Perm	Prot	NA	Prot	NA	NA
Protected Phases	3	3	3	4	4	2	1	6	6	6	6	6
Permitted Phases	3	3	3	4	4	2	1	6	6	6	6	6
Actuated Green, G (s)	14.0	14.0	14.0	14.0	14.0	45.1	1.7	51.0	1.7	51.0	1.7	51.0
Effective Green, g (s)	14.0	14.0	14.0	14.0	14.0	45.1	1.7	51.0	1.7	51.0	1.7	51.0
Actuated g/C Ratio	0.19	0.19	0.19	0.19	0.19	0.60	0.02	0.68	0.02	0.68	0.02	0.68
Clearance Time (s)	4.6	4.6	4.6	4.6	4.6	5.5	4.2	5.5	4.2	5.5	4.2	5.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	301	301	301	301	301	2125	40	2403	40	2403	40	2403
v/s Ratio Prot	c0.03	c0.03	c0.03	c0.03	c0.03	0.46	0.02	c0.51	0.02	c0.51	0.02	c0.51
v/s Ratio Perm	0.17	0.17	0.17	0.17	0.17	0.76	0.88	0.75	0.76	0.88	0.75	0.75
v/c Ratio	0.17	0.17	0.17	0.17	0.17	0.76	0.88	0.75	0.76	0.88	0.75	0.75
Uniform Delay, d1	25.7	25.7	25.7	25.7	25.7	11.1	36.6	7.8	11.1	36.6	7.8	7.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.3	0.3	0.3	0.3	1.7	93.6	1.3	1.7	93.6	1.3	1.3
Delay (s)	26.0	26.0	26.0	26.0	26.0	12.8	130.2	9.1	12.8	130.2	9.1	9.1
Level of Service	C	C	C	C	C	B	F	A	B	F	A	A
Approach Delay (s)	0.0	0.0	0.0	26.0	26.0	12.8	11.5	11.5	12.8	11.5	11.5	11.5
Approach LOS	A	A	A	C	C	B	B	B	B	B	B	B
Intersection Summary												
HCM 2000 Control Delay	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9
HCM 2000 Volume to Capacity ratio	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Actuated Cycle Length (s)	75.1	75.1	75.1	75.1	75.1	18.9	18.9	18.9	18.9	18.9	18.9	18.9
Intersection Capacity Utilization	64.1%	64.1%	64.1%	64.1%	64.1%	64.1%	64.1%	64.1%	64.1%	64.1%	64.1%	64.1%
Analysis Period (min)	15	15	15	15	15	15	15	15	15	15	15	15
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON Year 2023 Alt 3north

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	318	55	128	7	75	466	29	754	2	154	1473	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1514		1855	1509	1770	3539	1343	1770	3511	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1514		1855	1509	1770	3539	1343	1770	3511	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	418	72	168	8	82	507	32	829	2	164	1567	74
RTOR Reduction (vph)	0	0	137	0	0	195	0	0	1	0	2	0
Lane Group Flow (vph)	418	72	31	0	90	312	32	829	1	164	1639	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.6	27.6	27.6		27.6	27.6	4.0	55.2	55.2	18.3	69.5	
Effective Green, g (s)	27.6	27.6	27.6		27.6	27.6	4.0	55.2	55.2	18.3	69.5	
Actuated g/C Ratio	0.19	0.19	0.19		0.19	0.19	0.03	0.37	0.37	0.12	0.47	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	329	347	282		345	281	47	1319	500	218	1647	
v/s Ratio Prot	c0.24	0.04			0.05		0.02	0.23		c0.09	c0.47	
v/s Ratio Perm			0.02			c0.21		0.00				
v/c Ratio	1.27	0.21	0.11		0.26	1.11	0.68	0.63	0.00	0.75	1.00	
Uniform Delay, d1	60.2	51.0	50.1		51.5	60.2	71.4	38.1	29.2	62.7	39.1	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	143.5	0.3	0.2		0.4	86.3	33.6	2.3	0.0	13.6	21.0	
Delay (s)	203.8	51.3	50.2		51.9	146.5	105.0	40.3	29.2	76.3	60.2	
Level of Service	F	D	D		D	F	F	D	C	E	E	
Approach Delay (s)		147.9			132.3			42.7			61.6	
Approach LOS		F			F			D			E	
Intersection Summary												
HCM 2000 Control Delay		82.7								F		
HCM 2000 Volume to Capacity ratio		1.08										
Actuated Cycle Length (s)		148.1				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		83.8%				ICU Level of Service		E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON Year 2023 Alt 3north

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	345	543	3	71	195	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	383	603	4	100	222	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915				600
pX, platoon unblocked						
vC, conflicting volume	501	54			104	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	501	54			104	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	15	40			85	
cM capacity (veh/h)	451	1013			1487	
Direction, Lane #						
Volume Total	987	104	225			
Volume Left	383	0	222			
Volume Right	603	100	0			
cSH	842	1700	1487			
Volume to Capacity	1.17	0.06	0.15			
Queue Length 95th (ft)	758	0	13			
Control Delay (s)	109.3	0.0	7.7			
Lane LOS	F		A			
Approach Delay (s)	109.3	0.0	7.7			
Approach LOS	F					
Intersection Summary						
Average Delay		83.3				
Intersection Capacity Utilization		44.8%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON Year 2023 Alt 3north

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	347	8	791	74	0	1604
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	439	10	879	82	0	1802
RTOR Reduction (vph)	1	0	0	47	0	0
Lane Group Flow (vph)	448	0	879	35	0	1802
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.25		0.25			c0.51
v/s Ratio Perm				0.02		
v/c Ratio	0.53		0.58	0.06		1.19
Uniform Delay, d1	19.3		22.7	17.5		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.7		0.5	0.0		90.5
Delay (s)	20.0		23.3	17.5		120.4
Level of Service	B		C	B		F
Approach Delay (s)	20.0		22.8			120.4
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay		77.2		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		0.84				
Actuated Cycle Length (s)		105.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		94.3%		ICU Level of Service		F
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON Year 2023 Alt 3north

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Volume (veh/h)	4	7	673	3	15	1566
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	14	783	3	16	1721
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1678	393			786	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1678	393			786	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	90	98			98	
cM capacity (veh/h)	84	606			829	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	22	522	264	16	860	860
Volume Left	8	0	0	16	0	0
Volume Right	14	0	3	0	0	0
cSH	186	1700	1700	829	1700	1700
Volume to Capacity	0.12	0.31	0.16	0.02	0.51	0.51
Queue Length 95th (ft)	10	0	0	2	0	0
Control Delay (s)	26.9	0.0	0.0	9.4	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	26.9	0.0		0.1		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			53.3%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON Year 2023 Alt 3north

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	30	58	618	12	104	1466
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	33	63	702	14	114	1611
RTOR Reduction (vph)	0	45	0	7	0	0
Lane Group Flow (vph)	33	18	702	7	114	1611
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	11.3	23.2	27.8	27.8	6.8	43.4
Effective Green, g (s)	11.3	18.1	27.8	27.8	6.8	43.4
Actuated g/C Ratio	0.18	0.28	0.43	0.43	0.11	0.68
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	312	447	1537	687	188	2399
v/s Ratio Prot	c0.02	0.01	0.20		0.06	c0.46
v/s Ratio Perm			0.00			
v/c Ratio	0.11	0.04	0.46	0.01	0.61	0.67
Uniform Delay, d1	22.1	16.6	12.8	10.3	27.3	6.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.2	0.0	5.4	0.8
Delay (s)	22.3	16.7	13.0	10.3	32.8	6.8
Level of Service	C	B	B	B	C	A
Approach Delay (s)	18.6		12.9			8.6
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			10.2		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.66			
Actuated Cycle Length (s)			64.0		Sum of lost time (s)	18.1
Intersection Capacity Utilization			52.4%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON Year 2023 Alt 3north

Timing Plan: PM PEAK







	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↕	↕			↕
Volume (veh/h)	0	23	608	18	0	1496
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	31	699	21	0	1626
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1522	360			720	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1522	360			720	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	109	637			878	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	31	466	254	813	813	
Volume Left	0	0	0	0	0	
Volume Right	31	0	21	0	0	
cSH	637	1700	1700	1700	1700	
Volume to Capacity	0.05	0.27	0.15	0.48	0.48	
Queue Length 95th (ft)	4	0	0	0	0	
Control Delay (s)	10.9	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.9	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			44.7%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON Year 2023 Alt 3north

Timing Plan: PM PEAK








Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	30	26	601	18	23	1471
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	42	36	639	19	25	1616
RTOR Reduction (vph)	0	32	0	8	0	0
Lane Group Flow (vph)	42	4	639	11	25	1616
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	5.7	26.9	26.9	3.1	37.5
Effective Green, g (s)	2.6	5.7	26.9	26.9	3.1	37.5
Actuated g/C Ratio	0.06	0.12	0.58	0.58	0.07	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	98	193	2038	911	117	2841
v/s Ratio Prot	c0.02	0.00	0.18		0.01	c0.46
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.43	0.02	0.31	0.01	0.21	0.57
Uniform Delay, d1	21.3	18.0	5.1	4.2	20.6	1.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.0	0.1	0.0	0.9	0.3
Delay (s)	24.3	18.1	5.2	4.2	21.6	1.9
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.5		5.2			2.2
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.7		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.69			
Actuated Cycle Length (s)			46.7		Sum of lost time (s)	14.1
Intersection Capacity Utilization			51.6%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON Year 2023 Alt 3north

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	11	14	86	8	0	182	13	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	11	15	112	10	0	204	15	0	0
Direction, Lane #										
Volume Total (vph)	11	15	122	219						
Volume Left (vph)	0	0	112	0						
Volume Right (vph)	0	15	0	15						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.19						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus

MILCON Year 2023 Alt 3north

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

Timing Plan: PM PEAK














Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑		↰	↑	↰	↰	↑	↰			
Volume (vph)	10	188	0	0	83	140	12	521	70	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1295	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	11	214	0	0	95	161	13	573	77	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	124	0	42	0	0	0	0
Lane Group Flow (vph)	11	214	0	0	95	37	13	573	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.5	8.5			8.5	8.5	18.1	18.1	18.1			
Effective Green, g (s)	8.5	8.5			8.5	8.5	18.1	18.1	18.1			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.45	0.45	0.45			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	275	395			395	336	800	1601	716			
v/s Ratio Prot		c0.11			0.05		0.01	c0.16				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.54			0.24	0.11	0.02	0.36	0.05			
Uniform Delay, d1	12.5	14.0			13.1	12.7	6.0	7.2	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.5			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.6	15.5			13.4	12.8	6.0	7.3	6.2			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.0		7.1			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.1			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.42										
Actuated Cycle Length (s)		40.0			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		42.7%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON Year 2023 Alt 3north

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

Timing Plan: PM PEAK

							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	0	668	0	1642	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	0	0	759	0	1824	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2204	912	1824		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2204	912	1824		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	100		0		
cM capacity (veh/h)	38	276	331		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	0	380	380	1216	608	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.22	0.22	0.72	0.36	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	0.0	0.0			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			48.7%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON Year 2023 Alt 3north

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↖	→	↗	↖	→	↗	↖	→	↗	↖	→	↗
Lane Configurations	↖	↖		↖	↖		↖	↖		↖	↖	↖
Volume (vph)	277	0	69	1	1	0	74	332	12	1	1142	244
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3521		1770	3446	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3521		1770	3446	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	369	0	92	2	2	0	81	365	13	1	1269	271
RTOR Reduction (vph)	0	68	0	0	0	0	0	2	0	0	15	0
Lane Group Flow (vph)	369	24	0	2	2	0	81	376	0	1	1525	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	24.7	24.7		0.8	0.8		5.7	48.6		0.8	43.7	
Effective Green, g (s)	24.7	24.7		0.8	0.8		5.7	48.6		0.8	43.7	
Actuated g/C Ratio	0.26	0.26		0.01	0.01		0.06	0.52		0.01	0.47	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	466	416		15	15		107	1824		15	1605	
v/s Ratio Prot	c0.21	0.02		c0.00	0.00		c0.05	0.11		0.00	c0.44	
v/s Ratio Perm												
v/c Ratio	0.79	0.06		0.13	0.13		0.76	0.21		0.07	0.95	
Uniform Delay, d1	32.2	25.8		46.2	46.2		43.4	12.2		46.1	24.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	8.9	0.1		4.0	4.0		25.9	0.1		1.9	12.6	
Delay (s)	41.1	25.9		50.2	50.2		69.2	12.2		48.0	36.6	
Level of Service	D	C		D	D		E	B		D	D	
Approach Delay (s)	38.1			50.2			22.3			36.6		
Approach LOS	D			D			C			D		
Intersection Summary												
HCM 2000 Control Delay		34.2							C			
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		93.8				Sum of lost time (s)		18.9				
Intersection Capacity Utilization		77.4%				ICU Level of Service		D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON Year 2023 Alt 3north

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↖	→	↗	↖	→	↗	↖	→	↗	↖	→	↗
Lane Configurations	↖	↖		↖	↖		↖	↖		↖	↖	↖
Volume (vph)	58	1097	60	0	370	35	13	40		4	24	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6				5.6
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00				1.00
Flt	1.00	0.99			0.99		1.00	0.99				0.96
Flt Protected	0.95	1.00			1.00		0.95	1.00				0.98
Satd. Flow (prot)	1770	5046			5020		1770	1836				1759
Flt Permitted	0.95	1.00			1.00		0.70	1.00				0.16
Satd. Flow (perm)	1770	5046			5020		1308	1836				284
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	66	1247	68	0	394	37	19	57	6	28	31	25
RTOR Reduction (vph)	0	3	0	0	6	0	0	2	0	0	8	0
Lane Group Flow (vph)	66	1312	0	0	425	0	19	61	0	0	76	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1909			2038		254	357			47	
v/s Ratio Prot	c0.04	c0.26			c0.08			c0.03				
v/s Ratio Perm							0.01				c0.27	
v/c Ratio	0.34	0.69			0.21		0.07	0.17			1.61	
Uniform Delay, d1	73.9	47.0			34.7		59.3	60.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	2.0			0.2		0.1	0.2			353.1	
Delay (s)	74.9	49.0			34.9		59.4	60.6			428.1	
Level of Service	E	D			C		E	E			F	
Approach Delay (s)	50.3				34.9		60.3				428.1	
Approach LOS	D				C		E				F	
Intersection Summary												
HCM 2000 Control Delay		63.4							E			
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		67.8%				ICU Level of Service		C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON Year 2023 Alt 3north

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑
Volume (vph)	0	1127	0	646	408	38	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3494							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3494							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1266	0	687	434	40	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1266	0	687	474	0	0	0	0	0	0	3
Turn Type	NA			Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3175							609
v/s Ratio Prot		c0.25		c0.20	c0.14							
v/s Ratio Perm												0.00
v/c Ratio		0.66		0.36	0.15							0.00
Uniform Delay, d1		46.3		21.8	0.9							34.8
Progression Factor		0.18		1.00	1.00							1.00
Incremental Delay, d2		1.3		0.1	0.0							0.0
Delay (s)		9.8		21.9	0.9							34.9
Level of Service		A		C	A							C
Approach Delay (s)		9.8			13.3		0.0				34.9	
Approach LOS		A			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		11.6				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.51										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		49.4%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave




















MILCON Year 2023 Alt 3north

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	5	213	0	0	307	226	0	0	0	849	0	16
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	6	248	0	0	349	257	0	0	0	1286	0	24
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	606			248			761	865	248	737	737	477
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	606			248			761	865	248	737	737	477
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	0	100	96
cM capacity (veh/h)	972			1318			307	290	791	333	344	588
Direction, Lane #												
Volume Total	253	606	0	1311								
Volume Left	6	0	0	1286								
Volume Right	0	257	0	24								
cSH	972	1318	1700	336								
Volume to Capacity	0.01	0.00	0.00	3.91								
Queue Length 95th (ft)	0	0	0	Err								
Control Delay (s)	0.3	0.0	0.0	Err								
Lane LOS	A			A	F							
Approach Delay (s)	0.3	0.0	0.0	Err								
Approach LOS				A	F							
Intersection Summary												
Average Delay		6039.7										
Intersection Capacity Utilization		84.6%				ICU Level of Service		E				
Analysis Period (min)		15										











NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON Year 2023 Alt 3north
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	1040	12	85	507	24	14	38	68	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	1333	15	96	570	27	25	67	119	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	1349	96	597	211	161						
Volume Left (vph)	9	0	96	0	25	61						
Volume Right (vph)	0	15	0	27	119	28						
Hadj (s)	0.53	0.03	0.53	0.00	-0.28	0.00						
Departure Headway (s)	7.6	7.1	7.5	7.0	7.6	8.1						
Degree Utilization, x	0.02	2.67	0.20	1.16	0.44	0.36						
Capacity (veh/h)	460	518	471	520	454	429						
Control Delay (s)	9.6	772.0	11.2	115.9	16.4	15.5						
Approach Delay (s)	767.0		101.4		16.4	15.5						
Approach LOS	F		F		C	C						
Intersection Summary												
Delay			461.5									
Level of Service			F									
Intersection Capacity Utilization			79.9%		ICU Level of Service				D			
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON Year 2023 Alt 3north
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	262	981	596	39	53	189
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	270	1011	693	45	62	222
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	738				2267	369
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	738				2267	369
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	69				0	65
cM capacity (veh/h)	864				24	628
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	270	1011	462	276	285	
Volume Left	270	0	0	0	62	
Volume Right	0	0	0	45	222	
cSH	864	1700	1700	1700	95	
Volume to Capacity	0.31	0.59	0.27	0.16	3.00	
Queue Length 95th (ft)	34	0	0	0	Err	
Control Delay (s)	11.1	0.0	0.0	0.0	Err	
Lane LOS	B				F	
Approach Delay (s)	2.3		0.0		Err	
Approach LOS					F	
Intersection Summary						
Average Delay			1236.6			
Intersection Capacity Utilization			72.9%	ICU Level of Service		C
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↱		↰	↰↱			↱		↰	↰↱	↱
Volume (vph)	28	983	37	31	597	3	57	19	22	12	41	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3520		1770	3537			1755			1842	1583
Flt Permitted	0.40	1.00		0.18	1.00			0.78			0.91	1.00
Satd. Flow (perm)	747	3520		327	3537			1410			1703	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	1170	44	34	656	3	70	23	27	16	54	39
RTOR Reduction (vph)	0	3	0	0	0	0	0	17	0	0	0	30
Lane Group Flow (vph)	33	1211	0	34	659	0	0	103	0	0	70	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	23.1	23.1		23.1	23.1			9.3			9.3	9.3
Effective Green, g (s)	23.1	23.1		23.1	23.1			9.3			9.3	9.3
Actuated g/C Ratio	0.56	0.56		0.56	0.56			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	414	1954		181	1964			315			380	353
v/s Ratio Prot		c0.34			0.19							
v/s Ratio Perm	0.04			0.10				c0.07			0.04	0.01
v/c Ratio	0.08	0.62		0.19	0.34			0.33			0.18	0.02
Uniform Delay, d1	4.3	6.3		4.6	5.1			13.5			13.1	12.6
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.6		0.5	0.1			0.6			0.2	0.0
Delay (s)	4.4	6.9		5.1	5.2			14.1			13.3	12.6
Level of Service	A	A		A	A			B			B	B
Approach Delay (s)		6.8			5.2			14.1			13.1	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM 2000 Control Delay		7.0			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.54										
Actuated Cycle Length (s)		41.6			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		48.2%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↰			↰	↰
Volume (veh/h)	1031	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1257	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			1267		1257	1257
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1267		1257	1257
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		95	99
cM capacity (veh/h)			548		189	209
Direction, Lane #						
Volume Total	1257	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	193			
Volume to Capacity	0.74	0.01	0.06			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.0	0.0	24.8			
Lane LOS			C			
Approach Delay (s)	0.0		24.8			
Approach LOS			C			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			64.3%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	42	1966	135	59	933	133	101	91	63	176	81	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5036		1770	4990			3342			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5036		1770	4990			3342			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	45	2091	144	60	942	134	111	100	69	198	91	29
RTOR Reduction (vph)	0	4	0	0	10	0	0	18	0	0	4	0
Lane Group Flow (vph)	45	2231	0	60	1066	0	0	262	0	0	314	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2006		196	1987			649			658	
v/s Ratio Prot	0.03	c0.44		c0.03	0.21			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.23	1.11		0.31	0.54			0.40			0.48	
Uniform Delay, d1	73.0	54.1		73.6	41.4			63.4			64.4	
Progression Factor	1.00	1.00		1.22	0.85			1.00			1.00	
Incremental Delay, d2	0.6	58.1		0.8	1.0			0.4			0.5	
Delay (s)	73.6	112.3		90.9	36.4			63.8			64.9	
Level of Service	E	F		F	D			E			E	
Approach Delay (s)		111.5			39.3			63.8			64.9	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		84.1			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		119.1%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	20	2254	58	49	1347	56	21	11	35	64	13	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5066		1770	5055			1704		1770	1719	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.62	1.00	
Satd. Flow (perm)	1770	5066		1770	5055			1554		1156	1719	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2300	59	51	1389	58	25	13	42	75	15	16
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	14	0
Lane Group Flow (vph)	20	2358	0	51	1445	0	0	57	0	75	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3563		157	3667			191		142	212	
v/s Ratio Prot	0.01	c0.47		c0.03	c0.29						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.66		0.32	0.39			0.30		0.53	0.08	
Uniform Delay, d1	79.3	14.8		76.9	9.5			71.8		74.0	69.9	
Progression Factor	1.45	0.18		1.55	0.27			1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		1.0	0.3			0.9		3.5	0.2	
Delay (s)	115.3	2.8		120.1	2.8			72.7		77.5	70.0	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.8			6.8			72.7			75.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.1			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		64.6%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰		↰↰	
Volume (vph)	27	2129	210	160	1421	83	133	41	130	157	45	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5017		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5017		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	29	2265	223	165	1465	86	145	45	141	212	61	27
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	117	0	4	0
Lane Group Flow (vph)	29	2481	0	165	1465	49	0	190	24	0	296	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2221		192	2364	736		305	269		575	
v/s Ratio Prot	0.02	c0.49		c0.09	c0.29			c0.11			c0.09	
v/s Ratio Perm						0.03			0.02			
v/c Ratio	0.18	1.12		0.86	0.62	0.07		0.62	0.09		0.51	
Uniform Delay, d1	76.0	50.1		78.8	36.2	26.6		69.3	62.9		67.9	
Progression Factor	0.99	1.05		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.4	58.2		29.6	1.2	0.2		9.2	0.7		3.3	
Delay (s)	75.8	111.1		108.5	37.4	26.8		78.5	63.5		71.1	
Level of Service	E	F		F	D	C		E	E		E	
Approach Delay (s)		110.7			43.7			72.1			71.1	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		82.0			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		109.7%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰	↰		↰↰	
Volume (vph)	10	2259	50	174	1726	16	40	9	83	24	11	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5069		1770	5078			1679			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.83	
Satd. Flow (perm)	1770	5069		1770	5078			1512			1496	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	11	2510	56	183	1817	17	47	11	98	30	14	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	78	0	0	11	0
Lane Group Flow (vph)	11	2564	0	183	1833	0	0	78	0	0	47	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.3			17.3	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.3			17.3	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2417		234	3046			309			306	
v/s Ratio Prot	0.01	c0.51		c0.10	0.36							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.69	1.06		0.78	0.60			0.25			0.15	
Uniform Delay, d1	41.7	22.1		35.5	10.6			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	80.1	37.0		15.5	0.3			0.4			0.2	
Delay (s)	121.8	59.1		51.0	10.9			28.6			27.8	
Level of Service	F	E		D	B			C			C	
Approach Delay (s)		59.4			14.6			28.6			27.8	
Approach LOS		E			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		39.2			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		84.5			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		75.9%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON Year 2023 Alt 3north

Timing Plan: PM PEAK







	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Volume (vph)	193	2192	34	336	1733	569	69	182	547	603	245	233
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5074		1770	5085	1583	1770	1632	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	203	2307	36	361	1863	612	73	194	582	655	266	253
RTOR Reduction (vph)	0	1	0	0	0	82	0	26	279	0	2	126
Lane Group Flow (vph)	203	2342	0	361	1863	530	73	378	93	655	289	102
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.2	38.2	11.8	41.3	41.3
Effective Green, g (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.2	38.2	11.8	41.3	41.3
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1202		519	2320	722	100	406	375	264	470	405
v/s Ratio Prot	0.06	c0.46		c0.20	c0.37		0.04	c0.23		c0.19	c0.17	
v/s Ratio Perm					0.33			0.06				0.07
v/c Ratio	0.80	1.95		0.70	0.80	0.73	0.73	0.93	0.25	2.48	0.61	0.25
Uniform Delay, d1	69.8	58.4		48.0	35.7	34.0	71.1	56.2	46.0	70.7	49.0	43.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.7	429.9		4.0	2.1	3.9	23.2	28.2	0.3	677.7	2.4	0.3
Delay (s)	85.4	488.4		52.1	37.8	37.9	94.3	84.4	46.3	748.4	51.4	44.2
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		456.3			39.7			68.6			438.9	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		249.5			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.29										
Actuated Cycle Length (s)		153.2			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		133.4%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON Year 2023 Alt 3north

Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↑	↑↑↑
Volume (vph)	0	531	899	0	451	1744
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	597	956	0	496	1916
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	597	956	0	496	1913
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.17	c0.27		0.28	c0.69
v/s Ratio Perm						
v/c Ratio		0.33	1.11		0.75	1.08
Uniform Delay, d1		11.8	30.3		21.7	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	67.1		4.6	45.5
Delay (s)		11.9	97.4		26.3	60.0
Level of Service		B	F		C	E
Approach Delay (s)		11.9	97.4		53.1	
Approach LOS		B	F		D	
Intersection Summary						
HCM 2000 Control Delay		57.6		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		1.16				
Actuated Cycle Length (s)		80.0		Sum of lost time (s)		14.2
Intersection Capacity Utilization		90.4%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	975	0	0	542	257	467	2	110	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1618				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1618				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1016	0	0	609	289	502	2	118	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	31	0	0	0	0
Lane Group Flow (vph)	0	1016	0	0	800	0	316	275	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.7			19.7		14.9	14.9				
Effective Green, g (s)		19.7			19.7		14.9	14.9				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1636			1557		587	565				
v/s Ratio Prot		0.29			0.24							
v/s Ratio Perm							0.19	0.17				
v/c Ratio		0.62			0.51		0.54	0.49				
Uniform Delay, d1		8.6			8.1		11.1	10.9				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.7			0.3		1.0	0.7				
Delay (s)		9.4			8.4		12.0	11.5				
Level of Service		A			A		B	B				
Approach Delay (s)		9.4			8.4		11.8				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		9.6			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		42.6			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		50.0%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												
















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	191	789	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	208	1143	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1368	1143	1143			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1368	1143	1143			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	93	99			
cM capacity (veh/h)	159	243	611			
Direction, Lane #						
Volume Total	16	216	1143			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	243	611	1700			
Volume to Capacity	0.07	0.01	0.67			
Queue Length 95th (ft)	5	1	0			
Control Delay (s)	20.8	0.6	0.0			
Lane LOS	C	A				
Approach Delay (s)	20.8	0.6	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		51.5%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St







MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1397	34	0	3792	552	0	0	476	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1683	41	0	4122	600	0	0	595	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4742			1744			3130	6465	622	5023	6186	1714
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4742			1744			3130	6465	622	5023	6186	1714
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	84
cM capacity (veh/h)	21			350			4	0	1354	0	0	77
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	673	673	378	1649	1649	1424	595	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	600	595	12				
cSH	1700	1700	1700	1700	1700	1700	1354	77				
Volume to Capacity	0.40	0.40	0.22	0.97	0.97	0.84	0.44	0.16				
Queue Length 95th (ft)	0	0	0	0	0	0	57	13				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	60.5				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	60.5				
Approach LOS							A	F				
Intersection Summary												
Average Delay	0.9											
Intersection Capacity Utilization	100.7%			ICU Level of Service					G			
Analysis Period (min)	15											

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑↑↑			↑↑↑↑↑		↑↑	
Volume (veh/h)	1258	201	0	3692	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1430	228	0	4102	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1678		2951	631	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1678		2951	631	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	39	
cM capacity (veh/h)			372		11	410	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	572	572	514	1367	1367	1367	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	228	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	410
Volume to Capacity	0.34	0.34	0.30	0.80	0.80	0.80	0.61
Queue Length 95th (ft)	0	0	0	0	0	0	99
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	26.7
Lane LOS							D
Approach Delay (s)	0.0			0.0			26.7
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			86.2%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1558	1943	342	105	102	0	0	277	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4640		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4640		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1675	2089	368	142	138	0	0	318	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1022	3102	0	142	138	0	0	330	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.6			21.4	
Effective Green, g (s)				131.2	131.2		20.0	46.6			21.4	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1054	3214		186	870			396	
v/s Ratio Prot				c0.67	0.67		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.97	0.97		0.76	0.16			0.83	
Uniform Delay, d1				27.2	27.0		82.4	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				20.4	9.2		16.8	0.1			14.0	
Delay (s)				47.7	36.1		99.2	56.1			96.3	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			39.0			78.0			96.3	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		45.3		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		189.4		Sum of lost time (s)						16.8		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	583	64	0	0	0	0	197	198	450	1441	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3262	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3262	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	634	70	0	0	0	0	229	215	489	1501	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	18	49	0	0	0
Lane Group Flow (vph)	0	635	41	0	0	0	0	288	89	489	1501	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1178	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.42	
v/s Ratio Perm		0.12	0.03						0.06			
v/c Ratio		0.36	0.07					0.24	0.17	0.69	0.73	
Uniform Delay, d1		41.5	37.2					38.4	37.3	63.2	25.9	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.3	
Delay (s)		41.6	37.3					38.5	37.5	66.2	27.3	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.2			36.8	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.0		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)						14.4		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖↗		↕		↖↗	
Volume (vph)	209	6	1103	580	0	1068
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0		5.0	
Lane Util. Factor	1.00		0.95		0.95	
Flpb, ped/bikes	1.00		0.99		1.00	
Flpb, ped/bikes	1.00		1.00		1.00	
Frt	1.00		0.95		1.00	
Frt Protected	0.95		1.00		1.00	
Satd. Flow (prot)	1592		3315		3362	
Frt Permitted	0.95		1.00		1.00	
Satd. Flow (perm)	1592		3315		3362	
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	243	7	1186	624	0	1124
RTOR Reduction (vph)	2	0	54	0	0	0
Lane Group Flow (vph)	248	0	1756	0	0	1124
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2		6	
Permitted Phases						
Actuated Green, G (s)	16.6		42.2		42.2	
Effective Green, g (s)	16.6		42.2		42.2	
Actuated g/C Ratio	0.24		0.62		0.62	
Clearance Time (s)	4.1		5.0		5.0	
Vehicle Extension (s)	3.0		3.0		3.0	
Lane Grp Cap (vph)	389		2060		2089	
v/s Ratio Prot	c0.16		c0.53		0.33	
v/s Ratio Perm						
v/c Ratio	0.64		0.85		0.54	
Uniform Delay, d1	23.0		10.3		7.3	
Progression Factor	1.00		1.00		1.00	
Incremental Delay, d2	3.4		3.6		0.3	
Delay (s)	26.4		14.0		7.6	
Level of Service	C		B		A	
Approach Delay (s)	26.4		14.0		7.6	
Approach LOS	C		B		A	
Intersection Summary						
HCM 2000 Control Delay			12.7		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.83			
Actuated Cycle Length (s)			67.9		Sum of lost time (s)	12.1
Intersection Capacity Utilization			75.2%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Volume (vph)	45	2	9	7	0	5	18	1310	25	38	1204	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1708		1770	3529		1770	3524	
Frt Permitted	0.74	0.78	1.00		0.87		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1312	1384	1583		1525		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	52	2	10	14	0	10	21	1560	30	41	1309	38
RTOR Reduction (vph)	0	0	8	0	20	0	0	1	0	0	1	0
Lane Group Flow (vph)	27	27	2	0	4	0	21	1589	0	41	1346	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	14.8	14.8	14.8		14.8		2.5	59.9		4.0	61.4	
Effective Green, g (s)	14.8	14.8	14.8		14.8		2.5	59.9		4.0	61.4	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.65		0.04	0.66	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	209	220	252		243		47	2277		76	2331	
v/s Ratio Prot							0.01	c0.45		c0.02	0.38	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.13	0.12	0.01		0.02		0.45	0.70		0.54	0.58	
Uniform Delay, d1	33.5	33.4	32.8		32.9		44.5	10.6		43.5	8.6	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		6.6	1.0		7.2	0.3	
Delay (s)	33.8	33.7	32.8		32.9		51.1	11.6		50.7	8.9	
Level of Service	C	C	C		C		D	B		D	A	
Approach Delay (s)		33.6			32.9			12.1			10.2	
Approach LOS		C			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			11.8		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.58									
Actuated Cycle Length (s)			92.8		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			54.8%		ICU Level of Service			A				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	21	0	1257	7	411	785	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	32	0	1381	8	419	801	0
RTOR Reduction (vph)	0	0	0	0	29	0	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1381	4	419	801	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.39		c0.24	0.23	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.83	0.01	0.69	0.27	
Uniform Delay, d1					60.6			33.4	20.4	40.8	2.3	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			3.4	0.0	3.2	0.2	
Delay (s)					60.6			15.8	20.4	44.0	2.5	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			15.9			16.8	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		16.8			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		76.4%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	48	13	1	62	124	132	1100	5	280	242	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.98	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3191	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3191	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	46	74	20	1	70	141	147	1222	6	322	278	345
RTOR Reduction (vph)	0	0	19	0	0	119	0	0	3	0	156	0
Lane Group Flow (vph)	46	74	1	0	71	22	147	1222	3	322	467	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1047	
v/s Ratio Prot	0.03	c0.04			c0.04		0.08	c0.35		c0.18	0.15	
v/s Ratio Perm			0.00			0.01		0.00				
v/c Ratio	0.38	0.58	0.01		0.24	0.09	0.27	0.78	0.00	0.94	0.45	
Uniform Delay, d1	64.5	65.5	62.9		53.4	52.1	37.6	34.1	22.3	57.7	38.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.91	
Incremental Delay, d2	2.0	6.2	0.1		0.4	0.2	0.3	3.8	0.0	33.9	1.4	
Delay (s)	66.5	71.7	63.0		53.8	52.3	37.9	37.9	22.3	89.4	36.4	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		68.7			52.8			37.8			54.5	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay		46.5			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		81.6%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑	↘	↙	↓
Volume (veh/h)	21	191	4	84	314	8
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	25	225	5	105	341	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	749	58			110	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	749	58			110	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	78			77	
cM capacity (veh/h)	292	1009			1480	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	249	110	350			
Volume Left	25	0	341			
Volume Right	225	105	0			
cSH	1120	1700	1480			
Volume to Capacity	0.22	0.06	0.23			
Queue Length 95th (ft)	21	0	22			
Control Delay (s)	10.5	0.0	8.0			
Lane LOS	B		A			
Approach Delay (s)	10.5	0.0	8.0			
Approach LOS	B					
Intersection Summary						
Average Delay		7.6				
Intersection Capacity Utilization		34.5%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑	↘	↙	↓
Volume (vph)	25	3	1249	394	0	219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.98		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1729		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1729		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	33	4	1315	415	0	342
RTOR Reduction (vph)	4	0	0	113	0	0
Lane Group Flow (vph)	33	0	1315	302	0	342
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	1.9		31.5	31.5		31.5
Effective Green, g (s)	1.9		31.5	31.5		31.5
Actuated g/C Ratio	0.04		0.73	0.73		0.73
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	75		2574	1105		2574
v/s Ratio Prot	c0.02		c0.37			0.10
v/s Ratio Perm				0.20		
v/c Ratio	0.44		0.51	0.27		0.13
Uniform Delay, d1	20.2		2.6	2.0		1.8
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.1		0.2	0.1		0.0
Delay (s)	24.3		2.7	2.1		1.8
Level of Service	C		A	A		A
Approach Delay (s)	24.3		2.6			1.8
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		2.8		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.51				
Actuated Cycle Length (s)		43.3		Sum of lost time (s)		9.9
Intersection Capacity Utilization		46.9%		ICU Level of Service		A
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↑↑
Volume (veh/h)	0	14	2041	5	5	245
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	24	2195	5	7	360
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2392	1100			2200	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2392	1100			2200	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	88			97	
cM capacity (veh/h)	27	207			236	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	24	1463	737	7	180	180
Volume Left	0	0	0	7	0	0
Volume Right	24	0	5	0	0	0
cSH	207	1700	1700	236	1700	1700
Volume to Capacity	0.12	0.86	0.43	0.03	0.11	0.11
Queue Length 95th (ft)	10	0	0	2	0	0
Control Delay (s)	24.7	0.0	0.0	20.7	0.0	0.0
Lane LOS	C			C		
Approach Delay (s)	24.7	0.0		0.4		
Approach LOS	C					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		66.6%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	16	83	1958	11	36	209
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	20	102	2105	12	52	303
RTOR Reduction (vph)	0	5	0	1	0	0
Lane Group Flow (vph)	20	97	2105	11	52	303
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.6	25.7	68.3	68.3	5.0	82.1
Effective Green, g (s)	15.6	20.6	68.3	68.3	5.0	82.1
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	258	304	2259	1010	82	2715
v/s Ratio Prot	0.01	c0.06	c0.59		c0.03	0.09
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.32	0.93	0.01	0.63	0.11
Uniform Delay, d1	39.5	37.2	17.3	7.0	50.1	3.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	7.7	0.0	14.9	0.0
Delay (s)	39.6	37.8	25.0	7.0	65.0	3.2
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.1		24.9			12.2
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay		23.8		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio		0.81				
Actuated Cycle Length (s)		107.0		Sum of lost time (s)		18.1
Intersection Capacity Utilization		70.1%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↑↑		↘	↑↑
Volume (veh/h)	0	31	1936	25	0	224
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	50	2038	26	0	303
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2202	1032			2064	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2202	1032			2064	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	78			100	
cM capacity (veh/h)	38	230			267	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	50	1359	706	151	151	
Volume Left	0	0	0	0	0	
Volume Right	50	0	26	0	0	
cSH	230	1700	1700	1700	1700	
Volume to Capacity	0.22	0.80	0.42	0.09	0.09	
Queue Length 95th (ft)	20	0	0	0	0	
Control Delay (s)	25.0	0.0	0.0	0.0	0.0	
Lane LOS	C					
Approach Delay (s)	25.0	0.0		0.0		
Approach LOS	C					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		64.3%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↑↑	↖	↖	↑↑
Volume (vph)	9	6	1961	31	14	201
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	15	10	2043	32	17	248
RTOR Reduction (vph)	0	6	0	7	0	0
Lane Group Flow (vph)	15	4	2043	25	17	248
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.9	59.9	2.0	69.4
Effective Green, g (s)	1.4	3.4	59.9	59.9	2.0	69.4
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2738	1225	45	3173
v/s Ratio Prot	c0.01	0.00	c0.58		c0.01	0.07
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.47	0.06	0.75	0.02	0.38	0.08
Uniform Delay, d1	37.6	35.5	4.7	2.0	37.1	0.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.5	0.4	1.1	0.0	5.2	0.0
Delay (s)	48.1	35.8	5.8	2.0	42.3	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	43.2		5.8			3.1
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		5.9		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.73				
Actuated Cycle Length (s)		77.4		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		67.0%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	43	1	0	42	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	80	2	0	67	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	81	67	3					
Volume Left (vph)	0	0	80	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	836	1121	817	843	1121					
Control Delay (s)	7.2	6.2	7.7	7.5	6.2					
Approach Delay (s)	7.2		7.7	7.4						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.1%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: AM PEAK















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	35	0	0	31	216	3	1774	48	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1358	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	47	0	0	43	300	3	1887	51	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	21	0	0	0	0
Lane Group Flow (vph)	3	47	0	0	43	244	3	1887	30	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	15.7	15.7			15.7	15.7	47.3	43.2	43.2			
Effective Green, g (s)	15.7	15.7			15.7	15.7	47.3	43.2	43.2			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.60	0.60			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	294	404			404	343	1157	2114	945			
v/s Ratio Prot		0.03			0.02		0.00	c0.53				
v/s Ratio Perm	0.00					c0.15			0.02			
v/c Ratio	0.01	0.12			0.11	0.71	0.00	0.89	0.03			
Uniform Delay, d1	22.2	22.7			22.7	26.2	4.3	12.5	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	6.8	0.0	5.3	0.0			
Delay (s)	22.2	22.9			22.8	33.0	4.3	17.8	6.0			
Level of Service	C	C			C	C	A	B	A			
Approach Delay (s)		22.8			31.7			17.5			0.0	
Approach LOS		C			C			B			A	
Intersection Summary												
HCM 2000 Control Delay			19.7				HCM 2000 Level of Service		B			
HCM 2000 Volume to Capacity ratio			0.84									
Actuated Cycle Length (s)			72.3			Sum of lost time (s)			13.4			
Intersection Capacity Utilization			82.0%			ICU Level of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: AM PEAK

























							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	0	155	1582	0	172	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	161	1648	0	218	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None		None		
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1365	109	218		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1365	109	218		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	88		0		
cM capacity (veh/h)	122	924	1349		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	161	824	824	145	73	0
Volume Left	0	161	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1349	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.12	0.48	0.48	0.09	0.04	0.00
Queue Length 95th (ft)	0	10	0	0	0	0	0
Control Delay (s)	0.0	8.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	A					
Approach Delay (s)	0.0	0.7			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay		0.6					
Intersection Capacity Utilization		53.7%		ICU Level of Service		A	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: AM PEAK





















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	376	0	37	2	1	2	25	1623	0	0	128	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3408	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3408	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	427	0	42	6	3	6	26	1708	0	0	186	61
RTOR Reduction (vph)	0	30	0	0	6	0	0	0	0	0	27	0
Lane Group Flow (vph)	427	12	0	6	3	0	26	1708	0	0	220	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	25.0	25.0		1.7	1.7		1.9	43.6			37.5	
Effective Green, g (s)	25.0	25.0		1.7	1.7		1.9	43.6			37.5	
Actuated g/C Ratio	0.29	0.29		0.02	0.02		0.02	0.51			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	520	465		35	33		39	1815			1503	
v/s Ratio Prot	c0.24	0.01		c0.00	0.00		0.01	c0.48			0.06	
v/s Ratio Perm												
v/c Ratio	0.82	0.03		0.17	0.09		0.67	0.94			0.15	
Uniform Delay, d1	27.9	21.3		41.0	40.9		41.2	19.5			14.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	10.1	0.0		2.3	1.2		35.5	10.3			0.0	
Delay (s)	38.0	21.4		43.3	42.1		76.8	29.8			14.2	
Level of Service	D	C		D	D		E	C			B	
Approach Delay (s)		36.5			42.6			30.5			14.2	
Approach LOS		D			D			C			B	
Intersection Summary												
HCM 2000 Control Delay		30.1						HCM 2000 Level of Service			C	
HCM 2000 Volume to Capacity ratio		0.94										
Actuated Cycle Length (s)		85.0					Sum of lost time (s)			18.9		
Intersection Capacity Utilization		80.8%					ICU Level of Service			D		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: AM PEAK

















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	175	13	0	1487	16	36	21	1	18	39	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Frt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5031			5077		1770	1852			1732	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.20	
Satd. Flow (perm)	1770	5031			5077		1246	1852			357	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	8	197	15	0	1634	18	43	25	1	23	51	64
RTOR Reduction (vph)	0	5	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	8	207	0	0	1651	0	43	25	0	0	121	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2061		242	360			59	
v/s Ratio Prot	c0.00	0.04			c0.33			0.01				
v/s Ratio Perm							c0.03				c0.34	
v/c Ratio	0.04	0.11			0.80		0.18	0.07			2.04	
Uniform Delay, d1	71.4	36.3			47.1		60.5	59.2			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			3.1		0.4	0.1			522.7	
Delay (s)	71.5	36.4			50.2		60.8	59.3			597.7	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		37.7			50.2			60.3			597.7	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay	85.5			HCM 2000 Level of Service					F			
HCM 2000 Volume to Capacity ratio	0.80											
Actuated Cycle Length (s)	180.0			Sum of lost time (s)					21.9			
Intersection Capacity Utilization	67.5%			ICU Level of Service					C			
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	192	0	377	1495	8	0	0	0	0	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	234	0	401	1590	9	0	0	0	0	0	16
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	10
Lane Group Flow (vph)	0	234	0	401	1599	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.05		0.12	c0.45							
v/s Ratio Perm												0.00
v/c Ratio		0.12		0.23	0.50							0.01
Uniform Delay, d1		36.5		25.5	1.4							34.9
Progression Factor		0.43		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.1	0.1							0.0
Delay (s)		15.7		25.5	1.5							34.9
Level of Service		B		C	A							C
Approach Delay (s)		15.7			6.3			0.0			34.9	
Approach LOS		B			A			A			C	
Intersection Summary												
HCM 2000 Control Delay	7.5			HCM 2000 Level of Service				A				
HCM 2000 Volume to Capacity ratio	0.51											
Actuated Cycle Length (s)	180.0			Sum of lost time (s)				21.9				
Intersection Capacity Utilization	63.2%			ICU Level of Service				B				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	9	232	0	0	127	103	0	0	0	47	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	11	276	0	0	137	111	0	0	0	52	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	247			276			494	545	276	490	490	192
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	247			276			494	545	276	490	490	192
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1319			1287			480	442	763	486	475	850
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	287	247	0	56								
Volume Left	11	0	0	52								
Volume Right	0	111	0	4								
cSH	1319	1287	1700	503								
Volume to Capacity	0.01	0.00	0.00	0.11								
Queue Length 95th (ft)	1	0	0	9								
Control Delay (s)	0.4	0.0	0.0	13.1								
Lane LOS	A			A	B							
Approach Delay (s)	0.4	0.0	0.0	13.1								
Approach LOS				A	B							
Intersection Summary												
Average Delay				1.4								
Intersection Capacity Utilization				29.5%								A
Analysis Period (min)				15								

NBC Coastal Campus

22: 3rd St & Palm Ave











MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	270	4	26	208	24	11	14	125	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	314	5	28	224	26	14	17	154	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	319	28	249	185	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	154	18						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.0	5.5	5.1	5.6						
Degree Utilization, x	0.01	0.48	0.05	0.38	0.26	0.07						
Capacity (veh/h)	579	635	567	632	637	550						
Control Delay (s)	7.9	12.3	8.1	10.6	9.8	9.1						
Approach Delay (s)	12.2		10.3		9.8	9.1						
Approach LOS	B		B		A	A						
Intersection Summary												
Delay				10.9								
Level of Service				B								
Intersection Capacity Utilization				37.2%								A
Analysis Period (min)				15								



















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	224	423	331	151	17	68
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	284	535	404	184	24	96
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	588				1598	294
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	588				1598	294
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	71				65	86
cM capacity (veh/h)	983				69	702
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	284	535	269	319	120	
Volume Left	284	0	0	0	24	
Volume Right	0	0	0	184	96	
cSH	983	1700	1700	1700	248	
Volume to Capacity	0.29	0.31	0.16	0.19	0.48	
Queue Length 95th (ft)	30	0	0	0	61	
Control Delay (s)	10.1	0.0	0.0	0.0	32.4	
Lane LOS	B				D	
Approach Delay (s)	3.5		0.0		32.4	
Approach LOS					D	
Intersection Summary						
Average Delay			4.4			
Intersection Capacity Utilization			41.5%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	416	15	26	332	0	65	35	80	1	21	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1720			1858	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.88			0.98	1.00
Satd. Flow (perm)	933	3521		824	3539			1534			1830	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	540	19	34	431	0	98	53	121	2	36	47
RTOR Reduction (vph)	0	4	0	0	0	0	0	33	0	0	0	30
Lane Group Flow (vph)	21	555	0	34	431	0	0	239	0	0	38	17
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.1	13.1		13.1	13.1			13.1			13.1	13.1
Effective Green, g (s)	13.1	13.1		13.1	13.1			13.1			13.1	13.1
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	345	1302		304	1309			567			677	585
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.16			0.02	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.42			0.06	0.03
Uniform Delay, d1	7.2	8.3		7.3	8.0			8.3			7.2	7.1
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.1			0.5			0.0	0.0
Delay (s)	7.3	8.6		7.5	8.1			8.8			7.2	7.1
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.5			8.1			8.8			7.2	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.4		HCM 2000 Level of Service					A		
HCM 2000 Volume to Capacity ratio			0.42									
Actuated Cycle Length (s)			35.4		Sum of lost time (s)				9.2			
Intersection Capacity Utilization			46.3%		ICU Level of Service					A		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	501	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	545	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			549		545	545
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			549		545	545
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1021		500	539
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	545	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	527			
Volume to Capacity	0.32	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	11.9			
Lane LOS			B			
Approach Delay (s)	0.0		11.9			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑↑↑	↑	↑	↑	↑	↑	↑	↑
Volume (vph)	20	629	34	22	1644	42	157	36	49	87	44	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5047		1770	5066			3324			3365	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5047		1770	5066			3324			3365	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	24	749	40	24	1807	46	189	43	59	106	54	28
RTOR Reduction (vph)	0	3	0	0	1	0	0	13	0	0	8	0
Lane Group Flow (vph)	24	786	0	24	1852	0	0	278	0	0	180	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2234		118	2158			646			654	
v/s Ratio Prot	0.01	c0.16		c0.01	c0.37			c0.08			c0.05	
v/s Ratio Perm												
v/c Ratio	0.16	0.35		0.20	0.86			0.43			0.28	
Uniform Delay, d1	76.7	33.1		79.5	46.7			63.7			61.7	
Progression Factor	1.00	1.00		1.30	0.69			1.00			1.00	
Incremental Delay, d2	0.5	0.4		0.7	4.1			0.5			0.2	
Delay (s)	77.2	33.5		103.8	36.2			64.2			61.9	
Level of Service	E	C		F	D			E			E	
Approach Delay (s)		34.8			37.1			64.2			61.9	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		40.5			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		69.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	
Volume (vph)	2	852	34	19	1812	11	17	4	30	53	10	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5056		1770	5081			1685		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.91		0.67	1.00	
Satd. Flow (perm)	1770	5056		1770	5081			1551		1242	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	957	38	22	2059	12	23	5	41	76	14	20
RTOR Reduction (vph)	0	2	0	0	0	0	0	29	0	0	17	0
Lane Group Flow (vph)	2	993	0	22	2071	0	0	40	0	76	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3474		118	3717			258		207	283	
v/s Ratio Prot	0.00	0.20		c0.01	c0.41						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.29		0.19	0.56			0.15		0.37	0.06	
Uniform Delay, d1	86.1	11.0		79.4	10.9			64.2		66.6	63.1	
Progression Factor	1.69	0.28		1.40	0.27			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.5	0.4			0.3		1.1	0.1	
Delay (s)	146.3	3.3		112.1	3.3			64.4		67.7	63.2	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.5			4.5			64.4			66.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		7.5			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.52										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		68.7%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰	↰	
Volume (vph)	3	921	61	93	1673	50	140	18	88	163	35	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5038		1770	5085	1583		1784	1583		3374	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5038		1770	5085	1583		1784	1583		3374	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1035	69	112	2016	60	157	20	99	217	47	19
RTOR Reduction (vph)	0	4	0	0	0	28	0	0	82	0	3	0
Lane Group Flow (vph)	3	1100	0	112	2016	32	0	177	17	0	280	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		581	
v/s Ratio Prot	0.00	0.22		c0.06	c0.40			c0.10			c0.08	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.49		0.57	0.75	0.04		0.58	0.06		0.48	
Uniform Delay, d1	86.2	35.8		75.9	32.7	20.1		68.5	62.3		67.2	
Progression Factor	1.21	0.63		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.8		4.0	1.9	0.1		2.6	0.1		0.6	
Delay (s)	104.8	23.4		79.9	34.6	20.2		71.1	62.4		67.9	
Level of Service	F	C		E	C	C		E	E		E	
Approach Delay (s)		23.7			36.6			68.0			67.9	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		37.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		86.2%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	↰
Volume (vph)	13	1179	24	42	1798	11	15	6	47	37	2	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1670			1725	
Flt Permitted	0.95	1.00		0.95	1.00			0.93			0.78	
Satd. Flow (perm)	1770	5070		1770	5081			1566			1380	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	14	1282	26	49	2091	13	18	7	56	49	3	26
RTOR Reduction (vph)	0	1	0	0	0	0	0	44	0	0	20	0
Lane Group Flow (vph)	14	1307	0	49	2104	0	0	37	0	0	58	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Effective Green, g (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2666		72	2829			332			293	
v/s Ratio Prot	0.01	0.26		c0.03	c0.41							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.82	0.49		0.68	0.74			0.11			0.20	
Uniform Delay, d1	35.1	10.8		33.6	11.9			22.6			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	132.1	0.1		23.3	1.1			0.1			0.3	
Delay (s)	167.2	10.9		56.9	13.0			22.7			23.3	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		12.6			14.0			22.7			23.3	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		13.9			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		71.1			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		51.8%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰↰	↰	↰
Volume (vph)	89	1192	29	238	1741	209	71	70	751	228	90	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	103	1386	34	253	1852	222	79	78	834	271	107	88
RTOR Reduction (vph)	0	2	0	0	0	67	0	155	183	0	3	56
Lane Group Flow (vph)	103	1418	0	253	1852	155	79	307	267	271	113	23
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.1	30.1	10.4	33.8	33.8
Effective Green, g (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.1	30.1	10.4	33.8	33.8
Actuated g/C Ratio	0.05	0.31		0.15	0.41	0.41	0.06	0.26	0.26	0.09	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	178	1547		274	2076	646	102	403	391	308	511	439
v/s Ratio Prot	0.03	0.28		c0.14	c0.36		0.04	c0.20		c0.08	c0.06	
v/s Ratio Perm						0.10			0.18			0.02
v/c Ratio	0.58	0.92		0.92	0.89	0.24	0.77	0.76	0.68	0.88	0.22	0.05
Uniform Delay, d1	53.6	38.7		48.2	31.8	22.4	53.7	39.5	38.5	52.0	30.9	29.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.5	8.9		34.5	5.3	0.2	29.9	8.3	4.9	23.6	0.2	0.1
Delay (s)	58.1	47.6		82.7	37.2	22.6	83.6	47.8	43.4	75.6	31.2	29.4
Level of Service	E	D		F	D	C	F	D	D	E	C	C
Approach Delay (s)		48.3			40.7			48.6			56.7	
Approach LOS		D			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		45.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		115.6			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		81.7%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↘	↗
Volume (vph)	0	276	1081	0	151	1109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	310	1162	0	168	1232
RTOR Reduction (vph)	0	0	0	0	0	7
Lane Group Flow (vph)	0	310	1162	0	168	1225
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.33		0.09	c0.44
v/s Ratio Perm						
v/c Ratio		0.11	1.00		0.81	0.80
Uniform Delay, d1		2.5	26.7		34.4	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	25.1		20.9	3.0
Delay (s)		2.5	51.9		55.3	17.5
Level of Service		A	D		E	B
Approach Delay (s)		2.5	51.9		22.0	
Approach LOS		A	D		C	
Intersection Summary						
HCM 2000 Control Delay			32.0		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.93			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			61.1%		ICU Level of Service	B
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↘	↗				
Volume (vph)	0	428	0	0	410	510	770	1	140	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3245		1681	1631				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3245		1681	1631				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	492	0	0	446	554	837	1	152	0	0	0
RTOR Reduction (vph)	0	0	0	0	348	0	0	30	0	0	0	0
Lane Group Flow (vph)	0	492	0	0	652	0	502	458	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.3			16.3		19.5	19.5				
Effective Green, g (s)		16.3			16.3		19.5	19.5				
Actuated g/C Ratio		0.37			0.37		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1317			1207		748	726				
v/s Ratio Prot		0.14			c0.20							
v/s Ratio Perm							c0.30	0.28				
v/c Ratio		0.37			0.54		0.67	0.63				
Uniform Delay, d1		10.0			10.8		9.6	9.4				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.5		2.4	1.8				
Delay (s)		10.2			11.3		12.0	11.2				
Level of Service		B			B		B	B				
Approach Delay (s)		10.2			11.3		11.6				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					11.2					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.61							
Actuated Cycle Length (s)					43.8					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					66.7%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰			↱	↰	
Volume (veh/h)	0	3	4	65	13	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	90	32	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	133	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	133	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	858	1042	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	96	32			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	1042	1581	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			16.7%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↱			↰↱				↰			↰
Volume (veh/h)	0	4044	17	0	1798	243	0	0	907	0	0	55
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4212	18	0	1854	251	0	0	1008	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2124			4250			4963	6365	1453	3423	6249	783
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2124			4250			4963	6365	1453	3423	6249	783
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	249			34			0	0	1828	1	0	325
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1685	1685	860	741	741	621	1008	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	251	1008	83				
cSH	1700	1700	1700	1700	1700	1700	1828	325				
Volume to Capacity	0.99	0.99	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	89	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.4	19.8				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.4	19.8				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				143.3%	ICU Level of Service		H					
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3810	130	0	1835	0	200	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3928	134	0	1911	0	244	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4082		4672	1416	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4082		4672	1416	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			40		1	122	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1571	1571	920	637	637	637	244
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	244
cSH	1700	1700	1700	1700	1700	1700	122
Volume to Capacity	0.92	0.92	0.54	0.37	0.37	0.37	1.99
Queue Length 95th (ft)	0	0	0	0	0	0	495
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	533.4
Lane LOS							F
Approach Delay (s)	0.0			0.0			533.4
Approach LOS							F
Intersection Summary							
Average Delay			20.9				
Intersection Capacity Utilization			97.5%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	↗
Volume (vph)	0	0	0	963	634	109	86	251			860	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3528	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3528	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1014	667	115	89	259	0	0	887	16
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	507	1277	0	89	259	0	0	901	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1432		98	1989			1568	
v/s Ratio Prot				c0.33	0.28		c0.05	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.08	0.96d1		0.91	0.13			0.57	
Uniform Delay, d1				31.1	29.7		42.3	9.3			18.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				64.3	7.4		61.4	0.0			0.5	
Delay (s)				95.4	37.1		103.7	9.3			19.2	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			53.6			33.5			19.2	
Approach LOS		A			D			C			B	
Intersection Summary												
HCM 2000 Control Delay			41.1			HCM 2000 Level of Service		D				
HCM 2000 Volume to Capacity ratio			0.79									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)		17.2				
Intersection Capacity Utilization		135.5%				ICU Level of Service		H				
Analysis Period (min)			15									
d1 Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔	
Volume (vph)	7	2108	106	0	0	0	0	337	433	760	1086	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.95	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3130	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3130	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2316	116	0	0	0	0	392	503	792	1131	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2324	87	0	0	0	0	612	248	792	1131	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					949	409	865	2022	
v/s Ratio Prot		c0.46						c0.20		c0.23	0.32	
v/s Ratio Perm			0.06						0.18			
v/c Ratio		1.26	0.15					0.65	0.61	0.92	0.56	
Uniform Delay, d1		55.8	37.7					52.8	52.0	63.6	23.6	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		122.6	0.1					1.5	2.5	14.1	0.3	
Delay (s)		178.4	37.8					54.3	54.5	77.7	24.0	
Level of Service		F	D					D	D	E	C	
Approach Delay (s)		171.7			0.0			54.4			46.1	
Approach LOS		F			A			D			D	
Intersection Summary												
HCM 2000 Control Delay			105.8									F
HCM 2000 Volume to Capacity ratio			0.96									
Actuated Cycle Length (s)			175.0							14.4		
Intersection Capacity Utilization			135.5%							H		
Analysis Period (min)			15									
c Critical Lane Group												













NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔		↔↔			↔↔
Volume (vph)	167	11	840	663	0	1172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1584		3257			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1584		3257			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	214	14	944	745	0	1260
RTOR Reduction (vph)	2	0	68	0	0	0
Lane Group Flow (vph)	226	0	1621	0	0	1260
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	297		2461			2540
v/s Ratio Prot	c0.14		c0.50			0.37
v/s Ratio Perm						
v/c Ratio	0.76		0.66			0.50
Uniform Delay, d1	61.6		9.5			7.6
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	11.0		1.4			0.7
Delay (s)	72.6		10.9			8.3
Level of Service	E		B			A
Approach Delay (s)	72.6		10.9			8.3
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay			14.3			B
HCM 2000 Volume to Capacity ratio			0.69			
Actuated Cycle Length (s)			160.0			12.1
Intersection Capacity Utilization			77.9%			D
Analysis Period (min)			15			
c Critical Lane Group						













NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	138	9	28	25	9	24	21	1424	47	64	1388	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1721		1770	3522		1770	3489	
Flt Permitted	0.69	0.69	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1221	1220	1583		1464		1770	3522		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	177	12	36	39	14	38	23	1531	51	70	1509	159
RTOR Reduction (vph)	0	0	30	0	23	0	0	1	0	0	3	0
Lane Group Flow (vph)	94	95	6	0	68	0	23	1581	0	70	1665	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4		4							
Actuated Green, G (s)	18.9	18.9	18.9		18.9		3.0	71.4		8.0	76.4	
Effective Green, g (s)	18.9	18.9	18.9		18.9		3.0	71.4		8.0	76.4	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	204	203	264		244		46	2223		125	2356	
v/s Ratio Prot							0.01	0.45		c0.04	c0.48	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.46	0.47	0.02		0.28		0.50	0.71		0.56	0.71	
Uniform Delay, d1	42.5	42.6	39.4		41.1		54.3	14.0		50.8	11.4	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.6	1.7	0.0		0.6		8.3	1.1		5.6	1.0	
Delay (s)	44.1	44.3	39.4		41.8		62.6	15.0		56.5	12.4	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.4			41.8			15.7			14.2	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.3			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		113.1			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		72.9%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	7	0	139	0	1237	0	31	1522	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1619			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1619			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	10	0	201	0	1316	0	33	1637	0
RTOR Reduction (vph)	0	0	0	0	164	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	47	0	0	1316	0	33	1637	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			45.6		1.7	51.5	
Effective Green, g (s)					14.1			45.6		1.7	51.5	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					301			2131		39	2407	
v/s Ratio Prot					c0.03			0.37		0.02	c0.46	
v/s Ratio Perm												
v/c Ratio					0.16			0.62		0.85	0.68	
Uniform Delay, d1					25.8			9.5		36.9	7.2	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.2			0.5		84.9	0.8	
Delay (s)					26.1			10.1		121.7	8.0	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			26.1			10.1			10.2	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					11.2			HCM 2000 Level of Service			B	
HCM 2000 Volume to Capacity ratio					0.66							
Actuated Cycle Length (s)					75.7			Sum of lost time (s)			18.9	
Intersection Capacity Utilization					59.5%			ICU Level of Service			B	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	281	48	115	6	67	406	27	560	2	134	1351	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1517		1855	1511	1770	3539	1350	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1517		1855	1511	1770	3539	1350	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	370	63	151	7	73	441	30	615	2	143	1437	67
RTOR Reduction (vph)	0	0	122	0	0	228	0	0	1	0	2	0
Lane Group Flow (vph)	370	63	29	0	80	213	30	615	1	143	1502	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.8	27.8	27.8		22.7	22.7	2.9	56.2	56.2	16.6	69.9	
Effective Green, g (s)	27.8	27.8	27.8		22.7	22.7	2.9	56.2	56.2	16.6	69.9	
Actuated g/C Ratio	0.19	0.19	0.19		0.16	0.16	0.02	0.39	0.39	0.12	0.49	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	344	362	295		295	240	35	1393	531	205	1720	
v/s Ratio Prot	c0.21	0.03			0.04		0.02	0.17		c0.08	c0.43	
v/s Ratio Perm			0.02			c0.14		0.00				
v/c Ratio	1.08	0.17	0.10		0.27	0.89	0.86	0.44	0.00	0.70	0.87	
Uniform Delay, d1	57.4	47.9	47.2		52.7	58.8	69.7	31.7	26.2	60.6	32.5	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	70.1	0.2	0.1		0.5	30.1	94.8	1.0	0.0	9.9	6.5	
Delay (s)	127.6	48.1	47.3		53.2	88.8	164.5	32.8	26.2	70.5	38.9	
Level of Service	F	D	D		D	F	F	C	C	E	D	
Approach Delay (s)		98.3			83.4			38.8			41.7	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay		57.2								E		
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		142.7				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		78.2%				ICU Level of Service		D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	303	477	3	35	173	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	337	530	4	49	197	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	425	29			54	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	425	29			54	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	34	49			87	
cM capacity (veh/h)	511	1046			1552	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	867	54	200			
Volume Left	337	0	197			
Volume Right	530	49	0			
cSH	1126	1700	1552			
Volume to Capacity	0.77	0.03	0.13			
Queue Length 95th (ft)	201	0	11			
Control Delay (s)	18.0	0.0	7.5			
Lane LOS	C		A			
Approach Delay (s)	18.0	0.0	7.5			
Approach LOS	C					
Intersection Summary						
Average Delay		15.3				
Intersection Capacity Utilization		39.9%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	306	6	594	38	0	1474
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	387	8	660	42	0	1656
RTOR Reduction (vph)	1	0	0	24	0	0
Lane Group Flow (vph)	394	0	660	18	0	1656
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.22		0.19			c0.47
v/s Ratio Perm				0.01		
v/c Ratio	0.47		0.43	0.03		1.09
Uniform Delay, d1	18.5		21.0	17.3		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.2	0.0		51.5
Delay (s)	19.0		21.2	17.3		81.5
Level of Service	B		C	B		F
Approach Delay (s)	19.0		21.0			81.5
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay			57.1		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			0.76			
Actuated Cycle Length (s)			105.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			90.7%		ICU Level of Service	E
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (veh/h)	4	6	451	3	14	1411
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	524	3	15	1551
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1332	264			528	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1332	264			528	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	94	98			99	
cM capacity (veh/h)	143	734			1035	
Direction, Lane #						
Volume Total	20	350	178	15	775	775
Volume Left	8	0	0	15	0	0
Volume Right	12	0	3	0	0	0
cSH	277	1700	1700	1035	1700	1700
Volume to Capacity	0.07	0.21	0.10	0.01	0.46	0.46
Queue Length 95th (ft)	6	0	0	1	0	0
Control Delay (s)	19.0	0.0	0.0	8.5	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	19.0	0.0		0.1		
Approach LOS	C					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			49.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	29	54	399	11	98	1317
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	32	59	453	12	108	1447
RTOR Reduction (vph)	0	44	0	7	0	0
Lane Group Flow (vph)	32	15	453	5	108	1447
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.3	21.4	27.9	27.9	7.0	43.7
Effective Green, g (s)	9.3	16.3	27.9	27.9	7.0	43.7
Actuated g/C Ratio	0.15	0.26	0.45	0.45	0.11	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	264	414	1584	708	198	2482
v/s Ratio Prot	c0.02	0.01	0.13		0.06	c0.41
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.04	0.29	0.01	0.55	0.58
Uniform Delay, d1	23.0	17.1	10.9	9.5	26.1	4.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.0	3.1	0.4
Delay (s)	23.2	17.2	11.0	9.5	29.2	5.0
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.3		11.0			6.7
Approach LOS	B		B			A

Intersection Summary

HCM 2000 Control Delay	8.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	62.3	Sum of lost time (s)	18.1
Intersection Capacity Utilization	48.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: PM PEAK







	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↕	↕			↕
Volume (veh/h)	0	21	390	17	0	1346
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	28	448	20	0	1463
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1190	234			468	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1190	234			468	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	181	768			1090	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	28	299	169	732	732	
Volume Left	0	0	0	0	0	
Volume Right	28	0	20	0	0	
cSH	768	1700	1700	1700	1700	
Volume to Capacity	0.04	0.18	0.10	0.43	0.43	
Queue Length 95th (ft)	3	0	0	0	0	
Control Delay (s)	9.9	0.0	0.0	0.0	0.0	
Lane LOS	A					
Approach Delay (s)	9.9	0.0		0.0		
Approach LOS	A					

Intersection Summary

Average Delay	0.1				
Intersection Capacity Utilization	40.5%	ICU Level of Service	A		
Analysis Period (min)	15				





NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	29	25	384	17	21	1322
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	40	35	409	18	23	1453
RTOR Reduction (vph)	0	32	0	7	0	0
Lane Group Flow (vph)	40	3	409	11	23	1453
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.4	27.1	27.1	1.8	36.4
Effective Green, g (s)	2.6	4.4	27.1	27.1	1.8	36.4
Actuated g/C Ratio	0.06	0.10	0.59	0.59	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	152	2103	940	69	2824
v/s Ratio Prot	c0.02	0.00	0.12		0.01	c0.41
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.40	0.02	0.19	0.01	0.33	0.51
Uniform Delay, d1	20.7	18.7	4.2	3.8	21.3	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.6	0.1	0.0	0.0	2.8	0.2
Delay (s)	23.4	18.7	4.3	3.8	24.2	1.7
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.2		4.3			2.1
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.3		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.63			
Actuated Cycle Length (s)			45.6		Sum of lost time (s)	14.1
Intersection Capacity Utilization			47.5%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	10	13	81	7	0	171	12	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	10	14	105	9	0	192	13	0	0
Direction, Lane #										
Volume Total (vph)	10	14	114	206						
Volume Left (vph)	0	0	105	0						
Volume Right (vph)	0	14	0	13						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.13	0.18						
Capacity (veh/h)	873	1121	860	1121						
Control Delay (s)	7.1	6.2	7.7	6.9						
Approach Delay (s)	6.6		7.7	6.9						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑			↑	↱	↰	↑	↱			
Volume (vph)	9	177	0	0	78	132	11	308	65	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1301	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	10	201	0	0	90	152	12	338	71	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	120	0	0	38	0	0	0
Lane Group Flow (vph)	10	201	0	0	90	32	12	338	33	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.7	18.7	18.7			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.7	18.7	18.7			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	269	386			386	328	817	1634	730			
v/s Ratio Prot		c0.11			0.05		0.01	c0.10				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.52			0.23	0.10	0.01	0.21	0.04			
Uniform Delay, d1	12.8	14.3			13.4	13.0	5.9	6.5	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.3			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.9	15.5			13.7	13.1	5.9	6.5	6.0			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.3		6.4			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.5			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.30										
Actuated Cycle Length (s)		40.5			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		40.3%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON_NorthOp Year 2015 Alt 1/2/3











Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰		↰	↑	↱	↑	↱
Volume (veh/h)	0	155	0	446	0	1483	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	0	620	0	507	0	1648	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1901	824	1648		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1901	824	1648		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	0	100		0		
cM capacity (veh/h)	61	316	388		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	620	0	253	253	1099	549	0
Volume Left	0	0	0	0	0	0	0
Volume Right	620	0	0	0	0	0	0
cSH	316	1700	1700	1700	1700	1700	1700
Volume to Capacity	1.96	0.00	0.15	0.15	0.65	0.32	0.00
Queue Length 95th (ft)	1083	0	0	0	0	0	0
Control Delay (s)	470.8	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F						
Approach Delay (s)	470.8	0.0			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			105.2				
Intersection Capacity Utilization			57.3%		ICU Level of Service		
Analysis Period (min)			15				B

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2015 Alt 1/2/3











Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	83	0	64	1	1	0	70	308	11	1	1213	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3521		1770	3469	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3521		1770	3469	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	111	0	85	2	2	0	77	338	12	1	1348	204
RTOR Reduction (vph)	0	68	0	0	0	0	0	2	0	0	9	0
Lane Group Flow (vph)	111	17	0	2	2	0	77	348	0	1	1543	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	17.9	17.9		0.8	0.8		5.8	52.4		0.8	47.4	
Effective Green, g (s)	17.9	17.9		0.8	0.8		5.8	52.4		0.8	47.4	
Actuated g/C Ratio	0.20	0.20		0.01	0.01		0.06	0.58		0.01	0.52	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	348	312		15	16		113	2031		15	1810	
v/s Ratio Prot	c0.06	0.01		c0.00	0.00		c0.04	0.10		0.00	c0.44	
v/s Ratio Perm												
v/c Ratio	0.32	0.05		0.13	0.12		0.68	0.17		0.07	0.85	
Uniform Delay, d1	31.2	29.6		44.7	44.7		41.6	9.0		44.6	18.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.1		4.0	3.5		15.6	0.0		1.9	4.1	
Delay (s)	31.8	29.6		48.7	48.2		57.2	9.1		46.5	22.8	
Level of Service	C	C		D	D		E	A		D	C	
Approach Delay (s)		30.8			48.4			17.7			22.8	
Approach LOS		C			D			B			C	
Intersection Summary												
HCM 2000 Control Delay		22.6										
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		90.8										
Intersection Capacity Utilization		66.7%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	54	1170	55	0	344	33	12	38	4	23	25	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5051			5019		1770	1835			1761	
Flt Permitted	0.95	1.00			1.00		0.71	1.00			0.17	
Satd. Flow (perm)	1770	5051			5019		1316	1835			300	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	61	1330	62	0	366	35	17	54	6	27	29	22
RTOR Reduction (vph)	0	2	0	0	7	0	0	2	0	0	8	0
Lane Group Flow (vph)	61	1390	0	0	394	0	17	58	0	0	71	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1910			2038		255	356			50	
v/s Ratio Prot	c0.03	c0.28			c0.08			c0.03				
v/s Ratio Perm							0.01				c0.24	
v/c Ratio	0.31	0.73			0.19		0.07	0.16			1.41	
Uniform Delay, d1	73.7	48.0			34.5		59.2	60.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.9	2.5			0.2		0.1	0.2			269.3	
Delay (s)	74.6	50.5			34.7		59.3	60.5			344.3	
Level of Service	E	D			C		E	E			F	
Approach Delay (s)		51.5			34.7			60.2			344.3	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		59.8										
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑↑			↑↑	↑↑							↑
Volume (vph)	0	1199	0	478	379	36	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3493							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3493							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1347	0	509	403	38	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1347	0	509	441	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3174							609
v/s Ratio Prot		c0.26		c0.15	c0.13							
v/s Ratio Perm												0.00
v/c Ratio		0.70		0.26	0.14							0.00
Uniform Delay, d1		47.3		20.5	0.9							34.8
Progression Factor		0.18		1.00	1.00							1.00
Incremental Delay, d2		1.4		0.1	0.0							0.0
Delay (s)		9.8		20.5	0.9							34.9
Level of Service		A		C	A							C
Approach Delay (s)		9.8			11.4		0.0				34.9	
Approach LOS		A			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		10.6				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.47										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		46.0%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2015 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑				↑↑
Volume (veh/h)	3	212	0	0	304	40	0	0	0	103	0	8
Sign Control		Free			Free			Stop				Stop
Grade		0%			0%			0%				0%
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	247	0	0	345	45	0	0	0	156	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	391			247			634	644	247	622	622	368
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	391			247			634	644	247	622	622	368
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	61	100	98
cM capacity (veh/h)	1168			1319			384	390	792	398	402	677
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	250	391	0	168								
Volume Left	3	0	0	156								
Volume Right	0	45	0	12								
cSH	1168	1319	1700	411								
Volume to Capacity	0.00	0.00	0.00	0.41								
Queue Length 95th (ft)	0	0	0	49								
Control Delay (s)	0.1	0.0	0.0	19.7								
Lane LOS	A		A	C								
Approach Delay (s)	0.1	0.0	0.0	19.7								
Approach LOS			A	C								
Intersection Summary												
Average Delay		4.1										
Intersection Capacity Utilization		31.3%			ICU Level of Service			A				
Analysis Period (min)		15										

NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱			↰	↱		↰	↱
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	293	12	84	318	24	14	38	67	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	376	15	94	357	27	25	67	118	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	391	94	384	209	161						
Volume Left (vph)	9	0	94	0	25	61						
Volume Right (vph)	0	15	0	27	118	28						
Hadj (s)	0.53	0.01	0.53	-0.02	-0.28	0.00						
Departure Headway (s)	7.2	6.7	7.1	6.5	6.6	7.0						
Degree Utilization, x	0.02	0.72	0.19	0.70	0.38	0.31						
Capacity (veh/h)	472	520	485	529	479	437						
Control Delay (s)	9.1	23.9	10.5	22.0	13.7	13.2						
Approach Delay (s)	23.6		19.8		13.7	13.2						
Approach LOS	C		C		B	B						
Intersection Summary												
Delay			19.1									
Level of Service			C									
Intersection Capacity Utilization			41.2%		ICU Level of Service		A					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱
Volume (veh/h)	72	420	453	39	52	139
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	74	433	527	45	61	164
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	572				1131	286
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	572				1131	286
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	93				66	77
cM capacity (veh/h)	997				182	711
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	74	433	351	221	225	
Volume Left	74	0	0	0	61	
Volume Right	0	0	0	45	164	
cSH	997	1700	1700	1700	397	
Volume to Capacity	0.07	0.25	0.21	0.13	0.57	
Queue Length 95th (ft)	6	0	0	0	84	
Control Delay (s)	8.9	0.0	0.0	0.0	25.2	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		25.2	
Approach LOS					D	
Intersection Summary						
Average Delay			4.8			
Intersection Capacity Utilization			40.2%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	28	429	29	31	455	3	54	19	22	12	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3536			1754			1841	1583
Flt Permitted	0.47	1.00		0.45	1.00			0.79			0.90	1.00
Satd. Flow (perm)	870	3505		835	3536			1417			1669	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	511	35	34	500	3	66	23	27	16	53	39
RTOR Reduction (vph)	0	7	0	0	1	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	539	0	34	502	0	0	95	0	0	69	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Effective Green, g (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	414	1671		398	1686			309			364	345
v/s Ratio Prot		c0.15			0.14							
v/s Ratio Perm	0.04			0.04				c0.07			0.04	0.01
v/c Ratio	0.08	0.32		0.09	0.30			0.31			0.19	0.02
Uniform Delay, d1	4.3	4.9		4.3	4.8			9.9			9.6	9.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.6			0.3	0.0
Delay (s)	4.4	5.0		4.4	4.9			10.5			9.9	9.3
Level of Service	A	A		A	A			B			A	A
Approach Delay (s)		5.0			4.9			10.5			9.7	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		30.2			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		44.6%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												







NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↰			↰	↰
Volume (veh/h)	632	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	771	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			780		771	771
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			780		771	771
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			837		368	400
Direction, Lane #						
Volume Total	771	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	376			
Volume to Capacity	0.45	0.01	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	14.9			
Lane LOS			B			
Approach Delay (s)	0.0		14.9			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			43.3%		ICU Level of Service	A
Analysis Period (min)			15			








NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	40	1492	119	56	753	126	94	87	60	167	76	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5029		1770	4976			3342			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5029		1770	4976			3342			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	43	1587	127	57	761	127	103	96	66	188	85	27
RTOR Reduction (vph)	0	5	0	0	12	0	0	18	0	0	4	0
Lane Group Flow (vph)	43	1709	0	57	876	0	0	247	0	0	296	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2114		157	1982			649			658	
v/s Ratio Prot	0.02	c0.34		c0.03	0.18			c0.07			c0.09	
v/s Ratio Perm												
v/c Ratio	0.22	0.81		0.36	0.44			0.38			0.45	
Uniform Delay, d1	72.9	45.8		77.2	39.5			63.1			64.0	
Progression Factor	1.00	1.00		1.27	0.69			1.00			1.00	
Incremental Delay, d2	0.6	2.4		1.4	0.7			0.4			0.5	
Delay (s)	73.5	48.2		99.7	27.9			63.5			64.5	
Level of Service	E	D		F	C			E			E	
Approach Delay (s)		48.8			32.2			63.5			64.5	
Approach LOS		D			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		46.6			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		116.6%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	19	1765	55	47	1146	53	20	10	34	61	12	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5062		1770	5051			1702		1770	1718	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.63	1.00	
Satd. Flow (perm)	1770	5062		1770	5051			1556		1172	1718	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	19	1801	56	48	1181	55	24	12	41	72	14	15
RTOR Reduction (vph)	0	1	0	0	2	0	0	24	0	0	13	0
Lane Group Flow (vph)	19	1856	0	48	1234	0	0	53	0	72	16	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Effective Green, g (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3563		157	3667			191		143	210	
v/s Ratio Prot	0.01	c0.37		c0.03	c0.24						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.16	0.52		0.31	0.34			0.28		0.50	0.08	
Uniform Delay, d1	79.3	12.5		76.8	8.9			71.7		73.8	69.9	
Progression Factor	1.46	0.11		1.59	0.31			1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4		1.0	0.2			0.8		2.8	0.2	
Delay (s)	116.3	1.8		122.9	3.0			72.5		76.6	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		2.9			7.4			72.5			74.7	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.4			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.50										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		58.6%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	1609	191	152	1218	79	124	39	123	149	43	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5004		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5004		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	27	1712	203	157	1256	81	135	42	134	201	58	26
RTOR Reduction (vph)	0	8	0	0	0	36	0	0	111	0	4	0
Lane Group Flow (vph)	27	1907	0	157	1256	45	0	177	23	0	281	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	12.0	79.7		19.6	87.7	87.7		30.7	30.7		30.7	
Effective Green, g (s)	12.0	79.7		19.6	87.7	87.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.07	0.44		0.11	0.49	0.49		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	118	2215		192	2477	771		305	269		575	
v/s Ratio Prot	0.02	c0.38		c0.09	0.25			c0.10			c0.08	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.23	0.86		0.82	0.51	0.06		0.58	0.08		0.49	
Uniform Delay, d1	79.6	45.2		78.5	31.4	24.4		68.7	62.8		67.5	
Progression Factor	1.05	0.88		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.9	4.1		22.9	0.7	0.1		7.8	0.6		3.0	
Delay (s)	84.2	43.9		101.3	32.2	24.5		76.6	63.4		70.5	
Level of Service	F	D		F	C	C		E	E		E	
Approach Delay (s)		44.4			39.0			70.9			70.5	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		46.3			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		99.3%			ICU Level of Service				F			
Analysis Period (min)		15										
c Critical Lane Group												












NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	1778	48	165	1508	15	38	8	79	22	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5065		1770	5078			1678			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.84	
Satd. Flow (perm)	1770	5065		1770	5078			1514			1510	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85		0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	10	1976	53	174	1587	16	45	9	93	27	12	12
RTOR Reduction (vph)	0	2	0	0	1	0	0	74	0	0	10	0
Lane Group Flow (vph)	10	2027	0	174	1602	0	0	73	0	0	41	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.2			17.2	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.2			17.2	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2418		234	3050			308			307	
v/s Ratio Prot	0.01	c0.40		c0.10	0.32							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.62	0.84		0.74	0.53			0.24			0.14	
Uniform Delay, d1	41.7	19.2		35.2	9.8			28.1			27.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	57.6	2.7		12.0	0.2			0.4			0.2	
Delay (s)	99.2	21.9		47.3	10.0			28.5			27.7	
Level of Service	F	C		D	A			C			C	
Approach Delay (s)		22.3			13.6			28.5			27.7	
Approach LOS		C			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		18.8			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		84.4			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		65.6%			ICU Level of Service				C			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	184	1722	23	319	1516	540	63	172	519	572	232	221
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		1770	5085	1583	1770	1631	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		1770	5085	1583	1770	1631	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	194	1813	24	343	1630	581	67	183	552	622	252	240
RTOR Reduction (vph)	0	1	0	0	0	88	0	26	268	0	2	133
Lane Group Flow (vph)	194	1836	0	343	1630	493	67	356	85	622	274	83
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.3	36.4		45.0	70.1	70.1	8.6	36.6	36.6	11.8	39.8	39.8
Effective Green, g (s)	11.3	36.4		45.0	70.1	70.1	8.6	36.6	36.6	11.8	39.8	39.8
Actuated g/C Ratio	0.07	0.24		0.30	0.46	0.46	0.06	0.24	0.24	0.08	0.26	0.26
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1217		525	2349	731	100	393	362	267	458	394
v/s Ratio Prot	0.06	c0.36		c0.19	c0.32		0.04	c0.22		c0.18	c0.16	
v/s Ratio Perm						0.31		0.06				0.06
v/c Ratio	0.76	1.51		0.65	0.69	0.67	0.91	0.24	2.33	0.60	0.21	
Uniform Delay, d1	68.9	57.6		46.5	32.3	31.9	70.2	55.9	46.3	69.9	48.9	43.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.5	233.3		2.9	0.9	2.5	16.2	23.8	0.3	609.9	2.1	0.3
Delay (s)	81.4	290.9		49.5	33.2	34.3	86.4	79.7	46.6	679.9	51.0	44.0
Level of Service	F	F		D	C	C	F	E	D	F	D	D
Approach Delay (s)		270.9			35.6			65.7			400.8	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		175.4			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.12										
Actuated Cycle Length (s)		151.7			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		117.9%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↑↑	↑↑↑
Volume (vph)	0	488	825	0	428	1557
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	548	878	0	470	1711
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	548	878	0	470	1706
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.15	c0.25		0.27	c0.61
v/s Ratio Perm						
v/c Ratio		0.31	1.02		0.71	0.96
Uniform Delay, d1		11.6	30.3		21.3	13.6
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	36.8		3.5	13.3
Delay (s)		11.7	67.1		24.8	26.8
Level of Service		B	E		C	C
Approach Delay (s)		11.7	67.1		26.4	
Approach LOS		B	E		C	
Intersection Summary						
HCM 2000 Control Delay		34.1		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio		1.05				
Actuated Cycle Length (s)		80.0		Sum of lost time (s)		14.2
Intersection Capacity Utilization		82.6%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	911	0	0	512	244	418	2	104	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	949	0	0	575	274	449	2	112	0	0	0
RTOR Reduction (vph)	0	0	0	0	99	0	0	39	0	0	0	0
Lane Group Flow (vph)	0	949	0	0	750	0	287	237	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		18.5			18.5		13.4	13.4				
Effective Green, g (s)		18.5			18.5		13.4	13.4				
Actuated g/C Ratio		0.46			0.46		0.34	0.34				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1640			1561		564	542				
v/s Ratio Prot		0.27			0.22							
v/s Ratio Perm							0.17	0.15				
v/c Ratio		0.58			0.48		0.51	0.44				
Uniform Delay, d1		7.8			7.4		10.6	10.3				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.5			0.2		0.7	0.6				
Delay (s)		8.3			7.6		11.3	10.9				
Level of Service		A			A		B	B				
Approach Delay (s)		8.3			7.6		11.1				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		8.7					HCM 2000 Level of Service		A			
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		39.9					Sum of lost time (s)		8.0			
Intersection Capacity Utilization		46.7%					ICU Level of Service		A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2015 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	3	36	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	3	52	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	73	52	52			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	73	52	52			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	926	1015	1554			
Direction, Lane #						
Volume Total	16	12	52			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	1015	1554	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.3	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.3	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.5				
Intersection Capacity Utilization		17.2%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St










MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1398	34	0	3795	552	0	0	476	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1684	41	0	4125	600	0	0	595	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4745			1745			3132	6470	622	5026	6190	1715
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4745			1745			3132	6470	622	5026	6190	1715
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	84
cM capacity (veh/h)	21			350			4	0	1354	0	0	77
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	674	674	378	1650	1650	1425	595	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	600	595	12				
cSH	1700	1700	1700	1700	1700	1700	1354	77				
Volume to Capacity	0.40	0.40	0.22	0.97	0.97	0.84	0.44	0.16				
Queue Length 95th (ft)	0	0	0	0	0	0	57	13				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	60.6				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	60.6				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				100.7%			ICU Level of Service		G			
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1259	201	0	3694	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1431	228	0	4104	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1679		2953	631	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1679		2953	631	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	39	
cM capacity (veh/h)			371		11	410	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	572	572	515	1368	1368	1368	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	228	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	410
Volume to Capacity	0.34	0.34	0.30	0.80	0.80	0.80	0.61
Queue Length 95th (ft)	0	0	0	0	0	0	99
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	26.7
Lane LOS							D
Approach Delay (s)	0.0			0.0			26.7
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			86.2%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1559	1943	342	105	102	0	0	277	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4640		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4640		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1676	2089	368	142	138	0	0	318	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1022	3103	0	142	138	0	0	330	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.6			21.4	
Effective Green, g (s)				131.2	131.2		20.0	46.6			21.4	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1054	3214		186	870			396	
v/s Ratio Prot				c0.67	0.67		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.97	0.97		0.76	0.16			0.83	
Uniform Delay, d1				27.2	27.0		82.4	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				20.4	9.2		16.8	0.1			14.0	
Delay (s)				47.7	36.2		99.2	56.1			96.3	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			39.0			78.0			96.3	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		45.3		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		189.4		Sum of lost time (s)						16.8		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	583	64	0	0	0	0	197	198	451	1442	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3262	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3262	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	634	70	0	0	0	0	229	215	490	1502	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	18	49	0	0	0
Lane Group Flow (vph)	0	635	41	0	0	0	0	288	89	490	1502	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1178	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.42	
v/s Ratio Perm		0.12	0.03						0.06			
v/c Ratio		0.36	0.07					0.24	0.17	0.70	0.73	
Uniform Delay, d1		41.5	37.2					38.4	37.3	63.2	26.0	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.3	
Delay (s)		41.6	37.3					38.5	37.5	66.2	27.3	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.2			36.9	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.0		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)						14.4		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus MILCON_NorthOp Year 2016 Alt 2/3noB
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰↱		↰	↱
Volume (vph)	210	6	1112	585	0	1077
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3315			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3315			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	244	7	1196	629	0	1134
RTOR Reduction (vph)	2	0	54	0	0	0
Lane Group Flow (vph)	249	0	1771	0	0	1134
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	16.6		42.2			42.2
Effective Green, g (s)	16.6		42.2			42.2
Actuated g/C Ratio	0.24		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	389		2060			2089
v/s Ratio Prot	c0.16		c0.53			0.34
v/s Ratio Perm						
v/c Ratio	0.64		0.86			0.54
Uniform Delay, d1	23.0		10.4			7.3
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	3.6		3.8			0.3
Delay (s)	26.6		14.3			7.6
Level of Service	C		B			A
Approach Delay (s)	26.6		14.3			7.6
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			12.9		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.84			
Actuated Cycle Length (s)			67.9		Sum of lost time (s)	12.1
Intersection Capacity Utilization			75.7%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus MILCON_NorthOp Year 2016 Alt 2/3noB
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↰	↰	↱	↱	↰	↱	↰	↱	↱	↰
Volume (vph)	45	2	9	7	0	5	19	1320	25	38	1215	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1708		1770	3529		1770	3524	
Frt Permitted	0.74	0.78	1.00		0.87		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1312	1384	1583		1526		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	52	2	10	14	0	10	23	1571	30	41	1321	38
RTOR Reduction (vph)	0	0	8	0	20	0	0	1	0	0	1	0
Lane Group Flow (vph)	27	27	2	0	4	0	23	1600	0	41	1358	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	14.9	14.9	14.9		14.9		2.6	60.8		4.0	62.2	
Effective Green, g (s)	14.9	14.9	14.9		14.9		2.6	60.8		4.0	62.2	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.65		0.04	0.66	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	208	219	251		242		49	2287		75	2336	
v/s Ratio Prot							0.01	c0.45		c0.02	0.39	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.13	0.12	0.01		0.02		0.47	0.70		0.55	0.58	
Uniform Delay, d1	33.9	33.8	33.2		33.3		44.9	10.6		44.0	8.7	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		6.9	1.0		7.9	0.4	
Delay (s)	34.2	34.1	33.2		33.3		51.9	11.6		51.9	9.0	
Level of Service	C	C	C		C		D	B		D	A	
Approach Delay (s)		34.0			33.3			12.1			10.3	
Approach LOS		C			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			11.9		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.59									
Actuated Cycle Length (s)			93.8		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			55.1%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

MILCON_NorthOp Year 2016 Alt 2/3noB

7: SR-75 (Silver Strand Blvd) & Rendova Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	22	0	1266	7	415	792	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	33	0	1391	8	423	808	0
RTOR Reduction (vph)	0	0	0	0	30	0	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1391	4	423	808	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.39		c0.24	0.23	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.84	0.01	0.69	0.27	
Uniform Delay, d1					60.6			33.6	20.4	40.9	2.3	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			3.5	0.0	3.4	0.2	
Delay (s)					60.6			16.0	20.4	44.3	2.5	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			16.0			16.9	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.0										
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		145.0								18.9		
Intersection Capacity Utilization		76.8%								D		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

MILCON_NorthOp Year 2016 Alt 2/3noB









8: SR-75 (Silver Strand Blvd) & Tarawa Rd

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	48	13	1	63	125	133	1108	5	283	245	302
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.98	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3193	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3193	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	46	74	20	1	72	142	148	1231	6	325	282	347
RTOR Reduction (vph)	0	0	19	0	0	119	0	0	3	0	154	0
Lane Group Flow (vph)	46	74	1	0	73	23	148	1231	3	325	475	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1048	
v/s Ratio Prot	0.03	c0.04			c0.04		0.08	c0.35		c0.18	0.15	
v/s Ratio Perm			0.00			0.01			0.00			
v/c Ratio	0.38	0.58	0.01		0.25	0.09	0.27	0.78	0.00	0.95	0.45	
Uniform Delay, d1	64.5	65.5	62.9		53.4	52.1	37.6	34.2	22.3	57.9	38.4	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.91	
Incremental Delay, d2	2.0	6.2	0.1		0.4	0.2	0.3	3.9	0.0	36.0	1.4	
Delay (s)	66.5	71.7	63.0		53.9	52.3	37.9	38.1	22.3	91.6	36.4	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		68.7			52.8			38.0			55.2	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		46.9								D		
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		145.0								19.4		
Intersection Capacity Utilization		82.0%								D		
Analysis Period (min)		15										
c Critical Lane Group												











NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	22	193	4	85	317	8
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	26	227	5	106	345	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	756	58			111	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	756	58			111	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	77			77	
cM capacity (veh/h)	288	1008			1479	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	253	111	353			
Volume Left	26	0	345			
Volume Right	227	106	0			
cSH	1123	1700	1479			
Volume to Capacity	0.23	0.07	0.23			
Queue Length 95th (ft)	22	0	23			
Control Delay (s)	10.5	0.0	8.0			
Lane LOS	B		A			
Approach Delay (s)	10.5	0.0	8.0			
Approach LOS	B					
Intersection Summary						
Average Delay		7.7				
Intersection Capacity Utilization		34.6%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	25	3	1258	397	0	221
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.98		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1729		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1729		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	33	4	1324	418	0	345
RTOR Reduction (vph)	4	0	0	114	0	0
Lane Group Flow (vph)	33	0	1324	304	0	345
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	1.9		31.5	31.5		31.5
Effective Green, g (s)	1.9		31.5	31.5		31.5
Actuated g/C Ratio	0.04		0.73	0.73		0.73
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	75		2574	1105		2574
v/s Ratio Prot	c0.02		c0.37			0.10
v/s Ratio Perm				0.20		
v/c Ratio	0.44		0.51	0.28		0.13
Uniform Delay, d1	20.2		2.6	2.0		1.8
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.1		0.2	0.1		0.0
Delay (s)	24.3		2.7	2.1		1.8
Level of Service	C		A	A		A
Approach Delay (s)	24.3		2.6			1.8
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		2.8		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.51				
Actuated Cycle Length (s)		43.3		Sum of lost time (s)		9.9
Intersection Capacity Utilization		47.2%		ICU Level of Service		A
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↑↑
Volume (veh/h)	0	14	2056	5	5	248
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	24	2211	5	7	365
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2410	1108			2216	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2410	1108			2216	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	88			97	
cM capacity (veh/h)	26	204			233	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	24	1474	742	7	182	182
Volume Left	0	0	0	7	0	0
Volume Right	24	0	5	0	0	0
cSH	204	1700	1700	233	1700	1700
Volume to Capacity	0.12	0.87	0.44	0.03	0.11	0.11
Queue Length 95th (ft)	10	0	0	2	0	0
Control Delay (s)	24.9	0.0	0.0	21.0	0.0	0.0
Lane LOS	C			C		
Approach Delay (s)	24.9	0.0		0.4		
Approach LOS	C					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		67.0%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	16	84	1973	11	36	211
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	20	104	2122	12	52	306
RTOR Reduction (vph)	0	5	0	1	0	0
Lane Group Flow (vph)	20	99	2122	11	52	306
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.7	25.8	68.3	68.3	5.0	82.1
Effective Green, g (s)	15.7	20.7	68.3	68.3	5.0	82.1
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	259	305	2256	1009	82	2712
v/s Ratio Prot	0.01	c0.06	c0.60		c0.03	0.09
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.33	0.94	0.01	0.63	0.11
Uniform Delay, d1	39.4	37.2	17.6	7.1	50.2	3.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	8.6	0.0	14.9	0.0
Delay (s)	39.6	37.8	26.2	7.1	65.1	3.2
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.1		26.1			12.2
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay		24.8		HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio		0.81				
Actuated Cycle Length (s)		107.1		Sum of lost time (s)	18.1	
Intersection Capacity Utilization		70.6%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	31	1951	25	0	227
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	50	2054	26	0	307
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2220	1040			2080	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2220	1040			2080	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	78			100	
cM capacity (veh/h)	37	227			263	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	50	1369	711	153	153	
Volume Left	0	0	0	0	0	
Volume Right	50	0	26	0	0	
cSH	227	1700	1700	1700	1700	
Volume to Capacity	0.22	0.81	0.42	0.09	0.09	
Queue Length 95th (ft)	20	0	0	0	0	
Control Delay (s)	25.3	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	25.3	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			64.7%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	9	6	1976	31	14	204
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	15	10	2058	32	17	252
RTOR Reduction (vph)	0	6	0	7	0	0
Lane Group Flow (vph)	15	4	2058	25	17	252
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.9	59.9	2.0	69.4
Effective Green, g (s)	1.4	3.4	59.9	59.9	2.0	69.4
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2738	1225	45	3173
v/s Ratio Prot	c0.01	0.00	c0.58		c0.01	0.07
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.47	0.06	0.75	0.02	0.38	0.08
Uniform Delay, d1	37.6	35.5	4.7	2.0	37.1	0.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.5	0.4	1.2	0.0	5.2	0.0
Delay (s)	48.1	35.8	5.9	2.0	42.3	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	43.2		5.9			3.1
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay			5.9		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.73			
Actuated Cycle Length (s)			77.4		Sum of lost time (s)	14.1
Intersection Capacity Utilization			67.5%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus MILCON_NorthOp Year 2016 Alt 2/3noB
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	43	1	0	42	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	80	2	0	67	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	81	67	3					
Volume Left (vph)	0	0	80	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	836	1121	817	843	1121					
Control Delay (s)	7.2	6.2	7.7	7.5	6.2					
Approach Delay (s)	7.2		7.7	7.4						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.1%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus MILCON_NorthOp Year 2016 Alt 2/3noB
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑			↑	↑	↑	↑	↑			
Volume (vph)	2	35	0	0	31	218	3	1787	48	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1358	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	47	0	0	43	303	3	1901	51	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	0	20	0	0	0
Lane Group Flow (vph)	3	47	0	0	43	247	3	1901	31	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	15.9	15.9			15.9	15.9	47.7	43.6	43.6			
Effective Green, g (s)	15.9	15.9			15.9	15.9	47.7	43.6	43.6			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.60	0.60			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	296	406			406	345	1158	2116	946			
v/s Ratio Prot		0.03			0.02		0.00	c0.54				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.12			0.11	0.72	0.00	0.90	0.03			
Uniform Delay, d1	22.3	22.9			22.8	26.4	4.4	12.7	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	6.9	0.0	5.5	0.0			
Delay (s)	22.3	23.0			22.9	33.3	4.4	18.3	6.0			
Level of Service	C	C			C	C	A	B	A			
Approach Delay (s)		23.0			32.0			17.9			0.0	
Approach LOS		C			C			B			A	
Intersection Summary												
HCM 2000 Control Delay		20.1						HCM 2000 Level of Service		C		
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		72.9						Sum of lost time (s)		13.4		
Intersection Capacity Utilization		82.5%						ICU Level of Service		E		
Analysis Period (min)		15										
c Critical Lane Group												






















NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱	↱
Volume (veh/h)	0	0	246	1594	0	173	1
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	0	256	1660	0	219	1
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1562	110	220		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1562	110	220		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	100	81		0		
cM capacity (veh/h)	83	922	1346		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	0	256	830	830	146	74	0
Volume Left	0	256	0	0	0	0	0
Volume Right	0	0	0	0	0	1	0
cSH	1700	1346	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.19	0.49	0.49	0.09	0.04	0.00
Queue Length 95th (ft)	0	18	0	0	0	0	0
Control Delay (s)	0.0	8.3	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	A					
Approach Delay (s)	0.0	1.1			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay			1.0				
Intersection Capacity Utilization			54.1%		ICU Level of Service		A
Analysis Period (min)			15				

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	378	0	37	2	1	2	25	1725	0	0	129	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	0.96
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3409	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3409	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	430	0	42	6	3	6	26	1816	0	0	187	61
RTOR Reduction (vph)	0	30	0	0	6	0	0	0	0	0	27	0
Lane Group Flow (vph)	430	12	0	6	3	0	26	1816	0	0	221	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	25.1	25.1		1.7	1.7		1.9	43.6			37.5	
Effective Green, g (s)	25.1	25.1		1.7	1.7		1.9	43.6			37.5	
Actuated g/C Ratio	0.29	0.29		0.02	0.02		0.02	0.51			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	522	466		35	33		39	1813			1502	
v/s Ratio Prot	c0.24	0.01		c0.00	0.00		0.01	c0.51			0.06	
v/s Ratio Perm												
v/c Ratio	0.82	0.03		0.17	0.09		0.67	1.00			0.15	
Uniform Delay, d1	27.9	21.3		41.0	40.9		41.3	20.7			14.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	10.2	0.0		2.3	1.2		35.5	21.5			0.0	
Delay (s)	38.1	21.3		43.3	42.2		76.8	42.3			14.3	
Level of Service	D	C		D	D		E	D			B	
Approach Delay (s)		36.6			42.6			42.8			14.3	
Approach LOS		D			D			D			B	
Intersection Summary												
HCM 2000 Control Delay			38.9			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.98									
Actuated Cycle Length (s)			85.1			Sum of lost time (s)				18.9		
Intersection Capacity Utilization			83.7%			ICU Level of Service				E		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	7	176	13	0	1588	16	36	22	1	19	39	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Frt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5032			5078		1770	1852			1732	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.19	
Satd. Flow (perm)	1770	5032			5078		1244	1852			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	8	198	15	0	1745	18	43	26	1	25	51	64
RTOR Reduction (vph)	0	5	0	0	1	0	0	1	0	0	17	0
Lane Group Flow (vph)	8	208	0	0	1762	0	43	26	0	0	123	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2062		241	360			53	
v/s Ratio Prot	c0.00	0.04			c0.35			0.01				
v/s Ratio Perm							c0.03				c0.38	
v/c Ratio	0.04	0.11			0.85		0.18	0.07			2.33	
Uniform Delay, d1	71.4	36.3			48.6		60.5	59.2			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			4.3		0.4	0.1			651.7	
Delay (s)	71.5	36.4			53.0		60.9	59.3			726.7	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		37.7			53.0			60.3			726.7	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		94.6			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		69.5%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	194	0	379	1596	8	0	0	0	0	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	237	0	403	1698	9	0	0	0	0	0	16
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	10
Lane Group Flow (vph)	0	237	0	403	1707	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.05		0.12	c0.48							
v/s Ratio Perm												0.00
v/c Ratio		0.12		0.23	0.53							0.01
Uniform Delay, d1		36.5		25.5	1.4							34.9
Progression Factor		0.44		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.1	0.2							0.0
Delay (s)		16.0		25.6	1.6							34.9
Level of Service		B		C	A							C
Approach Delay (s)		16.0			6.2		0.0					34.9
Approach LOS		B			A		A					C
Intersection Summary												
HCM 2000 Control Delay		7.4			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		66.0%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2016 Alt 2/3noB

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	9	232	0	0	128	103	0	0	0	47	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	11	276	0	0	138	111	0	0	0	52	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	248			276			495	546	276	491	491	193
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	248			276			495	546	276	491	491	193
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1317			1287			479	441	763	485	475	849

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	287	248	0	56
Volume Left	11	0	0	52
Volume Right	0	111	0	4
cSH	1317	1287	1700	502
Volume to Capacity	0.01	0.00	0.00	0.11
Queue Length 95th (ft)	1	0	0	9
Control Delay (s)	0.4	0.0	0.0	13.1
Lane LOS	A		A	B
Approach Delay (s)	0.4	0.0	0.0	13.1
Approach LOS			A	B

Intersection Summary

Average Delay	1.4		
Intersection Capacity Utilization	29.5%	ICU Level of Service	A
Analysis Period (min)	15		

NBC Coastal Campus

22: 3rd St & Palm Ave

MILCON_NorthOp Year 2016 Alt 2/3noB

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	270	4	26	208	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	314	5	28	224	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	319	28	249	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.1	5.5	5.1	5.6						
Degree Utilization, x	0.01	0.49	0.05	0.38	0.26	0.07						
Capacity (veh/h)	579	635	566	631	637	550						
Control Delay (s)	7.9	12.3	8.1	10.6	9.9	9.1						
Approach Delay (s)	12.2		10.3		9.9	9.1						
Approach LOS	B		B		A	A						

Intersection Summary

Delay	10.9		
Level of Service	B		
Intersection Capacity Utilization	37.3%	ICU Level of Service	A
Analysis Period (min)	15		

























NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↑	↕	↕	↕	↕
Volume (veh/h)	224	424	331	152	17	68
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	284	537	404	185	24	96
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	589			1600	295	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	589			1600	295	
tC, single (s)	4.1			6.8	6.9	
tC, 2 stage (s)						
tF (s)	2.2			3.5	3.3	
p0 queue free %	71			65	86	
cM capacity (veh/h)	982			69	702	
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	284	537	269	320	120	
Volume Left	284	0	0	0	24	
Volume Right	0	0	0	185	96	
cSH	982	1700	1700	1700	247	
Volume to Capacity	0.29	0.32	0.16	0.19	0.48	
Queue Length 95th (ft)	30	0	0	0	61	
Control Delay (s)	10.1	0.0	0.0	0.0	32.5	
Lane LOS	B				D	
Approach Delay (s)	3.5		0.0		32.5	
Approach LOS					D	
Intersection Summary						
Average Delay			4.4			
Intersection Capacity Utilization			41.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

															
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR			
Lane Configurations															
Volume (vph)	16	417	15	26	332	0	65	35	80	1	21	27			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6			
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00			
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85			
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00			
Satd. Flow (prot)	1770	3521		1770	3539			1720			1858	1583			
Flt Permitted	0.50	1.00		0.44	1.00			0.88			0.98	1.00			
Satd. Flow (perm)	933	3521		823	3539			1534			1830	1583			
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58			
Adj. Flow (vph)	21	542	19	34	431	0	98	53	121	2	36	47			
RTOR Reduction (vph)	0	3	0	0	0	0	0	33	0	0	0	30			
Lane Group Flow (vph)	21	558	0	34	431	0	0	239	0	0	38	17			
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm			
Protected Phases		2			6			8			4				
Permitted Phases	2			6			8			4		4			
Actuated Green, G (s)	13.1	13.1		13.1	13.1			13.1			13.1	13.1			
Effective Green, g (s)	13.1	13.1		13.1	13.1			13.1			13.1	13.1			
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37			
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6			
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0			
Lane Grp Cap (vph)	345	1302		304	1309			567			677	585			
v/s Ratio Prot		c0.16			0.12										
v/s Ratio Perm	0.02			0.04				c0.16			0.02	0.01			
v/c Ratio	0.06	0.43		0.11	0.33			0.42			0.06	0.03			
Uniform Delay, d1	7.2	8.3		7.3	8.0			8.3			7.2	7.1			
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00			
Incremental Delay, d2	0.1	0.2		0.2	0.1			0.5			0.0	0.0			
Delay (s)	7.3	8.6		7.5	8.1			8.8			7.2	7.1			
Level of Service	A	A		A	A			A			A	A			
Approach Delay (s)		8.5			8.1			8.8			7.2				
Approach LOS		A			A			A			A				
Intersection Summary															
HCM 2000 Control Delay			8.4		HCM 2000 Level of Service					A					
HCM 2000 Volume to Capacity ratio		0.42													
Actuated Cycle Length (s)		35.4			Sum of lost time (s)				9.2						
Intersection Capacity Utilization		46.3%			ICU Level of Service					A					
Analysis Period (min)		15													
c Critical Lane Group															

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	501	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	545	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)			767			
pX, platoon unblocked						
vC, conflicting volume			549		545	545
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			549		545	545
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1021		500	539
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	545	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	527			
Volume to Capacity	0.32	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	11.9			
Lane LOS			B			
Approach Delay (s)	0.0		11.9			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

























	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑	↘	↗	↑↑↑		↗	↑↑	↘	↗	↑↑	↘
Volume (vph)	21	633	34	23	1744	42	158	36	1900	87	44	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5047		1770	5067			3324			3363	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5047		1770	5067			3324			3363	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	754	40	25	1916	46	190	43	59	106	54	29
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	791	0	25	1961	0	0	280	0	0	181	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2234		118	2159			646			653	
v/s Ratio Prot	0.01	c0.16		c0.01	c0.39			c0.08			c0.05	
v/s Ratio Perm												
v/c Ratio	0.17	0.35		0.21	0.91			0.43			0.28	
Uniform Delay, d1	76.7	33.1		79.5	48.4			63.8			61.7	
Progression Factor	1.00	1.00		1.28	0.70			1.00			1.00	
Incremental Delay, d2	0.6	0.4		0.7	6.0			0.5			0.2	
Delay (s)	77.3	33.6		102.2	40.1			64.2			62.0	
Level of Service	E	C		F	D			E			E	
Approach Delay (s)		34.9			40.9			64.2			62.0	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		42.7			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		71.7%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 2/3noB

Timing Plan: AM PEAK

























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	858	34	20	1913	11	17	4	30	53	10	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5056		1770	5081			1685		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.91		0.67	1.00	
Satd. Flow (perm)	1770	5056		1770	5081			1551		1242	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	964	38	23	2174	12	23	5	41	76	14	20
RTOR Reduction (vph)	0	2	0	0	0	0	0	29	0	0	17	0
Lane Group Flow (vph)	2	1000	0	23	2186	0	0	40	0	76	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3474		118	3717			258		207	283	
v/s Ratio Prot	0.00	0.20		c0.01	c0.43						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.29		0.19	0.59			0.15		0.37	0.06	
Uniform Delay, d1	86.1	11.0		79.4	11.4			64.2		66.6	63.1	
Progression Factor	1.70	0.28		1.41	0.29			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.5	0.4			0.3		1.1	0.1	
Delay (s)	146.9	3.3		112.7	3.7			64.4		67.7	63.2	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.6			4.8			64.4			66.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		7.7			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.54										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		70.6%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

28: 13th St & SR-75 (Palm Ave)









MILCON_NorthOp Year 2016 Alt 2/3noB

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	927	62	93	1772	50	141	18	88	164	35	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.91	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5037		1770	5085	1583		1784	1583		3374	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5037		1770	5085	1583		1784	1583		3374	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1042	70	112	2135	60	158	20	99	219	47	19
RTOR Reduction (vph)	0	4	0	0	0	28	0	0	82	0	3	0
Lane Group Flow (vph)	3	1108	0	112	2135	32	0	178	17	0	282	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		581	
v/s Ratio Prot	0.00	0.22		c0.06	c0.42			c0.10			c0.08	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.50		0.57	0.79	0.04		0.58	0.06		0.48	
Uniform Delay, d1	86.2	35.8		75.9	34.0	20.1		68.5	62.3		67.3	
Progression Factor	1.21	0.63		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.8		4.0	2.4	0.1		2.6	0.1		0.6	
Delay (s)	105.1	23.5		79.9	36.5	20.2		71.2	62.4		67.9	
Level of Service	F	C		E	D	C		E	E		E	
Approach Delay (s)		23.7			38.2			68.0			67.9	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		38.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		88.2%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	1186	25	42	1899	11	15	6	47	37	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1670			1722	
Flt Permitted	0.95	1.00		0.95	1.00			0.93			0.78	
Satd. Flow (perm)	1770	5070		1770	5081			1566			1384	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	14	1289	27	49	2208	13	18	7	56	49	3	28
RTOR Reduction (vph)	0	2	0	0	0	0	0	44	0	0	22	0
Lane Group Flow (vph)	14	1314	0	49	2221	0	0	37	0	0	58	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Effective Green, g (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2666		72	2829			332			293	
v/s Ratio Prot	0.01	0.26		c0.03	c0.44							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.82	0.49		0.68	0.78			0.11			0.20	
Uniform Delay, d1	35.1	10.8		33.6	12.4			22.6			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	132.1	0.1		23.3	1.5			0.1			0.3	
Delay (s)	167.2	10.9		56.9	13.9			22.7			23.4	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		12.6			14.8			22.7			23.4	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		14.4			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		71.1			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		53.8%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	89	1200	29	239	1841	210	72	71	755	230	90	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	103	1395	34	254	1959	223	80	79	839	274	107	89
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	182	0	3	56
Lane Group Flow (vph)	103	1427	0	254	1959	156	80	312	271	274	113	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.4	30.4	10.4	34.1	34.1
Effective Green, g (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.4	30.4	10.4	34.1	34.1
Actuated g/C Ratio	0.05	0.30		0.15	0.41	0.41	0.06	0.26	0.26	0.09	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	177	1543		273	2070	644	102	406	394	308	514	442
v/s Ratio Prot	0.03	0.28		c0.14	c0.39		0.05	c0.20		c0.08	c0.06	
v/s Ratio Perm						0.10		0.18				0.02
v/c Ratio	0.58	0.92		0.93	0.95	0.24	0.78	0.77	0.69	0.89	0.22	0.05
Uniform Delay, d1	53.7	39.0		48.4	33.1	22.6	53.9	39.5	38.5	52.2	30.9	29.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.8	9.7		36.3	9.9	0.2	31.6	8.5	4.9	25.2	0.2	0.1
Delay (s)	58.5	48.7		84.7	43.0	22.8	85.5	48.0	43.4	77.4	31.1	29.4
Level of Service	E	D		F	D	C	F	D	D	E	C	C
Approach Delay (s)		49.4			45.5			48.9			57.8	
Approach LOS		D			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		48.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.90										
Actuated Cycle Length (s)		115.9			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		83.8%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2016 Alt 2/3noB

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↘	↗
Volume (vph)	0	278	1105	0	152	1188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	312	1188	0	169	1320
RTOR Reduction (vph)	0	0	0	0	0	6
Lane Group Flow (vph)	0	312	1188	0	169	1314
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.34		0.10	c0.47
v/s Ratio Perm						
v/c Ratio		0.12	1.02		0.82	0.86
Uniform Delay, d1		2.5	26.8		34.5	15.3
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	30.9		21.4	5.0
Delay (s)		2.5	57.7		55.8	20.3
Level of Service		A	E		E	C
Approach Delay (s)		2.5	57.7		24.4	
Approach LOS		A	E		C	
Intersection Summary						
HCM 2000 Control Delay		35.3		HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio		0.98				
Actuated Cycle Length (s)		80.0		Sum of lost time (s)		14.2
Intersection Capacity Utilization		63.9%		ICU Level of Service		B
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 2/3noB

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↘	↗				
Volume (vph)	0	431	0	0	413	513	792	1	141	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3245		1681	1632				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3245		1681	1632				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	495	0	0	449	558	861	1	153	0	0	0
RTOR Reduction (vph)	0	0	0	0	351	0	0	29	0	0	0	0
Lane Group Flow (vph)	0	495	0	0	656	0	517	469	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.4			16.4		19.9	19.9				
Effective Green, g (s)		16.4			16.4		19.9	19.9				
Actuated g/C Ratio		0.37			0.37		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1310			1201		755	733				
v/s Ratio Prot		0.14			c0.20							
v/s Ratio Perm							c0.31	0.29				
v/c Ratio		0.38			0.55		0.68	0.64				
Uniform Delay, d1		10.2			11.0		9.7	9.4				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.5		2.6	1.8				
Delay (s)		10.4			11.5		12.3	11.3				
Level of Service		B			B		B	B				
Approach Delay (s)		10.4			11.5		11.8				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay		11.4							HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		44.3							Sum of lost time (s)		8.0	
Intersection Capacity Utilization		67.5%							ICU Level of Service		C	
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰			↱	↰	↱
Volume (veh/h)	0	3	4	65	13	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	90	32	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	133	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	133	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	858	1042	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	96	32			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	1042	1581	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			16.7%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↱			↰↱				↰			↱
Volume (veh/h)	0	4046	17	0	1798	243	0	0	907	0	0	55
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4215	18	0	1854	251	0	0	1008	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2124			4252			4965	6368	1454	3424	6251	783
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2124			4252			4965	6368	1454	3424	6251	783
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	249			34			0	0	1829	1	0	325
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1686	1686	861	741	741	621	1008	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	251	1008	83				
cSH	1700	1700	1700	1700	1700	1700	1829	325				
Volume to Capacity	0.99	0.99	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	89	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.4	19.8				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.4	19.8				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				143.3%	ICU Level of Service		H					
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3812	130	0	1835	0	200	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3930	134	0	1911	0	244	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4084		4674	1417	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4084		4674	1417	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			40		1	122	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1572	1572	920	637	637	637	244
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	244
cSH	1700	1700	1700	1700	1700	1700	122
Volume to Capacity	0.92	0.92	0.54	0.37	0.37	0.37	1.99
Queue Length 95th (ft)	0	0	0	0	0	0	495
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	534.5
Lane LOS							F
Approach Delay (s)	0.0			0.0			534.5
Approach LOS							F
Intersection Summary							
Average Delay			21.0				
Intersection Capacity Utilization			97.6%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	↗
Volume (vph)	0	0	0	963	634	109	86	251			860	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3528	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3528	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1014	667	115	89	259	0	0	887	16
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	507	1277	0	89	259	0	0	901	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1432		98	1989			1568	
v/s Ratio Prot				c0.33	0.28		c0.05	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.08	0.96d1		0.91	0.13			0.57	
Uniform Delay, d1				31.1	29.7		42.3	9.3			18.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				64.3	7.4		61.4	0.0			0.5	
Delay (s)				95.4	37.1		103.7	9.3			19.2	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			53.6			33.5			19.2	
Approach LOS		A			D			C			B	
Intersection Summary												
HCM 2000 Control Delay			41.1				HCM 2000 Level of Service				D	
HCM 2000 Volume to Capacity ratio			0.79									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)				17.2	
Intersection Capacity Utilization			135.5%				ICU Level of Service				H	
Analysis Period (min)			15									
d1 Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔↔	
Volume (vph)	7	2108	106	0	0	0	0	337	435	760	1087	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3128	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3128	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2316	116	0	0	0	0	392	506	792	1132	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2324	87	0	0	0	0	614	249	792	1132	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					949	409	865	2022	
v/s Ratio Prot		c0.46						c0.20		c0.23	0.32	
v/s Ratio Perm			0.06						0.18			
v/c Ratio		1.26	0.15					0.65	0.61	0.92	0.56	
Uniform Delay, d1		55.8	37.7					52.8	52.1	63.6	23.6	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		122.6	0.1					1.5	2.6	14.1	0.3	
Delay (s)		178.4	37.8					54.4	54.6	77.7	24.0	
Level of Service		F	D					D	D	E	C	
Approach Delay (s)		171.7			0.0			54.4			46.1	
Approach LOS		F			A			D			D	
Intersection Summary												
HCM 2000 Control Delay			105.8									F
HCM 2000 Volume to Capacity ratio			0.96									
Actuated Cycle Length (s)			175.0							14.4		
Intersection Capacity Utilization			135.5%									H
Analysis Period (min)			15									
c Critical Lane Group												













NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔
Volume (vph)	168	11	847	668	0	1181
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1584		3257			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1584		3257			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	215	14	952	751	0	1270
RTOR Reduction (vph)	2	0	68	0	0	0
Lane Group Flow (vph)	227	0	1635	0	0	1270
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	297		2461			2540
v/s Ratio Prot	c0.14		c0.50			0.38
v/s Ratio Perm						
v/c Ratio	0.77		0.66			0.50
Uniform Delay, d1	61.7		9.6			7.7
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	11.2		1.4			0.7
Delay (s)	72.8		11.0			8.4
Level of Service	E		B			A
Approach Delay (s)	72.8		11.0			8.4
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay			14.4			B
HCM 2000 Volume to Capacity ratio			0.70			
Actuated Cycle Length (s)			160.0			12.1
Intersection Capacity Utilization			78.3%			D
Analysis Period (min)			15			
c Critical Lane Group						









NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	139	9	28	25	9	24	22	1436	47	65	1398	147
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1695	1583		1721		1770	3522		1770	3489	
Flt Permitted	0.69	0.69	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1219	1217	1583		1463		1770	3522		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	178	12	36	39	14	38	24	1544	51	71	1520	160
RTOR Reduction (vph)	0	0	30	0	23	0	0	1	0	0	3	0
Lane Group Flow (vph)	94	96	6	0	68	0	24	1594	0	71	1677	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4		4							
Actuated Green, G (s)	18.9	18.9	18.9		18.9		3.1	72.0		8.0	76.9	
Effective Green, g (s)	18.9	18.9	18.9		18.9		3.1	72.0		8.0	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	202	263		243		48	2230		124	2359	
v/s Ratio Prot							0.01	0.45		c0.04	c0.48	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.47	0.48	0.02		0.28		0.50	0.71		0.57	0.71	
Uniform Delay, d1	42.8	42.9	39.7		41.4		54.5	14.0		51.2	11.5	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	1.8	0.0		0.6		8.0	1.1		6.3	1.0	
Delay (s)	44.5	44.7	39.7		42.1		62.5	15.1		57.4	12.5	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.8			42.1			15.8			14.3	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.5										
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		113.7								14.8		
Intersection Capacity Utilization		73.2%								D		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	7	0	140	0	1247	0	31	1533	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1619			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1619			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	10	0	203	0	1327	0	33	1648	0
RTOR Reduction (vph)	0	0	0	0	165	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	48	0	0	1327	0	33	1648	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			45.5		1.7	51.4	
Effective Green, g (s)					14.1			45.5		1.7	51.4	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					301			2129		39	2406	
v/s Ratio Prot					c0.03			0.37		0.02	c0.47	
v/s Ratio Perm												
v/c Ratio					0.16			0.62		0.85	0.68	
Uniform Delay, d1					25.8			9.6		36.8	7.2	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.2			0.6		84.9	0.8	
Delay (s)					26.0			10.2		121.7	8.1	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			26.0			10.2			10.3	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					11.3							
HCM 2000 Volume to Capacity ratio					0.66							
Actuated Cycle Length (s)					75.6					18.9		
Intersection Capacity Utilization					59.8%					B		
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2016 Alt 2/3noB

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	284	48	115	6	67	409	27	565	2	135	1361	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1516		1855	1511	1770	3539	1350	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1516		1855	1511	1770	3539	1350	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	374	63	151	7	73	445	30	621	2	144	1448	68
RTOR Reduction (vph)	0	0	122	0	0	226	0	0	1	0	2	0
Lane Group Flow (vph)	374	63	29	0	80	219	30	621	1	144	1514	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.7	27.7	27.7		23.1	23.1	2.9	56.2	56.2	16.6	69.9	
Effective Green, g (s)	27.7	27.7	27.7		23.1	23.1	2.9	56.2	56.2	16.6	69.9	
Actuated g/C Ratio	0.19	0.19	0.19		0.16	0.16	0.02	0.39	0.39	0.12	0.49	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	342	360	293		299	244	35	1390	530	205	1716	
v/s Ratio Prot	c0.21	0.03			0.04		0.02	0.18		c0.08	c0.43	
v/s Ratio Perm			0.02			c0.14		0.00				
v/c Ratio	1.09	0.17	0.10		0.27	0.90	0.86	0.45	0.00	0.70	0.88	
Uniform Delay, d1	57.6	48.1	47.4		52.5	58.8	69.8	32.0	26.4	60.8	32.9	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	76.1	0.2	0.1		0.5	31.4	94.8	1.0	0.0	10.4	6.9	
Delay (s)	133.8	48.3	47.5		53.0	90.1	164.6	33.0	26.4	71.2	39.8	
Level of Service	F	D	D		D	F	F	C	C	E	D	
Approach Delay (s)		102.5			84.5			39.0			42.5	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay		58.6								E		
HCM 2000 Volume to Capacity ratio		0.94										
Actuated Cycle Length (s)		143.0				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		78.6%				ICU Level of Service		D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2016 Alt 2/3noB

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	305	481	3	35	174	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	339	534	4	49	198	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	428	29			54	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	428	29			54	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	33	49			87	
cM capacity (veh/h)	510	1046			1552	
Direction, Lane #						
Volume Total	873	54	201			
Volume Left	339	0	198			
Volume Right	534	49	0			
cSH	1123	1700	1552			
Volume to Capacity	0.78	0.03	0.13			
Queue Length 95th (ft)	207	0	11			
Control Delay (s)	18.4	0.0	7.5			
Lane LOS	C		A			
Approach Delay (s)	18.4	0.0	7.5			
Approach LOS	C					
Intersection Summary						
Average Delay		15.6				
Intersection Capacity Utilization		40.0%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2016 Alt 2/3noB

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	308	6	600	38	0	1485
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	390	8	667	42	0	1669
RTOR Reduction (vph)	1	0	0	24	0	0
Lane Group Flow (vph)	397	0	667	18	0	1669
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.22		0.19			c0.47
v/s Ratio Perm				0.01		
v/c Ratio	0.47		0.44	0.03		1.10
Uniform Delay, d1	18.6		21.1	17.3		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.2	0.0		54.8
Delay (s)	19.0		21.3	17.3		84.7
Level of Service	B		C	B		F
Approach Delay (s)	19.0		21.0			84.7
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay			59.0		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			0.77			
Actuated Cycle Length (s)			105.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			91.0%		ICU Level of Service	E
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2016 Alt 2/3noB

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (veh/h)	4	6	455	3	14	1422
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	529	3	15	1563
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1343	266			533	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1343	266			533	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	94	98			99	
cM capacity (veh/h)	141	732			1031	
Direction, Lane #						
Volume Total	20	353	180	15	781	781
Volume Left	8	0	0	15	0	0
Volume Right	12	0	3	0	0	0
cSH	274	1700	1700	1031	1700	1700
Volume to Capacity	0.07	0.21	0.11	0.01	0.46	0.46
Queue Length 95th (ft)	6	0	0	1	0	0
Control Delay (s)	19.2	0.0	0.0	8.5	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	19.2	0.0		0.1		
Approach LOS	C					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			49.3%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2016 Alt 2/3noB

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↕	↕	↖	↗
Volume (vph)	29	55	403	11	99	1327
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	32	60	458	12	109	1458
RTOR Reduction (vph)	0	44	0	7	0	0
Lane Group Flow (vph)	32	16	458	5	109	1458
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.3	21.5	27.8	27.8	7.1	43.7
Effective Green, g (s)	9.3	16.4	27.8	27.8	7.1	43.7
Actuated g/C Ratio	0.15	0.26	0.45	0.45	0.11	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	264	416	1579	706	201	2482
v/s Ratio Prot	c0.02	0.01	0.13		0.06	c0.41
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.04	0.29	0.01	0.54	0.59
Uniform Delay, d1	23.0	17.1	11.0	9.6	26.1	4.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.0	3.0	0.4
Delay (s)	23.2	17.1	11.1	9.6	29.0	5.1
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.2		11.0			6.7
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			8.2		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.61			
Actuated Cycle Length (s)			62.3		Sum of lost time (s)	18.1
Intersection Capacity Utilization			48.6%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave







MILCON_NorthOp Year 2016 Alt 2/3noB

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↕	↕		↗
Volume (veh/h)	0	22	394	18	0	1356
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	29	453	21	0	1474
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1200	237			474	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1200	237			474	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	178	765			1085	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	29	302	172	737	737	
Volume Left	0	0	0	0	0	
Volume Right	29	0	21	0	0	
cSH	765	1700	1700	1700	1700	
Volume to Capacity	0.04	0.18	0.10	0.43	0.43	
Queue Length 95th (ft)	3	0	0	0	0	
Control Delay (s)	9.9	0.0	0.0	0.0	0.0	
Lane LOS	A					
Approach Delay (s)	9.9	0.0		0.0		
Approach LOS	A					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			40.8%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd





MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	29	25	387	18	22	1332
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	40	35	412	19	24	1464
RTOR Reduction (vph)	0	32	0	8	0	0
Lane Group Flow (vph)	40	3	412	11	24	1464
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.4	27.1	27.1	1.8	36.4
Effective Green, g (s)	2.6	4.4	27.1	27.1	1.8	36.4
Actuated g/C Ratio	0.06	0.10	0.59	0.59	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	152	2103	940	69	2824
v/s Ratio Prot	c0.02	0.00	0.12		0.01	c0.41
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.40	0.02	0.20	0.01	0.35	0.52
Uniform Delay, d1	20.7	18.7	4.2	3.8	21.3	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.6	0.1	0.0	0.0	3.0	0.2
Delay (s)	23.4	18.7	4.3	3.8	24.4	1.7
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.2		4.3			2.1
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	3.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	45.6	Sum of lost time (s)	14.1
Intersection Capacity Utilization	47.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	10	13	81	7	0	172	12	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	10	14	105	9	0	193	13	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	10	14	114	207						
Volume Left (vph)	0	0	105	0						
Volume Right (vph)	0	14	0	13						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.13	0.18						
Capacity (veh/h)	873	1121	860	1121						
Control Delay (s)	7.1	6.2	7.7	6.9						
Approach Delay (s)	6.6		7.7	6.9						
Approach LOS	A		A	A						

Intersection Summary			
Delay	7.2		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2016 Alt 2/3noB

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑		↰	↑	↰	↰	↑	↰			
Volume (vph)	9	178	0	0	78	133	11	311	66	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Flt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1301	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	10	202	0	0	90	153	12	342	73	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	121	0	0	39	0	0	0
Lane Group Flow (vph)	10	202	0	0	90	32	12	342	34	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.7	18.7	18.7			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.7	18.7	18.7			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	269	386			386	328	817	1634	730			
v/s Ratio Prot		c0.11			0.05		0.01	c0.10				
v/s Ratio Perm	0.01					0.02		0.02				
v/c Ratio	0.04	0.52			0.23	0.10	0.01	0.21	0.05			
Uniform Delay, d1	12.8	14.3			13.4	13.0	5.9	6.5	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.3			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.9	15.6			13.7	13.1	5.9	6.6	6.0			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.3		6.4			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.5			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.31										
Actuated Cycle Length (s)		40.5			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		40.3%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd











MILCON_NorthOp Year 2016 Alt 2/3noB

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰		↰	↑	↰	↑	↰
Volume (veh/h)	1	246	1	449	0	1494	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	4	984	1	510	0	1660	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1917	830	1660		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1917	830	1660		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	93	0	100		0		
cM capacity (veh/h)	59	313	384		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	988	1	255	255	1107	553	0
Volume Left	4	1	0	0	0	0	0
Volume Right	984	0	0	0	0	0	0
cSH	308	384	1700	1700	1700	1700	1700
Volume to Capacity	3.21	0.00	0.15	0.15	0.65	0.33	0.00
Queue Length 95th (ft)	Err	0	0	0	0	0	0
Control Delay (s)	Err	14.4	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B					
Approach Delay (s)	Err	0.0			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			3126.9				
Intersection Capacity Utilization			63.3%		ICU Level of Service		
Analysis Period (min)			15				B











NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	0	65	1	1	0	70	311	11	1	1312	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3521		1770	3473	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3521		1770	3473	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	112	0	87	2	2	0	77	342	12	1	1458	207
RTOR Reduction (vph)	0	70	0	0	0	0	0	2	0	0	8	0
Lane Group Flow (vph)	112	17	0	2	2	0	77	352	0	1	1657	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	17.9	17.9		0.8	0.8		5.8	52.4		0.8	47.4	
Effective Green, g (s)	17.9	17.9		0.8	0.8		5.8	52.4		0.8	47.4	
Actuated g/C Ratio	0.20	0.20		0.01	0.01		0.06	0.58		0.01	0.52	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	348	312		15	16		113	2031		15	1812	
v/s Ratio Prot	c0.06	0.01		c0.00	0.00		c0.04	0.10		0.00	c0.48	
v/s Ratio Perm												
v/c Ratio	0.32	0.05		0.13	0.12		0.68	0.17		0.07	0.91	
Uniform Delay, d1	31.2	29.6		44.7	44.7		41.6	9.0		44.6	19.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.1		4.0	3.5		15.6	0.0		1.9	7.6	
Delay (s)	31.8	29.7		48.7	48.2		57.2	9.1		46.5	27.4	
Level of Service	C	C		D	D		E	A		D	C	
Approach Delay (s)		30.9			48.4			17.7			27.4	
Approach LOS		C			D			B			C	
Intersection Summary												
HCM 2000 Control Delay		25.9										
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		90.8										
Intersection Capacity Utilization		69.6%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	1269	56	0	347	33	12	38	4	23	25	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5053			5019		1770	1835			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.17	
Satd. Flow (perm)	1770	5053			5019		1313	1835			299	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	62	1442	64	0	369	35	17	54	6	27	29	24
RTOR Reduction (vph)	0	2	0	0	6	0	0	2	0	0	8	0
Lane Group Flow (vph)	62	1504	0	0	398	0	17	58	0	0	72	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1911			2038		255	356			49	
v/s Ratio Prot	c0.04	c0.30			c0.08			c0.03				
v/s Ratio Perm							0.01				c0.24	
v/c Ratio	0.32	0.79			0.20		0.07	0.16			1.46	
Uniform Delay, d1	73.7	49.5			34.5		59.2	60.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.9	3.4			0.2		0.1	0.2			291.2	
Delay (s)	74.6	52.9			34.7		59.3	60.5			366.2	
Level of Service	E	D			C		E	E			F	
Approach Delay (s)		53.7			34.7			60.2			366.2	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		62.1										
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←
Volume (vph)	0	1298	0	482	383	1900	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3494							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3494							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1458	0	513	407	38	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1458	0	513	445	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3175							609
v/s Ratio Prot		c0.29		c0.15	c0.13							
v/s Ratio Perm												0.00
v/c Ratio		0.76		0.27	0.14							0.00
Uniform Delay, d1		48.8		20.5	0.9							34.8
Progression Factor		0.18		1.00	1.00							1.00
Incremental Delay, d2		1.7		0.1	0.0							0.0
Delay (s)		10.3		20.6	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		10.3			11.4		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		10.8				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.50										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		48.0%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												








NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		←←←←			←←←←			←←←←			←←←←	
Volume (veh/h)	3	212	0	0	304	40	0	0	0	103	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	247	0	0	345	45	0	0	0	156	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	391			247			634	644	247	622	622	368
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	391			247			634	644	247	622	622	368
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	61	100	98
cM capacity (veh/h)	1168			1319			384	390	792	398	402	677
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	250	391	0	168								
Volume Left	3	0	0	156								
Volume Right	0	45	0	12								
cSH	1168	1319	1700	411								
Volume to Capacity	0.00	0.00	0.00	0.41								
Queue Length 95th (ft)	0	0	0	49								
Control Delay (s)	0.1	0.0	0.0	19.7								
Lane LOS	A			A								
Approach Delay (s)	0.1	0.0	0.0	19.7								
Approach LOS				A								
Intersection Summary												
Average Delay		4.1										
Intersection Capacity Utilization		31.3%				ICU Level of Service		A				
Analysis Period (min)		15										







NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	293	12	84	318	24	14	38	67	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	376	15	94	357	27	25	67	118	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	391	94	384	209	161						
Volume Left (vph)	9	0	94	0	25	61						
Volume Right (vph)	0	15	0	27	118	28						
Hadj (s)	0.53	0.01	0.53	-0.02	-0.28	0.00						
Departure Headway (s)	7.2	6.7	7.1	6.5	6.6	7.0						
Degree Utilization, x	0.02	0.72	0.19	0.70	0.38	0.31						
Capacity (veh/h)	472	520	485	529	479	437						
Control Delay (s)	9.1	23.9	10.5	22.0	13.7	13.2						
Approach Delay (s)	23.6		19.8		13.7	13.2						
Approach LOS	C		C		B	B						
Intersection Summary												
Delay			19.1									
Level of Service			C									
Intersection Capacity Utilization			41.2%		ICU Level of Service				A			
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	72	421	454	39	52	140
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	74	434	528	45	61	165
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	573				1133	287
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	573				1133	287
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	93				66	77
cM capacity (veh/h)	996				182	710
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	74	434	352	221	226	
Volume Left	74	0	0	0	61	
Volume Right	0	0	0	45	165	
cSH	996	1700	1700	1700	397	
Volume to Capacity	0.07	0.26	0.21	0.13	0.57	
Queue Length 95th (ft)	6	0	0	0	85	
Control Delay (s)	8.9	0.0	0.0	0.0	25.3	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		25.3	
Approach LOS					D	
Intersection Summary						
Average Delay			4.9			
Intersection Capacity Utilization			40.3%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↲	↰	↱	↲	↰	↱	↲	↰	↱	↲
Volume (vph)	28	430	29	31	456	3	54	19	22	12	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3536			1754			1841	1583
Flt Permitted	0.47	1.00		0.45	1.00			0.79			0.90	1.00
Satd. Flow (perm)	870	3505		834	3536			1417			1669	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	512	35	34	501	3	66	23	27	16	53	39
RTOR Reduction (vph)	0	7	0	0	1	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	540	0	34	503	0	0	95	0	0	69	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Effective Green, g (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	414	1671		397	1686			309			364	345
v/s Ratio Prot		c0.15			0.14							
v/s Ratio Perm	0.04			0.04			c0.07			0.04		0.01
v/c Ratio	0.08	0.32		0.09	0.30		0.31			0.19		0.02
Uniform Delay, d1	4.3	4.9		4.3	4.8		9.9			9.6		9.3
Progression Factor	1.00	1.00		1.00	1.00		1.00			1.00		1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1		0.6			0.3		0.0
Delay (s)	4.4	5.0		4.4	4.9		10.5			9.9		9.3
Level of Service	A	A		A	A		B			A		A
Approach Delay (s)		5.0			4.9		10.5			9.7		
Approach LOS		A			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		30.2			Sum of lost time (s)		9.2					
Intersection Capacity Utilization		44.6%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↱			↰	↱
Volume (veh/h)	720	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	878	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			888		878	878
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			888		878	878
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	99
cM capacity (veh/h)			763		318	347
Direction, Lane #						
Volume Total	EB 1	EB 2	NB 1			
Volume Left	878	10	12			
Volume Right	0	0	9			
cSH	0	10	3			
cSH	1700	1700	325			
Volume to Capacity	0.52	0.01	0.04			
Queue Length 95th (ft)	0	0	3			
Control Delay (s)	0.0	0.0	16.5			
Lane LOS			C			
Approach Delay (s)	0.0		16.5			
Approach LOS			C			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			47.9%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	40	1591	120	56	759	127	94	87	61	168	77	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Flt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5032		1770	4976			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5032		1770	4976			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	43	1693	128	57	767	128	103	96	67	189	87	28
RTOR Reduction (vph)	0	5	0	0	12	0	0	19	0	0	4	0
Lane Group Flow (vph)	43	1816	0	57	883	0	0	247	0	0	300	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2116		157	1982			649			658	
v/s Ratio Prot	0.02	c0.36		c0.03	0.18			c0.07			c0.09	
v/s Ratio Perm												
v/c Ratio	0.22	0.86		0.36	0.45			0.38			0.46	
Uniform Delay, d1	72.9	47.3		77.2	39.6			63.1			64.1	
Progression Factor	1.00	1.00		1.25	0.69			1.00			1.00	
Incremental Delay, d2	0.6	3.7		1.4	0.7			0.4			0.5	
Delay (s)	73.5	51.0		97.6	28.2			63.5			64.6	
Level of Service	E	D		F	C			E			E	
Approach Delay (s)		51.5			32.4			63.5			64.6	
Approach LOS		D			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		48.2			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		116.6%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	20	1866	55	47	1154	53	21	10	34	62	12	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5			5.5	5.5
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	1.00
Flt	1.00	1.00		1.00	0.99			0.93			1.00	0.92
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.95	1.00
Satd. Flow (prot)	1770	5063		1770	5052			1703			1770	1718
Flt Permitted	0.95	1.00		0.95	1.00			0.90			0.63	1.00
Satd. Flow (perm)	1770	5063		1770	5052			1551			1169	1718
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	1904	56	48	1190	55	25	12	41	73	14	15
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	13	0
Lane Group Flow (vph)	20	1959	0	48	1243	0	0	55	0	73	16	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Effective Green, g (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3563		157	3668			190		143	210	
v/s Ratio Prot	0.01	c0.39		c0.03	c0.25						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.55		0.31	0.34			0.29		0.51	0.08	
Uniform Delay, d1	79.3	12.9		76.8	9.0			71.8		73.9	69.9	
Progression Factor	1.44	0.10		1.56	0.31			1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4		0.9	0.2			0.9		3.1	0.2	
Delay (s)	114.8	1.7		121.1	3.0			72.7		76.9	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		2.8			7.3			72.7			75.0	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.52										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		58.7%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	1684	192	153	1227	79	125	39	124	150	43	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5007		1770	5085	1583		1794	1583		3371	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5007		1770	5085	1583		1794	1583		3371	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	28	1791	204	158	1265	81	136	42	135	203	58	27
RTOR Reduction (vph)	0	8	0	0	0	37	0	0	112	0	4	0
Lane Group Flow (vph)	28	1987	0	158	1265	44	0	178	23	0	284	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2216		192	2364	736		305	269		574	
v/s Ratio Prot	0.02	c0.40		c0.09	c0.25			c0.10			c0.08	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.18	0.90		0.82	0.54	0.06		0.58	0.09		0.49	
Uniform Delay, d1	75.9	46.3		78.5	34.3	26.5		68.8	62.8		67.6	
Progression Factor	1.04	0.91		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	5.4		23.9	0.9	0.2		7.9	0.6		3.0	
Delay (s)	79.5	47.7		102.4	35.2	26.7		76.7	63.5		70.6	
Level of Service	E	D		F	D	C		E	E		E	
Approach Delay (s)		48.1			41.8			71.0			70.6	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		49.1			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		100.7%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	1878	48	166	1519	15	38	8	79	23	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5066		1770	5078			1678			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.83	
Satd. Flow (perm)	1770	5066		1770	5078			1513			1506	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85		0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	10	2087	53	175	1599	16	45	9	93	28	12	12
RTOR Reduction (vph)	0	2	0	0	1	0	0	74	0	0	10	0
Lane Group Flow (vph)	10	2138	0	175	1614	0	0	73	0	0	42	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4				4	
Actuated Green, G (s)	0.8	40.4		11.2	50.8			17.2			17.2	
Effective Green, g (s)	0.8	40.4		11.2	50.8			17.2			17.2	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2422		234	3052			307			306	
v/s Ratio Prot	0.01	c0.42		c0.10	0.32							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.62	0.88		0.75	0.53			0.24			0.14	
Uniform Delay, d1	41.7	19.9		35.3	9.9			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	57.6	4.2		12.3	0.2			0.4			0.2	
Delay (s)	99.3	24.1		47.6	10.0			28.6			27.8	
Level of Service	F	C		D	B			C			C	
Approach Delay (s)		24.4			13.7			28.6			27.8	
Approach LOS		C			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		20.0			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		84.5			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		67.5%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 2/3noB

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↔↔↔		↔	↔↔↔	↔	↔	↔	↔	↔↔	↔	↔
Volume (vph)	185	1822	24	321	1527	544	64	173	522	576	234	223
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		1770	5085	1583	1770	1631	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		1770	5085	1583	1770	1631	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	195	1918	25	345	1642	585	68	184	555	626	254	242
RTOR Reduction (vph)	0	1	0	0	0	88	0	26	269	0	2	132
Lane Group Flow (vph)	195	1942	0	345	1642	497	68	358	86	626	276	86
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.3	36.4		45.0	70.1	70.1	8.6	36.8	36.8	11.8	40.0	40.0
Effective Green, g (s)	11.3	36.4		45.0	70.1	70.1	8.6	36.8	36.8	11.8	40.0	40.0
Actuated g/C Ratio	0.07	0.24		0.30	0.46	0.46	0.06	0.24	0.24	0.08	0.26	0.26
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1216		524	2346	730	100	395	364	266	460	396
v/s Ratio Prot	0.06	c0.38		c0.19	c0.32		0.04	c0.22		c0.18	c0.16	
v/s Ratio Perm						0.31		0.06				0.06
v/c Ratio	0.76	1.60		0.66	0.70	0.68	0.91	0.24	2.35	0.60	0.22	
Uniform Delay, d1	69.0	57.8		46.7	32.5	32.1	70.3	55.9	46.3	70.0	48.9	43.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.8	272.7		3.0	0.9	2.6	17.3	23.8	0.3	620.6	2.1	0.3
Delay (s)	81.8	330.4		49.7	33.5	34.7	87.6	79.7	46.6	690.6	51.1	44.0
Level of Service	F	F		D	C	C	F	E	D	F	D	D
Approach Delay (s)		307.7			35.9			65.8			406.5	
Approach LOS		F			D			E			F	

Intersection Summary

HCM 2000 Control Delay	189.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	151.9	Sum of lost time (s)	21.9
Intersection Capacity Utilization	120.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2016 Alt 2/3noB

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔↔	↔↔		↔	↔↔
Volume (vph)	0	492	830	0	431	1567
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	553	883	0	474	1722
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	553	883	0	474	1717
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.16	c0.25		0.27	c0.62
v/s Ratio Perm						
v/c Ratio		0.31	1.03		0.71	0.97
Uniform Delay, d1		11.6	30.3		21.3	13.7
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	38.4		3.7	14.2
Delay (s)		11.7	68.7		25.0	27.9
Level of Service		B	E		C	C
Approach Delay (s)		11.7	68.7		27.3	
Approach LOS		B	E		C	

Intersection Summary

HCM 2000 Control Delay	35.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	83.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑				
Volume (vph)	0	917	0	0	515	245	421	2	105	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1614				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1614				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	955	0	0	579	275	453	2	113	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	39	0	0	0	0
Lane Group Flow (vph)	0	955	0	0	756	0	290	239	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		18.7			18.7		13.5	13.5				
Effective Green, g (s)		18.7			18.7		13.5	13.5				
Actuated g/C Ratio		0.47			0.47		0.34	0.34				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1646			1566		564	542				
v/s Ratio Prot		0.27			0.22							
v/s Ratio Perm							0.17	0.15				
v/c Ratio		0.58			0.48		0.51	0.44				
Uniform Delay, d1		7.9			7.4		10.7	10.4				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.5			0.2		0.8	0.6				
Delay (s)		8.4			7.6		11.5	11.0				
Level of Service		A			A		B	B				
Approach Delay (s)		8.4			7.6		11.3				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		8.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		40.2			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		46.9%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2016 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	3	36	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	3	52	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	73	52	52			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	73	52	52			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	926	1015	1554			
Direction, Lane #						
Volume Total	16	12	52			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	1015	1554	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.3	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.3	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.5				
Intersection Capacity Utilization		17.2%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St










MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1401	34	0	3825	552	0	0	476	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1688	41	0	4158	600	0	0	595	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4778			1749			3146	6506	623	5060	6227	1726
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4778			1749			3146	6506	623	5060	6227	1726
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	84
cM capacity (veh/h)	20			349			4	0	1355	0	0	75
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	675	675	379	1663	1663	1432	595	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	600	595	12				
cSH	1700	1700	1700	1700	1700	1700	1355	75				
Volume to Capacity	0.40	0.40	0.22	0.98	0.98	0.84	0.44	0.16				
Queue Length 95th (ft)	0	0	0	0	0	0	57	13				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	61.7				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	61.7				
Approach LOS							A	F				
Intersection Summary												
Average Delay	0.9											
Intersection Capacity Utilization	101.3%			ICU Level of Service					G			
Analysis Period (min)	15											

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1262	201	0	3725	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1434	228	0	4139	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1682		2968	632	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1682		2968	632	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	39	
cM capacity (veh/h)			370		11	409	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	574	574	515	1380	1380	1380	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	228	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	409
Volume to Capacity	0.34	0.34	0.30	0.81	0.81	0.81	0.61
Queue Length 95th (ft)	0	0	0	0	0	0	99
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	26.8
Lane LOS							D
Approach Delay (s)	0.0			0.0			26.8
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			86.8%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1589	1944	342	106	102	0	0	277	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4640		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4640		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1709	2090	368	143	138	0	0	318	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1025	3134	0	143	138	0	0	330	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.6			21.4	
Effective Green, g (s)				131.2	131.2		20.0	46.6			21.4	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1054	3214		186	870			396	
v/s Ratio Prot				0.67	c0.68		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.97	0.98		0.77	0.16			0.83	
Uniform Delay, d1				27.4	27.5		82.4	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				21.2	10.7		17.2	0.1			14.0	
Delay (s)				48.6	38.2		99.7	56.1			96.3	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			40.8			78.3			96.3	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		46.8		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		189.4		Sum of lost time (s)						16.8		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	583	70	0	0	0	0	198	201	451	1472	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3258	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3258	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	634	76	0	0	0	0	230	218	490	1533	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	19	49	0	0	0
Lane Group Flow (vph)	0	635	47	0	0	0	0	292	88	490	1533	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1177	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.43	
v/s Ratio Perm		0.12	0.03						0.06			
v/c Ratio		0.36	0.08					0.25	0.17	0.70	0.74	
Uniform Delay, d1		41.5	37.4					38.5	37.3	63.2	26.4	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.5	
Delay (s)		41.6	37.5					38.6	37.4	66.2	27.8	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.2			37.1	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.2		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)						14.4		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus MILCON_NorthOp Year 2017 Alt 2/3noB
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰	↱	↰	↱
Volume (vph)	212	6	1124	589	0	1124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3316			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3316			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	247	7	1209	633	0	1183
RTOR Reduction (vph)	2	0	53	0	0	0
Lane Group Flow (vph)	252	0	1789	0	0	1183
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	16.7		42.5			42.5
Effective Green, g (s)	16.7		42.5			42.5
Actuated g/C Ratio	0.24		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	389		2063			2092
v/s Ratio Prot	c0.16		c0.54			0.35
v/s Ratio Perm						
v/c Ratio	0.65		0.87			0.57
Uniform Delay, d1	23.2		10.6			7.5
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	3.7		4.1			0.4
Delay (s)	26.9		14.7			7.9
Level of Service	C		B			A
Approach Delay (s)	26.9		14.7			7.9
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			13.2		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.85			
Actuated Cycle Length (s)			68.3		Sum of lost time (s)	12.1
Intersection Capacity Utilization			76.2%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus MILCON_NorthOp Year 2017 Alt 2/3noB
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↰	↰	↱	↱	↰	↱	↱	↰	↱	↱
Volume (vph)	46	2	9	7	0	5	19	1334	25	38	1262	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1708		1770	3529		1770	3525	
Frt Permitted	0.74	0.78	1.00		0.87		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1312	1385	1583		1527		1770	3529		1770	3525	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	53	2	10	14	0	10	23	1588	30	41	1372	38
RTOR Reduction (vph)	0	0	8	0	20	0	0	1	0	0	1	0
Lane Group Flow (vph)	28	27	2	0	4	0	23	1617	0	41	1409	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.3	15.3	15.3		15.3		2.6	63.0		4.0	64.4	
Effective Green, g (s)	15.3	15.3	15.3		15.3		2.6	63.0		4.0	64.4	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.65		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	208	219	251		242		47	2306		73	2354	
v/s Ratio Prot							0.01	c0.46		c0.02	0.40	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.13	0.12	0.01		0.02		0.49	0.70		0.56	0.60	
Uniform Delay, d1	34.9	34.8	34.1		34.2		46.2	10.7		45.3	8.9	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		7.8	1.0		9.5	0.4	
Delay (s)	35.2	35.0	34.2		34.2		54.1	11.7		54.9	9.3	
Level of Service	D	D	C		C		D	B		D	A	
Approach Delay (s)		35.0			34.2			12.3			10.6	
Approach LOS		C			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.1		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.59									
Actuated Cycle Length (s)			96.4		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			56.4%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	22	0	1280	7	418	836	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	33	0	1407	8	427	853	0
RTOR Reduction (vph)	0	0	0	0	30	0	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1407	4	427	853	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.40		c0.24	0.24	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.85	0.01	0.70	0.29	
Uniform Delay, d1					60.6			33.9	20.4	41.0	2.3	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			3.7	0.0	3.5	0.2	
Delay (s)					60.6			16.1	20.4	44.5	2.6	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			16.2			16.6	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		16.9			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		77.4%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	49	14	1	63	126	134	1122	5	285	285	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.98	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3215	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3215	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	46	75	22	1	72	143	149	1247	6	328	328	349
RTOR Reduction (vph)	0	0	20	0	0	120	0	0	3	0	133	0
Lane Group Flow (vph)	46	75	2	0	73	23	149	1247	3	328	544	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1055	
v/s Ratio Prot	0.03	c0.04			c0.04		0.08	c0.35		c0.19	0.17	
v/s Ratio Perm			0.00			0.02			0.00			
v/c Ratio	0.38	0.59	0.02		0.25	0.09	0.27	0.79	0.00	0.96	0.52	
Uniform Delay, d1	64.5	65.5	62.9		53.4	52.1	37.7	34.4	22.3	58.0	39.4	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.91	
Incremental Delay, d2	2.0	6.7	0.1		0.4	0.2	0.3	4.1	0.0	38.1	1.8	
Delay (s)	66.5	72.2	63.0		53.9	52.3	37.9	38.6	22.3	93.8	37.8	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		68.9			52.8			38.4			56.1	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		47.5			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		83.5%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑	↘	↙	↓
Volume (veh/h)	27	194	4	86	319	8
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	32	228	5	108	347	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	761	59			112	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	761	59			112	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	77			77	
cM capacity (veh/h)	286	1007			1477	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	260	112	355			
Volume Left	32	0	347			
Volume Right	228	108	0			
cSH	1147	1700	1477			
Volume to Capacity	0.23	0.07	0.23			
Queue Length 95th (ft)	22	0	23			
Control Delay (s)	10.8	0.0	8.0			
Lane LOS	B		A			
Approach Delay (s)	10.8	0.0	8.0			
Approach LOS	B					
Intersection Summary						
Average Delay		7.8				
Intersection Capacity Utilization		34.8%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑	↘	↙	↓
Volume (vph)	30	3	1272	401	0	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1737		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1737		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	40	4	1339	422	0	408
RTOR Reduction (vph)	4	0	0	116	0	0
Lane Group Flow (vph)	40	0	1339	306	0	408
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	1.9		31.0	31.0		31.0
Effective Green, g (s)	1.9		31.0	31.0		31.0
Actuated g/C Ratio	0.04		0.72	0.72		0.72
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	77		2563	1100		2563
v/s Ratio Prot	c0.02		c0.38			0.12
v/s Ratio Perm				0.20		
v/c Ratio	0.52		0.52	0.28		0.16
Uniform Delay, d1	20.0		2.6	2.0		1.8
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	6.2		0.2	0.1		0.0
Delay (s)	26.3		2.8	2.2		1.9
Level of Service	C		A	A		A
Approach Delay (s)	26.3		2.7			1.9
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.0		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.52				
Actuated Cycle Length (s)		42.8		Sum of lost time (s)		9.9
Intersection Capacity Utilization		47.6%		ICU Level of Service		A
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2017 Alt 2/3noB

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↑↑
Volume (veh/h)	0	15	2077	5	5	293
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2233	5	7	431
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2466	1119			2239	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2466	1119			2239	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	87			97	
cM capacity (veh/h)	24	201			228	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1489	750	7	215	215
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	201	1700	1700	228	1700	1700
Volume to Capacity	0.13	0.88	0.44	0.03	0.13	0.13
Queue Length 95th (ft)	11	0	0	2	0	0
Control Delay (s)	25.5	0.0	0.0	21.3	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	25.5	0.0		0.4		
Approach LOS	D					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		67.6%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2017 Alt 2/3noB

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	17	84	1993	11	36	256
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	104	2143	12	52	371
RTOR Reduction (vph)	0	5	0	1	0	0
Lane Group Flow (vph)	21	99	2143	11	52	371
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.7	25.8	68.3	68.3	5.0	82.1
Effective Green, g (s)	15.7	20.7	68.3	68.3	5.0	82.1
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	259	305	2256	1009	82	2712
v/s Ratio Prot	0.01	c0.06	c0.61		c0.03	0.10
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.33	0.95	0.01	0.63	0.14
Uniform Delay, d1	39.5	37.2	17.8	7.1	50.2	3.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	9.6	0.0	14.9	0.0
Delay (s)	39.6	37.8	27.4	7.1	65.1	3.3
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.1		27.3			10.9
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay		25.2		HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio		0.82				
Actuated Cycle Length (s)		107.1		Sum of lost time (s)	18.1	
Intersection Capacity Utilization		71.1%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2017 Alt 2/3noB

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖↗	↑↓		↖↗	↑↓
Volume (veh/h)	0	31	1971	25	0	271
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	50	2075	26	0	366
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2271	1051			2101	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2271	1051			2101	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	78			100	
cM capacity (veh/h)	34	223			258	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	50	1383	718	183	183	
Volume Left	0	0	0	0	0	
Volume Right	50	0	26	0	0	
cSH	223	1700	1700	1700	1700	
Volume to Capacity	0.22	0.81	0.42	0.11	0.11	
Queue Length 95th (ft)	21	0	0	0	0	
Control Delay (s)	25.7	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	25.7	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		65.3%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2017 Alt 2/3noB

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖↗	↑↓	↖	↖	↑↓
Volume (vph)	9	6	1996	31	15	248
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	15	10	2079	32	19	306
RTOR Reduction (vph)	0	5	0	7	0	0
Lane Group Flow (vph)	15	5	2079	25	19	306
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.8	59.8	2.0	69.3
Effective Green, g (s)	1.4	3.4	59.8	59.8	2.0	69.3
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2737	1224	45	3172
v/s Ratio Prot	c0.01	0.00	c0.59		c0.01	0.09
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.47	0.08	0.76	0.02	0.42	0.10
Uniform Delay, d1	37.6	35.4	4.8	2.0	37.1	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.5	0.5	1.3	0.0	6.3	0.0
Delay (s)	48.0	35.9	6.1	2.0	43.4	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	43.2		6.0			3.0
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		6.0		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.74				
Actuated Cycle Length (s)		77.3		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		68.0%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus MILCON_NorthOp Year 2017 Alt 2/3noB
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	44	1	0	43	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	81	2	0	68	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	83	68	3					
Volume Left (vph)	0	0	81	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	834	1121	816	842	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.4						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.2%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus MILCON_NorthOp Year 2017 Alt 2/3noB
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: AM PEAK















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑			↑	↑	↑	↑	↑			
Volume (vph)	2	35	0	0	31	219	3	1805	49	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1358	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	47	0	0	43	304	3	1920	52	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	21	0	0	0	0
Lane Group Flow (vph)	3	47	0	0	43	248	3	1920	31	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	15.9	15.9			15.9	15.9	47.7	43.6	43.6			
Effective Green, g (s)	15.9	15.9			15.9	15.9	47.7	43.6	43.6			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.60	0.60			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	296	406			406	345	1158	2116	946			
v/s Ratio Prot		0.03			0.02		0.00	c0.54				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.12			0.11	0.72	0.00	0.91	0.03			
Uniform Delay, d1	22.3	22.9			22.8	26.4	4.4	12.9	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	7.0	0.0	6.1	0.0			
Delay (s)	22.3	23.0			22.9	33.4	4.4	19.0	6.0			
Level of Service	C	C			C	C	A	B	A			
Approach Delay (s)		23.0			32.1			18.6			0.0	
Approach LOS		C			C			B			A	
Intersection Summary												
HCM 2000 Control Delay		20.7						HCM 2000 Level of Service		C		
HCM 2000 Volume to Capacity ratio		0.86										
Actuated Cycle Length (s)		72.9					Sum of lost time (s)		13.4			
Intersection Capacity Utilization		83.0%					ICU Level of Service		E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON_NorthOp Year 2017 Alt 2/3noB

Timing Plan: AM PEAK

























							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	5	9	345	1606	0	174	44
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	20	36	359	1673	0	220	56
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None		None		
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1803	138	276		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1803	138	276		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	61	96	72		0		
cM capacity (veh/h)	51	885	1284		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	56	359	836	836	147	129	0
Volume Left	20	359	0	0	0	0	0
Volume Right	36	0	0	0	0	56	0
cSH	129	1284	1700	1700	1700	1700	1700
Volume to Capacity	0.43	0.28	0.49	0.49	0.09	0.08	0.00
Queue Length 95th (ft)	47	29	0	0	0	0	0
Control Delay (s)	52.6	8.9	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	A					
Approach Delay (s)	52.6	1.6			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay		2.6					
Intersection Capacity Utilization		61.1%		ICU Level of Service		B	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2017 Alt 2/3noB

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	382	0	37	2	1	2	25	1833	0	0	139	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3414	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3414	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	434	0	42	6	3	6	26	1929	0	0	201	62
RTOR Reduction (vph)	0	30	0	0	6	0	0	0	0	0	25	0
Lane Group Flow (vph)	434	12	0	6	3	0	26	1929	0	0	238	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	25.3	25.3		1.7	1.7		1.9	43.6			37.5	
Effective Green, g (s)	25.3	25.3		1.7	1.7		1.9	43.6			37.5	
Actuated g/C Ratio	0.30	0.30		0.02	0.02		0.02	0.51			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	524	469		35	33		39	1808			1500	
v/s Ratio Prot	c0.25	0.01		c0.00	0.00		0.01	c0.55			0.07	
v/s Ratio Perm												
v/c Ratio	0.83	0.03		0.17	0.09		0.67	1.07			0.16	
Uniform Delay, d1	28.0	21.3		41.1	41.0		41.4	20.8			14.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	10.4	0.0		2.3	1.2		35.5	41.6			0.0	
Delay (s)	38.4	21.3		43.4	42.3		76.9	62.5			14.4	
Level of Service	D	C		D	D		E	E			B	
Approach Delay (s)		36.9			42.7			62.6			14.4	
Approach LOS		D			D			E			B	
Intersection Summary												
HCM 2000 Control Delay		53.3						HCM 2000 Level of Service		D		
HCM 2000 Volume to Capacity ratio		1.02										
Actuated Cycle Length (s)		85.3					Sum of lost time (s)		18.9			
Intersection Capacity Utilization		86.9%					ICU Level of Service		E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	7	186	14	0	1694	17	37	22	1	19	39	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5031			5078		1770	1852			1731	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.19	
Satd. Flow (perm)	1770	5031			5078		1243	1852			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	
Adj. Flow (vph)	8	209	16	0	1862	19	44	26	1	25	51	65
RTOR Reduction (vph)	0	5	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	8	220	0	0	1880	0	44	26	0	0	124	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2062		241	360			53	
v/s Ratio Prot	c0.00	0.04			c0.37			0.01				
v/s Ratio Perm							c0.04				c0.38	
v/c Ratio	0.04	0.12			0.91		0.18	0.07			2.33	
Uniform Delay, d1	71.4	36.4			50.4		60.6	59.2			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			6.8		0.4	0.1			653.1	
Delay (s)	71.5	36.5			57.2		60.9	59.3			728.1	
Level of Service	E	D			E		E	E			F	
Approach Delay (s)		37.7			57.2			60.3			728.1	
Approach LOS		D			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		96.0			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.90										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		71.5%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	204	0	382	1702	8	0	0	0	0	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3537							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3537							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	249	0	406	1811	9	0	0	0	0	0	16
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	10
Lane Group Flow (vph)	0	249	0	406	1820	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3214							609
v/s Ratio Prot		0.05		0.12	c0.51							
v/s Ratio Perm												0.00
v/c Ratio		0.13		0.24	0.57							0.01
Uniform Delay, d1		36.6		25.5	1.5							34.9
Progression Factor		0.42		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.1	0.2							0.0
Delay (s)		15.6		25.6	1.8							34.9
Level of Service		B		C	A							C
Approach Delay (s)		15.6			6.1		0.0					34.9
Approach LOS		B			A		A					C
Intersection Summary												
HCM 2000 Control Delay		7.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		69.0%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	9	233	0	0	128	104	0	0	0	47	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	11	277	0	0	138	112	0	0	0	52	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	249			277			497	548	277	492	492	194
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	249			277			497	548	277	492	492	194
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1316			1285			478	440	761	484	474	848
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	288	249	0	56								
Volume Left	11	0	0	52								
Volume Right	0	112	0	4								
cSH	1316	1285	1700	501								
Volume to Capacity	0.01	0.00	0.00	0.11								
Queue Length 95th (ft)	1	0	0	9								
Control Delay (s)	0.4	0.0	0.0	13.1								
Lane LOS	A			B								
Approach Delay (s)	0.4	0.0	0.0	13.1								
Approach LOS				B								
Intersection Summary												
Average Delay				1.4								
Intersection Capacity Utilization				29.6%								A
Analysis Period (min)				15								

NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	271	4	26	208	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	315	5	28	224	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	320	28	249	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.1	5.5	5.1	5.6						
Degree Utilization, x	0.01	0.49	0.05	0.38	0.26	0.07						
Capacity (veh/h)	579	635	566	631	637	549						
Control Delay (s)	7.9	12.4	8.2	10.6	9.9	9.1						
Approach Delay (s)	12.3		10.3		9.9	9.1						
Approach LOS	B		B		A	A						
Intersection Summary												
Delay				10.9								
Level of Service				B								
Intersection Capacity Utilization				37.3%								A
Analysis Period (min)				15								

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

HCM Unsignalized Intersection Capacity Analysis

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	502	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	546	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			550		546	546
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			550		546	546
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1020		499	538
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	546	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	526			
Volume to Capacity	0.32	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	11.9			
Lane LOS			B			
Approach Delay (s)	0.0		11.9			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑	↘	↗	↑↑↑		↗	↑↑	↘	↗	↑↑	↘
Volume (vph)	21	646	34	23	1849	42	160	36	50	88	44	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5048		1770	5068			3323			3363	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5048		1770	5068			3323			3363	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	769	40	25	2032	46	193	43	60	107	54	29
RTOR Reduction (vph)	0	3	0	0	1	0	0	13	0	0	8	0
Lane Group Flow (vph)	25	806	0	25	2077	0	0	283	0	0	182	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2235		118	2159			646			653	
v/s Ratio Prot	0.01	c0.16		c0.01	c0.41			c0.09			c0.05	
v/s Ratio Perm												
v/c Ratio	0.17	0.36		0.21	0.96			0.44			0.28	
Uniform Delay, d1	76.7	33.3		79.5	50.2			63.8			61.7	
Progression Factor	1.00	1.00		1.25	0.75			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.7	10.5			0.5			0.2	
Delay (s)	77.3	33.7		100.2	48.0			64.3			62.0	
Level of Service	E	C		F	D			E			E	
Approach Delay (s)		35.0			48.6			64.3			62.0	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		47.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		73.7%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 2/3noB

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	
Volume (vph)	2	872	34	20	2020	11	18	4	30	54	10	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5081			1688		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5057		1770	5081			1542		1237	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	980	38	23	2295	12	25	5	41	77	14	20
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	17	0
Lane Group Flow (vph)	2	1016	0	23	2307	0	0	44	0	77	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases						4				8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			257		206	283	
v/s Ratio Prot	0.00	0.20		c0.01	c0.45						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.29		0.19	0.62			0.17		0.37	0.06	
Uniform Delay, d1	86.1	11.0		79.4	11.9			64.3		66.7	63.1	
Progression Factor	1.68	0.28		1.41	0.31			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.5	0.5			0.3		1.1	0.1	
Delay (s)	145.6	3.2		112.9	4.1			64.6		67.8	63.2	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.5			5.2			64.6			66.4	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		7.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		72.7%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 2/3noB

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰	↰↰	
Volume (vph)	3	942	62	94	1876	51	143	19	89	165	35	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5038		1770	5085	1583		1784	1583		3374	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5038		1770	5085	1583		1784	1583		3374	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1058	70	113	2260	61	161	21	100	220	47	19
RTOR Reduction (vph)	0	4	0	0	0	29	0	0	83	0	2	0
Lane Group Flow (vph)	3	1124	0	113	2260	32	0	182	17	0	284	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		581	
v/s Ratio Prot	0.00	0.22		c0.06	c0.44			c0.10			c0.08	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.50		0.58	0.84	0.04		0.59	0.06		0.49	
Uniform Delay, d1	86.2	36.0		76.0	35.5	20.2		68.7	62.3		67.3	
Progression Factor	1.22	0.63		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.8		4.1	3.3	0.1		3.1	0.1		0.6	
Delay (s)	106.3	23.4		80.0	38.8	20.2		71.7	62.4		68.0	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.7			40.2			68.4			68.0	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		39.5			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		90.2%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	↰
Volume (vph)	13	1203	25	42	2003	11	15	6	48	37	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1670			1722	
Flt Permitted	0.95	1.00		0.95	1.00			0.93			0.78	
Satd. Flow (perm)	1770	5070		1770	5081			1566			1383	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	14	1308	27	49	2329	13	18	7	57	49	3	28
RTOR Reduction (vph)	0	2	0	0	0	0	0	45	0	0	22	0
Lane Group Flow (vph)	14	1333	0	49	2342	0	0	37	0	0	58	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Effective Green, g (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2666		72	2829			332			293	
v/s Ratio Prot	0.01	0.26		c0.03	c0.46							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.82	0.50		0.68	0.83			0.11			0.20	
Uniform Delay, d1	35.1	10.8		33.6	12.9			22.6			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	132.1	0.1		23.3	2.1			0.2			0.3	
Delay (s)	167.2	11.0		56.9	15.1			22.7			23.4	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		12.6			15.9			22.7			23.4	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		15.1			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		71.1			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		55.9%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰	↰	↰	↰	↰↰	↰	↰
Volume (vph)	90	1215	29	241	1944	212	73	71	760	231	91	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	105	1413	34	256	2068	226	81	79	844	275	108	89
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	182	0	3	56
Lane Group Flow (vph)	105	1445	0	256	2068	159	81	314	274	275	114	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.4	30.4	10.4	34.1	34.1
Effective Green, g (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.4	30.4	10.4	34.1	34.1
Actuated g/C Ratio	0.05	0.30		0.15	0.41	0.41	0.06	0.26	0.26	0.09	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	177	1543		273	2070	644	102	406	394	308	514	442
v/s Ratio Prot	0.03	0.29		c0.14	c0.41		0.05	c0.20		c0.08	c0.07	
v/s Ratio Perm						0.10			0.18			0.02
v/c Ratio	0.59	0.94		0.94	1.00	0.25	0.79	0.77	0.69	0.89	0.22	0.05
Uniform Delay, d1	53.8	39.2		48.4	34.3	22.6	53.9	39.5	38.6	52.2	30.9	29.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.2	11.0		37.6	19.4	0.2	33.3	8.8	5.3	26.1	0.2	0.1
Delay (s)	59.0	50.2		86.1	53.7	22.8	87.3	48.4	43.8	78.3	31.1	29.4
Level of Service	E	D		F	D	C	F	D	D	E	C	C
Approach Delay (s)		50.8			54.2			49.4			58.3	
Approach LOS		D			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		52.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		115.9			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		85.9%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2017 Alt 2/3noB

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↔	↔
Volume (vph)	0	280	1134	0	153	1265
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	315	1219	0	170	1406
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	315	1219	0	170	1401
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.34		0.10	c0.50
v/s Ratio Perm						
v/c Ratio		0.12	1.04		0.82	0.91
Uniform Delay, d1		2.5	26.8		34.5	16.3
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	38.8		22.3	8.7
Delay (s)		2.5	65.6		56.8	25.0
Level of Service		A	E		E	C
Approach Delay (s)		2.5	65.6		28.5	
Approach LOS		A	E		C	
Intersection Summary						
HCM 2000 Control Delay			40.4		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			1.03			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			66.7%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 2/3noB

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↔	↔				
Volume (vph)	0	434	0	0	418	517	817	1	142	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3246		1681	1633				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3246		1681	1633				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	499	0	0	454	562	888	1	154	0	0	0
RTOR Reduction (vph)	0	0	0	0	354	0	0	28	0	0	0	0
Lane Group Flow (vph)	0	499	0	0	662	0	533	482	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.7			16.7		20.5	20.5				
Effective Green, g (s)		16.7			16.7		20.5	20.5				
Actuated g/C Ratio		0.37			0.37		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1307			1199		762	740				
v/s Ratio Prot		0.14			c0.20							
v/s Ratio Perm							c0.32	0.29				
v/c Ratio		0.38			0.55		0.70	0.65				
Uniform Delay, d1		10.5			11.3		9.9	9.6				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.6		2.8	2.1				
Delay (s)		10.6			11.8		12.7	11.6				
Level of Service		B			B		B	B				
Approach Delay (s)		10.6			11.8		12.2				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					11.7					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.63							
Actuated Cycle Length (s)					45.2					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					68.5%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰			↱	↰	↱
Volume (veh/h)	0	3	4	65	13	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	90	32	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	133	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	133	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	858	1042	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	96	32			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	1042	1581	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			16.7%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↱			↰↱				↰			↱
Volume (veh/h)	0	4076	17	0	1806	243	0	0	908	0	0	55
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4246	18	0	1862	251	0	0	1009	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2132			4284			4999	6407	1464	3442	6291	786
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2132			4284			4999	6407	1464	3442	6291	786
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	247			33			0	0	1835	1	0	324
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1698	1698	867	745	745	623	1009	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	251	1009	83				
cSH	1700	1700	1700	1700	1700	1700	1835	324				
Volume to Capacity	1.00	1.00	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	89	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3	19.9				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.3	19.9				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				144.0%	ICU Level of Service		H					
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3842	130	0	1843	0	200	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3961	134	0	1920	0	244	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4115		4708	1427	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4115		4708	1427	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			39		1	120	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1584	1584	926	640	640	640	244
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	244
cSH	1700	1700	1700	1700	1700	1700	120
Volume to Capacity	0.93	0.93	0.54	0.38	0.38	0.38	2.03
Queue Length 95th (ft)	0	0	0	0	0	0	500
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	549.7
Lane LOS							F
Approach Delay (s)	0.0			0.0			549.7
Approach LOS							F
Intersection Summary							
Average Delay			21.4				
Intersection Capacity Utilization			98.2%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	↗
Volume (vph)	0	0	0	971	634	109	92	251			860	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3528	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3528	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1022	667	115	95	259	0	0	887	16
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	511	1281	0	95	259	0	0	901	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1432		98	1989			1568	
v/s Ratio Prot				c0.34	0.28		c0.05	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.09	0.97dl		0.97	0.13			0.57	
Uniform Delay, d1				31.1	29.7		42.4	9.3			18.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				67.2	7.6		80.0	0.0			0.5	
Delay (s)				98.3	37.3		122.4	9.3			19.2	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			54.6			39.7			19.2	
Approach LOS		A			D			D			B	
Intersection Summary												
HCM 2000 Control Delay			42.4		HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio			0.80									
Actuated Cycle Length (s)			90.0		Sum of lost time (s)			17.2				
Intersection Capacity Utilization		135.6%			ICU Level of Service			H				
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔↔	
Volume (vph)	7	2109	108	0	0	0	0	344	464	760	1094	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3118	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3118	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2318	119	0	0	0	0	400	540	792	1140	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2326	90	0	0	0	0	642	263	792	1140	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					946	409	865	2022	
v/s Ratio Prot		c0.46						c0.21		c0.23	0.32	
v/s Ratio Perm			0.06						0.19			
v/c Ratio		1.26	0.16					0.68	0.64	0.92	0.56	
Uniform Delay, d1		55.8	37.7					53.5	52.7	63.6	23.7	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		123.1	0.1					2.0	3.4	14.1	0.4	
Delay (s)		178.9	37.9					55.4	56.2	77.7	24.1	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		172.0		0.0				55.7			46.1	
Approach LOS		F		A				E			D	
Intersection Summary												
HCM 2000 Control Delay		105.7		HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio		0.97										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		135.6%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave













MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔
Volume (vph)	169	11	892	673	0	1200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1584		3264			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1584		3264			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	217	14	1002	756	0	1290
RTOR Reduction (vph)	2	0	65	0	0	0
Lane Group Flow (vph)	229	0	1693	0	0	1290
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	297		2466			2540
v/s Ratio Prot	c0.14		c0.52			0.38
v/s Ratio Perm						
v/c Ratio	0.77		0.69			0.51
Uniform Delay, d1	61.8		9.9			7.8
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	11.8		1.6			0.7
Delay (s)	73.5		11.5			8.5
Level of Service	E		B			A
Approach Delay (s)	73.5		11.5			8.5
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay		14.7		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.72				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		79.7%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2017 Alt 2/3noB









Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	140	9	28	25	9	24	22	1485	48	65	1419	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1695	1583		1721		1770	3522		1770	3489	
Flt Permitted	0.69	0.69	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1219	1217	1583		1463		1770	3522		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	179	12	36	39	14	38	24	1597	52	71	1542	162
RTOR Reduction (vph)	0	0	30	0	23	0	0	1	0	0	3	0
Lane Group Flow (vph)	95	96	6	0	68	0	24	1648	0	71	1701	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4		4							
Actuated Green, G (s)	18.9	18.9	18.9		18.9		3.1	72.0		8.0	76.9	
Effective Green, g (s)	18.9	18.9	18.9		18.9		3.1	72.0		8.0	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	202	263		243		48	2230		124	2359	
v/s Ratio Prot							0.01	0.47		c0.04	c0.49	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.47	0.48	0.02		0.28		0.50	0.74		0.57	0.72	
Uniform Delay, d1	42.9	42.9	39.7		41.4		54.5	14.4		51.2	11.6	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	1.8	0.0		0.6		8.0	1.3		6.3	1.1	
Delay (s)	44.6	44.7	39.7		42.1		62.5	15.7		57.4	12.7	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.9			42.1			16.4			14.5	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.8			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		113.7			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		73.9%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2017 Alt 2/3noB

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	7	0	141	0	1295	0	31	1555	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1619			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1619			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	10	0	204	0	1378	0	33	1672	0
RTOR Reduction (vph)	0	0	0	0	166	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	48	0	0	1378	0	33	1672	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			45.5		1.7	51.4	
Effective Green, g (s)					14.1			45.5		1.7	51.4	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					301			2129		39	2406	
v/s Ratio Prot					c0.03			0.39		0.02	c0.47	
v/s Ratio Perm												
v/c Ratio					0.16			0.65		0.85	0.69	
Uniform Delay, d1					25.8			9.8		36.8	7.3	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.2			0.7		84.9	0.9	
Delay (s)					26.0			10.5		121.7	8.2	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			26.0			10.5			10.4	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					11.5			HCM 2000 Level of Service			B	
HCM 2000 Volume to Capacity ratio					0.67							
Actuated Cycle Length (s)					75.6			Sum of lost time (s)			18.9	
Intersection Capacity Utilization					60.5%			ICU Level of Service			B	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2017 Alt 2/3noB

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	286	49	116	6	68	413	27	609	2	136	1381	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1516		1855	1511	1770	3539	1349	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1516		1855	1511	1770	3539	1349	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	376	64	153	7	74	449	30	669	2	145	1469	68
RTOR Reduction (vph)	0	0	124	0	0	218	0	0	1	0	2	0
Lane Group Flow (vph)	376	64	29	0	81	231	30	669	1	145	1535	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.7	27.7	27.7		24.1	24.1	2.9	56.0	56.0	16.8	69.9	
Effective Green, g (s)	27.7	27.7	27.7		24.1	24.1	2.9	56.0	56.0	16.8	69.9	
Actuated g/C Ratio	0.19	0.19	0.19		0.17	0.17	0.02	0.39	0.39	0.12	0.49	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	340	358	291		310	252	35	1376	524	206	1704	
v/s Ratio Prot	c0.21	0.03			0.04		0.02	0.19		c0.08	c0.44	
v/s Ratio Perm			0.02			c0.15		0.00				
v/c Ratio	1.11	0.18	0.10		0.26	0.92	0.86	0.49	0.00	0.70	0.90	
Uniform Delay, d1	58.1	48.6	47.9		52.2	59.0	70.3	33.2	26.9	61.2	33.9	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	80.4	0.2	0.2		0.5	34.8	94.8	1.2	0.0	10.4	8.1	
Delay (s)	138.6	48.9	48.0		52.7	93.7	165.1	34.4	26.9	71.6	42.0	
Level of Service	F	D	D		D	F	F	C	C	E	D	
Approach Delay (s)		105.5			87.4			40.0			44.5	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay		60.4								E		
HCM 2000 Volume to Capacity ratio		0.95										
Actuated Cycle Length (s)		144.0				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		79.3%				ICU Level of Service		D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2017 Alt 2/3noB

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	309	484	3	40	176	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	343	538	4	56	200	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	436	32			61	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	436	32			61	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	32	48			87	
cM capacity (veh/h)	503	1041			1543	
Direction, Lane #						
Volume Total	881	61	203			
Volume Left	343	0	200			
Volume Right	538	56	0			
cSH	1105	1700	1543			
Volume to Capacity	0.80	0.04	0.13			
Queue Length 95th (ft)	224	0	11			
Control Delay (s)	19.6	0.0	7.6			
Lane LOS	C		A			
Approach Delay (s)	19.6	0.0	7.6			
Approach LOS	C					
Intersection Summary						
Average Delay		16.5				
Intersection Capacity Utilization		40.4%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2017 Alt 2/3noB

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕		↕
Volume (vph)	312	6	644	43	0	1506
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	395	8	716	48	0	1692
RTOR Reduction (vph)	1	0	0	27	0	0
Lane Group Flow (vph)	402	0	716	21	0	1692
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.23		0.20			c0.48
v/s Ratio Perm				0.01		
v/c Ratio	0.48		0.47	0.03		1.11
Uniform Delay, d1	18.6		21.4	17.3		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.2	0.0		60.7
Delay (s)	19.1		21.7	17.3		90.6
Level of Service	B		C	B		F
Approach Delay (s)	19.1		21.4			90.6
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay			62.0		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			0.78			
Actuated Cycle Length (s)			105.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			91.5%		ICU Level of Service	F
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2017 Alt 2/3noB

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕	↕	↕
Volume (veh/h)	4	6	502	3	15	1444
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	584	3	16	1587
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1412	294			587	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1412	294			587	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	94	98			98	
cM capacity (veh/h)	127	703			984	
Direction, Lane #						
Volume Total	20	389	198	16	793	793
Volume Left	8	0	0	16	0	0
Volume Right	12	0	3	0	0	0
cSH	250	1700	1700	984	1700	1700
Volume to Capacity	0.08	0.23	0.12	0.02	0.47	0.47
Queue Length 95th (ft)	6	0	0	1	0	0
Control Delay (s)	20.7	0.0	0.0	8.7	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	20.7	0.0		0.1		
Approach LOS	C					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			49.9%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2017 Alt 2/3noB

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↕	↖	↗	↕
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	29	55	449	11	100	1348
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	32	60	510	12	110	1481
RTOR Reduction (vph)	0	44	0	7	0	0
Lane Group Flow (vph)	32	16	510	5	110	1481
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.3	21.5	27.6	27.6	7.1	43.5
Effective Green, g (s)	9.3	16.4	27.6	27.6	7.1	43.5
Actuated g/C Ratio	0.15	0.26	0.44	0.44	0.11	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	265	418	1572	703	202	2479
v/s Ratio Prot	c0.02	0.01	0.14		0.06	c0.42
v/s Ratio Perm			0.00			
v/c Ratio	0.12	0.04	0.32	0.01	0.54	0.60
Uniform Delay, d1	22.9	17.0	11.2	9.6	26.0	4.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.0	3.0	0.4
Delay (s)	23.1	17.0	11.3	9.6	29.0	5.2
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.1		11.3			6.8
Approach LOS	B		B			A

Intersection Summary

HCM 2000 Control Delay	8.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	62.1	Sum of lost time (s)	18.1
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2017 Alt 2/3noB

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↕	↖	↗	↕
Lane Configurations		↖	↕	↖		↕
Volume (veh/h)	0	22	440	18	0	1377
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	29	506	21	0	1497
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1264	263			526	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1264	263			526	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	161	735			1037	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	29	337	189	748	748
Volume Left	0	0	0	0	0
Volume Right	29	0	21	0	0
cSH	735	1700	1700	1700	1700
Volume to Capacity	0.04	0.20	0.11	0.44	0.44
Queue Length 95th (ft)	3	0	0	0	0
Control Delay (s)	10.1	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.1	0.0		0.0	
Approach LOS	B				

Intersection Summary

Average Delay	0.1				
Intersection Capacity Utilization	41.4%		ICU Level of Service	A	
Analysis Period (min)	15				

NBC Coastal Campus MILCON_NorthOp Year 2017 Alt 2/3noB
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↕	↖	↗	↕
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	29	25	433	18	22	1353
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	40	35	461	19	24	1487
RTOR Reduction (vph)	0	32	0	8	0	0
Lane Group Flow (vph)	40	3	461	11	24	1487
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.4	27.2	27.2	1.8	36.5
Effective Green, g (s)	2.6	4.4	27.2	27.2	1.8	36.5
Actuated g/C Ratio	0.06	0.10	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	152	2106	942	69	2826
v/s Ratio Prot	c0.02	0.00	0.13		0.01	c0.42
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.40	0.02	0.22	0.01	0.35	0.53
Uniform Delay, d1	20.8	18.7	4.3	3.8	21.4	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.6	0.1	0.1	0.0	3.0	0.2
Delay (s)	23.4	18.8	4.4	3.8	24.4	1.8
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.2		4.3			2.1
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.3		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.64			
Actuated Cycle Length (s)			45.7		Sum of lost time (s)	14.1
Intersection Capacity Utilization			48.3%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus MILCON_NorthOp Year 2017 Alt 2/3noB
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Movement	↖	→	↗	↖	→	↗	↖	→	↗	↖
Lane Configurations	↖	→	↗	↖	→	↗	↖	→	↗	↖
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	10	14	82	7	0	174	12	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	10	15	106	9	0	196	13	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	10	15	116	209						
Volume Left (vph)	0	0	106	0						
Volume Right (vph)	0	15	0	13						
Hadj (s)	0.03	-0.57	0.22	0.00						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.13	0.19						
Capacity (veh/h)	873	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	6.9						
Approach Delay (s)	6.6		7.8	6.9						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus MILCON_NorthOp Year 2017 Alt 2/3noB
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: PM PEAK











Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑			↑	↱	↰	↑↑	↱			
Volume (vph)	9	180	0	0	79	134	11	356	67	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Flt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1300	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	10	205	0	0	91	154	12	391	74	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	122	0	40	0	0	0	0
Lane Group Flow (vph)	10	205	0	0	91	32	12	391	34	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.5	18.5	18.5			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.5	18.5	18.5			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	270	388			388	329	812	1624	726			
v/s Ratio Prot		c0.11			0.05		0.01	c0.11				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.53			0.23	0.10	0.01	0.24	0.05			
Uniform Delay, d1	12.7	14.2			13.3	12.9	5.9	6.6	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.3			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.8	15.5			13.6	13.0	5.9	6.7	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.2		6.6			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.3			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.33										
Actuated Cycle Length (s)		40.3			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		40.4%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus MILCON_NorthOp Year 2017 Alt 2/3noB
17: SR-75 (Silver Strand Blvd) & Hooper Blvd Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰		↰	↑↑	↱	↑↑	↱
Volume (veh/h)	44	343	20	453	0	1505	11
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	176	1372	23	515	0	1672	12
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1981	842	1684		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1981	842	1684		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	0	94		0		
cM capacity (veh/h)	50	307	376		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	1548	23	257	257	1115	570	0
Volume Left	176	23	0	0	0	0	0
Volume Right	1372	0	0	0	0	12	0
cSH	195	376	1700	1700	1700	1700	1700
Volume to Capacity	7.95	0.06	0.15	0.15	0.66	0.34	0.00
Queue Length 95th (ft)	Err	5	0	0	0	0	0
Control Delay (s)	Err	15.2	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C					
Approach Delay (s)	Err	0.6			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			4105.8				
Intersection Capacity Utilization			72.2%		ICU Level of Service		
Analysis Period (min)			15				C











NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	0	65	1	1	0	71	332	11	1	1416	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3522		1770	3477	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3522		1770	3477	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	112	0	87	2	2	0	78	365	12	1	1573	209
RTOR Reduction (vph)	0	70	0	0	0	0	0	2	0	0	8	0
Lane Group Flow (vph)	112	17	0	2	2	0	78	375	0	1	1774	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	17.9	17.9		0.8	0.8		5.8	52.4		0.8	47.4	
Effective Green, g (s)	17.9	17.9		0.8	0.8		5.8	52.4		0.8	47.4	
Actuated g/C Ratio	0.20	0.20		0.01	0.01		0.06	0.58		0.01	0.52	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	348	312		15	16		113	2032		15	1815	
v/s Ratio Prot	c0.06	0.01		c0.00	0.00		c0.04	0.11		0.00	c0.51	
v/s Ratio Perm												
v/c Ratio	0.32	0.05		0.13	0.12		0.69	0.18		0.07	0.98	
Uniform Delay, d1	31.2	29.6		44.7	44.7		41.6	9.1		44.6	21.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.1		4.0	3.5		16.6	0.0		1.9	16.0	
Delay (s)	31.8	29.7		48.7	48.2		58.2	9.1		46.5	37.1	
Level of Service	C	C		D	D		E	A		D	D	
Approach Delay (s)		30.9			48.4			17.6			37.1	
Approach LOS		C			D			B			D	
Intersection Summary												
HCM 2000 Control Delay		33.0			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		90.8			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		72.5%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	1372	57	0	369	33	12	38	4	23	25	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5055			5023		1770	1835			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.17	
Satd. Flow (perm)	1770	5055			5023		1313	1835			299	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	62	1559	65	0	393	35	17	54	6	27	29	24
RTOR Reduction (vph)	0	2	0	0	6	0	0	2	0	0	8	0
Lane Group Flow (vph)	62	1622	0	0	422	0	17	58	0	0	72	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1912			2039		255	356			49	
v/s Ratio Prot	c0.04	c0.32			c0.08			c0.03				
v/s Ratio Perm							0.01				c0.24	
v/c Ratio	0.32	0.85			0.21		0.07	0.16			1.46	
Uniform Delay, d1	73.7	51.2			34.7		59.2	60.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.9	4.9			0.2		0.1	0.2			291.2	
Delay (s)	74.6	56.1			34.9		59.3	60.5			366.2	
Level of Service	E	E			C		E	E			F	
Approach Delay (s)		56.8			34.9			60.2			366.2	
Approach LOS		E			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		63.7			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			22.3				
Intersection Capacity Utilization		67.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑
Volume (vph)	0	1401	0	485	405	36	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3496							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3496							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1574	0	516	431	38	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1574	0	516	469	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3177							609
v/s Ratio Prot		c0.31		c0.15	c0.13							
v/s Ratio Perm												0.00
v/c Ratio		0.82		0.27	0.15							0.00
Uniform Delay, d1		50.4		20.5	0.9							34.8
Progression Factor		0.21		1.00	1.00							1.00
Incremental Delay, d2		2.0		0.1	0.0							0.0
Delay (s)		12.4		20.6	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		12.4			11.2		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		12.0					HCM 2000 Level of Service		B			
HCM 2000 Volume to Capacity ratio		0.52										
Actuated Cycle Length (s)		180.0					Sum of lost time (s)		22.3			
Intersection Capacity Utilization		50.1%					ICU Level of Service		A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑			↑↑	
Volume (veh/h)	3	212	0	0	306	40	0	0	0	104	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	247	0	0	348	45	0	0	0	158	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	393			247			636	647	247	624	624	370
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	393			247			636	647	247	624	624	370
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	60	100	98
cM capacity (veh/h)	1165			1319			383	389	792	397	401	675
Direction, Lane #												
Volume Total	250	393	0	170								
Volume Left	3	0	0	158								
Volume Right	0	45	0	12								
cSH	1165	1319	1700	409								
Volume to Capacity	0.00	0.00	0.00	0.41								
Queue Length 95th (ft)	0	0	0	50								
Control Delay (s)	0.1	0.0	0.0	19.9								
Lane LOS	A			A			C					
Approach Delay (s)	0.1	0.0	0.0	19.9								
Approach LOS				A			C					
Intersection Summary												
Average Delay		4.2										
Intersection Capacity Utilization		31.4%					ICU Level of Service		A			
Analysis Period (min)		15										

NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱			↰	↱		↰	↱
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	294	12	84	320	24	14	38	67	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	377	15	94	360	27	25	67	118	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	392	94	387	209	161						
Volume Left (vph)	9	0	94	0	25	61						
Volume Right (vph)	0	15	0	27	118	28						
Hadj (s)	0.53	0.01	0.53	-0.01	-0.28	0.00						
Departure Headway (s)	7.2	6.7	7.1	6.5	6.6	7.0						
Degree Utilization, x	0.02	0.73	0.19	0.70	0.38	0.31						
Capacity (veh/h)	472	519	485	529	478	436						
Control Delay (s)	9.1	24.1	10.5	22.3	13.7	13.3						
Approach Delay (s)	23.8		20.0		13.7	13.3						
Approach LOS	C		C		B	B						
Intersection Summary												
Delay			19.3									
Level of Service			C									
Intersection Capacity Utilization			41.3%		ICU Level of Service		A					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱
Volume (veh/h)	72	421	454	39	52	141
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	74	434	528	45	61	166
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	573				1133	287
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	573				1133	287
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	93				66	77
cM capacity (veh/h)	996				182	710
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	74	434	352	221	227	
Volume Left	74	0	0	0	61	
Volume Right	0	0	0	45	166	
cSH	996	1700	1700	1700	398	
Volume to Capacity	0.07	0.26	0.21	0.13	0.57	
Queue Length 95th (ft)	6	0	0	0	86	
Control Delay (s)	8.9	0.0	0.0	0.0	25.4	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		25.4	
Approach LOS					D	
Intersection Summary						
Average Delay			4.9			
Intersection Capacity Utilization			40.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↲	↰	↱	↲	↰	↱	↲	↰	↱	↲
Volume (vph)	28	430	29	31	456	3	54	19	22	12	41	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3536			1754			1842	1583
Flt Permitted	0.47	1.00		0.45	1.00			0.78			0.90	1.00
Satd. Flow (perm)	870	3505		834	3536			1416			1671	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	512	35	34	501	3	66	23	27	16	54	39
RTOR Reduction (vph)	0	7	0	0	1	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	540	0	34	503	0	0	95	0	0	70	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Effective Green, g (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	414	1671		397	1686			309			365	345
v/s Ratio Prot		c0.15			0.14							
v/s Ratio Perm	0.04			0.04			c0.07			0.04		0.01
v/c Ratio	0.08	0.32		0.09	0.30		0.31			0.19		0.02
Uniform Delay, d1	4.3	4.9		4.3	4.8		9.9			9.6		9.3
Progression Factor	1.00	1.00		1.00	1.00		1.00			1.00		1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1		0.6			0.3		0.0
Delay (s)	4.4	5.0		4.4	4.9		10.5			9.9		9.3
Level of Service	A	A		A	A		B			A		A
Approach Delay (s)		5.0			4.9		10.5			9.7		
Approach LOS		A			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		30.2			Sum of lost time (s)		9.2					
Intersection Capacity Utilization		44.6%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↱			↰	↱
Volume (veh/h)	740	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	902	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			912		902	902
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			912		902	902
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	99
cM capacity (veh/h)			747		308	336
Direction, Lane #						
Volume Total	902	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	315			
Volume to Capacity	0.53	0.01	0.04			
Queue Length 95th (ft)	0	0	3			
Control Delay (s)	0.0	0.0	16.9			
Lane LOS			C			
Approach Delay (s)	0.0		16.9			
Approach LOS			C			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			48.9%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	40	1694	122	57	782	128	95	88	61	169	77	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Flt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5034		1770	4978			3342			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5034		1770	4978			3342			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	43	1802	130	58	790	129	104	97	67	190	87	28
RTOR Reduction (vph)	0	4	0	0	12	0	0	18	0	0	4	0
Lane Group Flow (vph)	43	1928	0	58	907	0	0	250	0	0	301	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2117		157	1982			649			658	
v/s Ratio Prot	0.02	c0.38		c0.03	0.18			c0.07			c0.09	
v/s Ratio Perm												
v/c Ratio	0.22	0.91		0.37	0.46			0.39			0.46	
Uniform Delay, d1	72.9	49.0		77.2	39.8			63.1			64.1	
Progression Factor	1.00	1.00		1.24	0.71			1.00			1.00	
Incremental Delay, d2	0.6	6.4		1.4	0.7			0.4			0.5	
Delay (s)	73.5	55.4		97.4	29.2			63.5			64.6	
Level of Service	E	E		F	C			E			E	
Approach Delay (s)		55.8			33.2			63.5			64.6	
Approach LOS		E			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		50.9			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		117.5%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	
Volume (vph)	20	1971	56	48	1180	54	21	10	34	62	12	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5064		1770	5052			1703		1770	1718	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.63	1.00	
Satd. Flow (perm)	1770	5064		1770	5052			1551		1169	1718	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2011	57	49	1216	56	25	12	41	73	14	15
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	13	0
Lane Group Flow (vph)	20	2067	0	49	1270	0	0	55	0	73	16	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Effective Green, g (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3564		157	3668			190		143	210	
v/s Ratio Prot	0.01	c0.41		c0.03	c0.25						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.58		0.31	0.35			0.29		0.51	0.08	
Uniform Delay, d1	79.3	13.3		76.8	9.0			71.8		73.9	69.9	
Progression Factor	1.44	0.09		1.57	0.30			1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4		1.0	0.2			0.9		3.1	0.2	
Delay (s)	114.9	1.6		121.4	2.9			72.7		76.9	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		2.7			7.3			72.7			75.0	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.0			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.54										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		59.5%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	1781	194	154	1253	80	126	39	125	151	43	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5011		1770	5085	1583		1794	1583		3371	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5011		1770	5085	1583		1794	1583		3371	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	28	1895	206	159	1292	82	137	42	136	204	58	27
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	113	0	4	0
Lane Group Flow (vph)	28	2094	0	159	1292	45	0	179	23	0	285	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2218		192	2364	736		305	269		574	
v/s Ratio Prot	0.02	c0.42		c0.09	c0.25			c0.10			c0.08	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.18	0.94		0.83	0.55	0.06		0.59	0.09		0.50	
Uniform Delay, d1	75.9	48.0		78.6	34.5	26.5		68.8	62.8		67.6	
Progression Factor	1.04	0.93		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	8.5		24.4	0.9	0.2		8.0	0.6		3.0	
Delay (s)	79.1	53.1		103.0	35.5	26.7		76.8	63.5		70.7	
Level of Service	E	D		F	D	C		E	E		E	
Approach Delay (s)		53.4			42.0			71.1			70.7	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		51.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		102.6%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	1982	49	167	1547	15	38	8	80	23	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5067		1770	5078			1678			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.83	
Satd. Flow (perm)	1770	5067		1770	5078			1514			1505	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85		0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	10	2202	54	176	1628	16	45	9	94	28	12	12
RTOR Reduction (vph)	0	2	0	0	1	0	0	75	0	0	10	0
Lane Group Flow (vph)	10	2254	0	176	1643	0	0	73	0	0	42	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.4		11.2	50.8			17.2			17.2	
Effective Green, g (s)	0.8	40.4		11.2	50.8			17.2			17.2	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2422		234	3052			308			306	
v/s Ratio Prot	0.01	c0.44		c0.10	0.32							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.62	0.93		0.75	0.54			0.24			0.14	
Uniform Delay, d1	41.7	20.7		35.3	9.9			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	57.6	7.2		12.8	0.2			0.4			0.2	
Delay (s)	99.3	27.9		48.1	10.1			28.6			27.8	
Level of Service	F	C		D	B			C			C	
Approach Delay (s)		28.2			13.8			28.6			27.8	
Approach LOS		C			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		22.1			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		84.5			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		69.7%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	186	1924	25	323	1555	548	64	175	526	580	236	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	196	2025	26	347	1672	589	68	186	560	630	257	243
RTOR Reduction (vph)	0	1	0	0	0	87	0	26	271	0	2	131
Lane Group Flow (vph)	196	2050	0	347	1672	502	68	362	87	630	279	88
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.3	36.4		45.0	70.1	70.1	8.6	37.1	37.1	11.8	40.3	40.3
Effective Green, g (s)	11.3	36.4		45.0	70.1	70.1	8.6	37.1	37.1	11.8	40.3	40.3
Actuated g/C Ratio	0.07	0.24		0.30	0.46	0.46	0.06	0.24	0.24	0.08	0.26	0.26
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	254	1213		523	2342	729	100	397	366	266	462	398
v/s Ratio Prot	0.06	c0.40		c0.20	c0.33		0.04	c0.22		c0.18	c0.16	
v/s Ratio Perm					0.32			0.06				0.06
v/c Ratio	0.77	1.69		0.66	0.71	0.69	0.68	0.91	0.24	2.37	0.60	0.22
Uniform Delay, d1	69.2	57.9		47.0	33.0	32.4	70.4	56.0	46.2	70.2	49.0	43.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.5	314.2		3.2	1.1	2.7	17.3	24.8	0.3	627.3	2.2	0.3
Delay (s)	82.7	372.1		50.1	34.0	35.1	87.8	80.8	46.5	697.5	51.2	44.0
Level of Service	F	F		D	C	D	F	F	D	F	D	D
Approach Delay (s)		346.8			36.4			66.3			410.1	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		204.7										
HCM 2000 Volume to Capacity ratio		1.18										
Actuated Cycle Length (s)		152.2										
Intersection Capacity Utilization		123.1%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2017 Alt 2/3noB
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	↔
Volume (vph)	0	498	840	0	434	1592
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	560	894	0	477	1749
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	0	560	894	0	477	1745
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.16	c0.25		0.27	c0.63
v/s Ratio Perm						
v/c Ratio		0.31	1.04		0.72	0.98
Uniform Delay, d1		11.6	30.3		21.4	14.1
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	42.2		3.7	17.2
Delay (s)		11.7	72.5		25.1	31.3
Level of Service		B	E		C	C
Approach Delay (s)		11.7	72.5		30.0	
Approach LOS		B	E		C	
Intersection Summary						
HCM 2000 Control Delay		37.5				
HCM 2000 Volume to Capacity ratio		1.07				
Actuated Cycle Length (s)		80.0				
Intersection Capacity Utilization		84.1%				
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 2/3noB

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	926	0	0	520	247	427	2	105	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	965	0	0	584	278	459	2	113	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	37	0	0	0	0
Lane Group Flow (vph)	0	965	0	0	764	0	294	243	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.0			19.0		13.9	13.9				
Effective Green, g (s)		19.0			19.0		13.9	13.9				
Actuated g/C Ratio		0.46			0.46		0.34	0.34				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1644			1564		571	548				
v/s Ratio Prot		0.27			0.23							
v/s Ratio Perm							0.17	0.15				
v/c Ratio		0.59			0.49		0.51	0.44				
Uniform Delay, d1		8.1			7.6		10.8	10.5				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.5			0.2		0.8	0.6				
Delay (s)		8.6			7.8		11.6	11.1				
Level of Service		A			A		B	B				
Approach Delay (s)		8.6			7.8		11.3				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		9.0			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		40.9			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		47.3%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

33: Silver Strand Blvd & YMCA Dwy















MILCON_NorthOp Year 2017 Alt 2/3noB

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	3	36	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	3	52	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	73	52	52			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	73	52	52			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	926	1015	1554			
Direction, Lane #						
Volume Total	16	12	52			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	1015	1554	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.3	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.3	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.5				
Intersection Capacity Utilization		17.2%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St










MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1404	34	0	3838	552	0	0	476	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1692	41	0	4172	600	0	0	595	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4792			1753			3155	6524	624	5076	6244	1731
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4792			1753			3155	6524	624	5076	6244	1731
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	84
cM capacity (veh/h)	20			348			4	0	1355	0	0	75
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	677	677	379	1669	1669	1434	595	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	600	595	12				
cSH	1700	1700	1700	1700	1700	1700	1355	75				
Volume to Capacity	0.40	0.40	0.22	0.98	0.98	0.84	0.44	0.16				
Queue Length 95th (ft)	0	0	0	0	0	0	57	13				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	62.2				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	62.2				
Approach LOS							A	F				
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			101.6%			ICU Level of Service		G				
Analysis Period (min)			15									

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1264	201	0	3738	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1436	228	0	4153	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1685		2975	633	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1685		2975	633	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	39	
cM capacity (veh/h)			369		11	409	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	575	575	516	1384	1384	1384	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	228	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	409
Volume to Capacity	0.34	0.34	0.30	0.81	0.81	0.81	0.61
Queue Length 95th (ft)	0	0	0	0	0	0	99
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	26.9
Lane LOS							D
Approach Delay (s)	0.0			0.0			26.9
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			87.1%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1601	1944	343	106	102	0	0	278	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4639		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4639		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1722	2090	369	143	138	0	0	320	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1033	3140	0	143	138	0	0	332	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3211		186	872			397	
v/s Ratio Prot				c0.68	0.68		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.98	0.98		0.77	0.16			0.84	
Uniform Delay, d1				28.0	27.8		82.5	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				23.1	11.1		17.2	0.1			14.2	
Delay (s)				51.0	38.9		99.7	56.1			96.5	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			41.9			78.3			96.5	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		47.8		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.94										
Actuated Cycle Length (s)		189.5		Sum of lost time (s)						16.8		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	583	73	0	0	0	0	198	203	451	1484	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3257	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3257	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	634	79	0	0	0	0	230	221	490	1546	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	19	49	0	0	0
Lane Group Flow (vph)	0	635	50	0	0	0	0	293	90	490	1546	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1176	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.44	
v/s Ratio Perm		0.12	0.03						0.06			
v/c Ratio		0.36	0.09					0.25	0.17	0.70	0.75	
Uniform Delay, d1		41.5	37.5					38.5	37.3	63.2	26.5	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.5	
Delay (s)		41.6	37.5					38.6	37.5	66.2	28.1	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.1			0.0			38.2			37.3	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.3		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)						14.4		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	214	6	1134	594	0	1147
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3315			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3315			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	249	7	1219	639	0	1207
RTOR Reduction (vph)	2	0	53	0	0	0
Lane Group Flow (vph)	254	0	1805	0	0	1207
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	16.7		42.7			42.7
Effective Green, g (s)	16.7		42.7			42.7
Actuated g/C Ratio	0.24		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	388		2066			2095
v/s Ratio Prot	c0.16		c0.54			0.36
v/s Ratio Perm						
v/c Ratio	0.66		0.87			0.58
Uniform Delay, d1	23.3		10.7			7.6
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	4.0		4.4			0.4
Delay (s)	27.3		15.1			8.0
Level of Service	C		B			A
Approach Delay (s)	27.3		15.1			8.0
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			13.4		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.86			
Actuated Cycle Length (s)			68.5		Sum of lost time (s)	12.1
Intersection Capacity Utilization			76.7%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: AM PEAK



















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↕	↕	↔	↔	↔
Volume (vph)	46	2	9	7	0	5	19	1346	25	39	1286	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1708		1770	3529		1770	3525	
Frt Permitted	0.74	0.78	1.00		0.87		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1312	1385	1583		1526		1770	3529		1770	3525	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	53	2	10	14	0	10	23	1602	30	42	1398	39
RTOR Reduction (vph)	0	0	8	0	20	0	0	1	0	0	1	0
Lane Group Flow (vph)	28	27	2	0	4	0	23	1631	0	42	1436	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.3	15.3	15.3		15.3		2.7	63.6		4.0	64.9	
Effective Green, g (s)	15.3	15.3	15.3		15.3		2.7	63.6		4.0	64.9	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	206	218	249		240		49	2313		72	2358	
v/s Ratio Prot							0.01	c0.46		c0.02	0.41	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.14	0.12	0.01		0.02		0.47	0.71		0.58	0.61	
Uniform Delay, d1	35.2	35.1	34.4		34.5		46.4	10.7		45.7	9.0	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		6.9	1.0		11.5	0.5	
Delay (s)	35.5	35.3	34.5		34.5		53.4	11.7		57.2	9.4	
Level of Service	D	D	C		C		D	B		E	A	
Approach Delay (s)		35.3			34.5			12.3			10.8	
Approach LOS		D			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.2		HCM 2000 Level of Service					B		
HCM 2000 Volume to Capacity ratio			0.59									
Actuated Cycle Length (s)			97.0		Sum of lost time (s)					14.1		
Intersection Capacity Utilization			57.1%		ICU Level of Service					B		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: AM PEAK
























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	22	0	1291	7	421	857	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Frt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.66	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	33	0	1419	8	430	874	0
RTOR Reduction (vph)	0	0	0	0	30	0	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1419	4	430	874	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.40		c0.24	0.25	
v/s Ratio Perm									0.00			
v/c Ratio					0.02			0.85	0.01	0.70	0.29	
Uniform Delay, d1					60.6			34.0	20.4	41.1	2.4	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			3.9	0.0	3.7	0.2	
Delay (s)					60.6			16.3	20.4	44.8	2.6	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			16.3			16.5	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay			17.0		HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio			0.74									
Actuated Cycle Length (s)			145.0		Sum of lost time (s)				18.9			
Intersection Capacity Utilization			78.2%		ICU Level of Service				D			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	49	14	1	64	127	135	1131	5	287	302	307
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.98	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3222	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3222	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	46	75	22	1	73	144	150	1257	6	330	347	353
RTOR Reduction (vph)	0	0	20	0	0	121	0	0	3	0	127	0
Lane Group Flow (vph)	46	75	2	0	74	23	150	1257	3	330	573	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1057	
v/s Ratio Prot	0.03	c0.04			c0.04		0.08	c0.36		c0.19	0.18	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.38	0.59	0.02		0.25	0.10	0.27	0.80	0.00	0.97	0.54	
Uniform Delay, d1	64.5	65.5	62.9		53.5	52.1	37.7	34.6	22.3	58.1	39.8	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.92	
Incremental Delay, d2	2.0	6.7	0.1		0.4	0.2	0.3	4.3	0.0	39.3	2.0	
Delay (s)	66.5	72.2	63.0		53.9	52.3	37.9	38.9	22.3	95.0	38.5	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		68.9			52.8			38.7			56.6	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay			47.9		HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio			0.72									
Actuated Cycle Length (s)			145.0		Sum of lost time (s)				19.4			
Intersection Capacity Utilization			84.3%		ICU Level of Service				E			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑	↘	↙	↓
Volume (veh/h)	29	196	4	87	321	8
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	34	231	5	109	349	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	766	59			114	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	766	59			114	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	88	77			76	
cM capacity (veh/h)	283	1006			1475	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	265	114	358			
Volume Left	34	0	349			
Volume Right	231	109	0			
cSH	1155	1700	1475			
Volume to Capacity	0.23	0.07	0.24			
Queue Length 95th (ft)	22	0	23			
Control Delay (s)	10.9	0.0	8.0			
Lane LOS	B		A			
Approach Delay (s)	10.9	0.0	8.0			
Approach LOS	B					
Intersection Summary						
Average Delay		7.8				
Intersection Capacity Utilization		34.9%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑	↘	↙	↓
Volume (vph)	32	3	1283	404	0	278
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1739		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1739		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	43	4	1351	425	0	434
RTOR Reduction (vph)	4	0	0	118	0	0
Lane Group Flow (vph)	43	0	1351	307	0	434
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	1.9		30.7	30.7		30.7
Effective Green, g (s)	1.9		30.7	30.7		30.7
Actuated g/C Ratio	0.04		0.72	0.72		0.72
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	77		2556	1097		2556
v/s Ratio Prot	c0.02		c0.38			0.12
v/s Ratio Perm				0.20		
v/c Ratio	0.56		0.53	0.28		0.17
Uniform Delay, d1	19.9		2.6	2.1		1.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	9.0		0.2	0.1		0.0
Delay (s)	28.9		2.8	2.2		1.9
Level of Service	C		A	A		A
Approach Delay (s)	28.9		2.7			1.9
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.1		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.53				
Actuated Cycle Length (s)		42.5		Sum of lost time (s)		9.9
Intersection Capacity Utilization		47.9%		ICU Level of Service		A
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↑↑
Volume (veh/h)	0	15	2094	5	5	312
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2252	5	7	459
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2498	1128			2257	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2498	1128			2257	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	87			97	
cM capacity (veh/h)	23	198			224	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1501	756	7	229	229
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	198	1700	1700	224	1700	1700
Volume to Capacity	0.13	0.88	0.44	0.03	0.13	0.13
Queue Length 95th (ft)	11	0	0	3	0	0
Control Delay (s)	25.9	0.0	0.0	21.6	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	25.9	0.0		0.3		
Approach LOS	D					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		68.0%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	17	85	2010	12	37	274
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	105	2161	13	54	397
RTOR Reduction (vph)	0	4	0	1	0	0
Lane Group Flow (vph)	21	101	2161	12	54	397
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.7	25.8	68.3	68.3	5.0	82.1
Effective Green, g (s)	15.7	20.7	68.3	68.3	5.0	82.1
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	259	305	2256	1009	82	2712
v/s Ratio Prot	0.01	c0.06	c0.61		c0.03	0.11
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.33	0.96	0.01	0.66	0.15
Uniform Delay, d1	39.5	37.2	18.1	7.1	50.2	3.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	10.7	0.0	17.5	0.0
Delay (s)	39.6	37.9	28.7	7.1	67.7	3.3
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.2		28.6			11.0
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay		26.2		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio		0.83				
Actuated Cycle Length (s)		107.1		Sum of lost time (s)		18.1
Intersection Capacity Utilization		71.7%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↑↑			↑↑
Volume (veh/h)	0	31	1988	25	0	290
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	50	2093	26	0	392
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2302	1059			2119	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2302	1059			2119	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	77			100	
cM capacity (veh/h)	32	220			254	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	50	1395	724	196	196	
Volume Left	0	0	0	0	0	
Volume Right	50	0	26	0	0	
cSH	220	1700	1700	1700	1700	
Volume to Capacity	0.23	0.82	0.43	0.12	0.12	
Queue Length 95th (ft)	21	0	0	0	0	
Control Delay (s)	26.1	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	26.1	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		65.7%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↖	↗	↑↑
Volume (vph)	9	6	2013	31	15	267
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	15	10	2097	32	19	330
RTOR Reduction (vph)	0	5	0	7	0	0
Lane Group Flow (vph)	15	5	2097	25	19	330
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.8	59.8	2.0	69.3
Effective Green, g (s)	1.4	3.4	59.8	59.8	2.0	69.3
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2737	1224	45	3172
v/s Ratio Prot	c0.01	0.00	c0.59		c0.01	0.09
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.47	0.08	0.77	0.02	0.42	0.10
Uniform Delay, d1	37.6	35.4	4.9	2.0	37.1	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.5	0.5	1.3	0.0	6.3	0.0
Delay (s)	48.0	35.9	6.2	2.0	43.4	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	43.2		6.1			2.8
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		6.0		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.75				
Actuated Cycle Length (s)		77.3		Sum of lost time (s)		14.1
Intersection Capacity Utilization		68.5%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	44	1	0	43	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	81	2	0	68	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	83	68	3					
Volume Left (vph)	0	0	81	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	834	1121	816	842	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.4						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.2%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: AM PEAK















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	36	0	0	31	221	3	1821	49	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1358	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	48	0	0	43	307	3	1937	52	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	21	0	0	0	0
Lane Group Flow (vph)	3	48	0	0	43	251	3	1937	31	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.0	16.0			16.0	16.0	47.7	43.6	43.6			
Effective Green, g (s)	16.0	16.0			16.0	16.0	47.7	43.6	43.6			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.60	0.60			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	297	408			408	346	1156	2113	945			
v/s Ratio Prot		0.03			0.02		0.00	c0.55				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.12			0.11	0.72	0.00	0.92	0.03			
Uniform Delay, d1	22.3	22.8			22.8	26.5	4.4	13.1	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	7.3	0.0	6.8	0.0			
Delay (s)	22.3	23.0			22.9	33.8	4.4	19.9	6.1			
Level of Service	C	C			C	C	A	B	A			
Approach Delay (s)		22.9				32.5		19.5			0.0	
Approach LOS		C				C		B			A	
Intersection Summary												
HCM 2000 Control Delay		21.5				HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio		0.86										
Actuated Cycle Length (s)		73.0				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		83.6%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: AM PEAK

























							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	7	12	378	1618	0	176	61
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	28	48	394	1685	0	223	77
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1892	150	300		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1892	150	300		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	34	94	69		0		
cM capacity (veh/h)	42	870	1258		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	76	394	843	843	149	151	0
Volume Left	28	394	0	0	0	0	0
Volume Right	48	0	0	0	0	77	0
cSH	106	1258	1700	1700	1700	1700	1700
Volume to Capacity	0.72	0.31	0.50	0.50	0.09	0.09	0.00
Queue Length 95th (ft)	94	34	0	0	0	0	0
Control Delay (s)	97.5	9.2	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	A					
Approach Delay (s)	97.5	1.7			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay		4.5					
Intersection Capacity Utilization		61.4%		ICU Level of Service		B	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	386	0	38	2	1	2	25	1877	0	0	143	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3417	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3417	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	439	0	43	6	3	6	26	1976	0	0	207	62
RTOR Reduction (vph)	0	30	0	0	6	0	0	0	0	0	24	0
Lane Group Flow (vph)	439	13	0	6	3	0	26	1976	0	0	245	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	25.4	25.4		1.7	1.7		1.9	43.5			37.4	
Effective Green, g (s)	25.4	25.4		1.7	1.7		1.9	43.5			37.4	
Actuated g/C Ratio	0.30	0.30		0.02	0.02		0.02	0.51			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	527	471		35	33		39	1804			1498	
v/s Ratio Prot	c0.25	0.01		c0.00	0.00		0.01	c0.56			0.07	
v/s Ratio Perm												
v/c Ratio	0.83	0.03		0.17	0.09		0.67	1.10			0.16	
Uniform Delay, d1	28.0	21.2		41.1	41.0		41.4	20.9			14.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	10.8	0.0		2.3	1.2		35.5	52.3			0.1	
Delay (s)	38.8	21.2		43.4	42.3		76.9	73.2			14.5	
Level of Service	D	C		D	D		E	E			B	
Approach Delay (s)		37.2			42.7			73.3			14.5	
Approach LOS		D			D			E			B	
Intersection Summary												
HCM 2000 Control Delay		61.1						HCM 2000 Level of Service		E		
HCM 2000 Volume to Capacity ratio		1.04										
Actuated Cycle Length (s)		85.3						Sum of lost time (s)		18.9		
Intersection Capacity Utilization		88.4%						ICU Level of Service		E		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰↰↰	↰↰↰		↰	↰		↰	↰↰	
Volume (vph)	7	191	14	0	1736	17	39	22	1	19	40	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5032			5078		1770	1852			1732	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.19	
Satd. Flow (perm)	1770	5032			5078		1241	1852			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	
Adj. Flow (vph)	8	215	16	0	1908	19	46	26	1	25	52	65
RTOR Reduction (vph)	0	4	0	0	1	0	0	1	0	0	17	0
Lane Group Flow (vph)	8	227	0	0	1926	0	46	26	0	0	125	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1903			2062		241	360			53	
v/s Ratio Prot	c0.00	0.05			c0.38			0.01				
v/s Ratio Perm							c0.04				c0.39	
v/c Ratio	0.04	0.12			0.93		0.19	0.07			2.36	
Uniform Delay, d1	71.4	36.4			51.1		60.7	59.2			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			8.4		0.4	0.1			668.2	
Delay (s)	71.5	36.6			59.6		61.0	59.3			743.2	
Level of Service	E	D			E		E	E			F	
Approach Delay (s)		37.7			59.6			60.4			743.2	
Approach LOS		D			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		98.2			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.92										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		72.3%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰↰	↰↰↰							↰
Volume (vph)	0	209	0	385	1744	8	0	0	0	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3537							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3537							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	255	0	410	1855	9	0	0	0	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	255	0	410	1864	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3214							609
v/s Ratio Prot		0.05		0.12	c0.53							
v/s Ratio Perm												0.00
v/c Ratio		0.13		0.24	0.58							0.01
Uniform Delay, d1		36.6		25.6	1.6							34.9
Progression Factor		0.42		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.1	0.3							0.0
Delay (s)		15.4		25.6	1.8							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.4			6.1		0.0				35.0	
Approach LOS		B			A		A				C	
Intersection Summary												
HCM 2000 Control Delay		7.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		70.1%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	9	234	0	0	128	104	0	0	0	47	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	11	279	0	0	138	112	0	0	0	52	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	249			279			498	549	279	494	494	194
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	249			279			498	549	279	494	494	194
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1316			1284			477	439	760	483	473	848

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	289	249	0	56
Volume Left	11	0	0	52
Volume Right	0	112	0	4
cSH	1316	1284	1700	500
Volume to Capacity	0.01	0.00	0.00	0.11
Queue Length 95th (ft)	1	0	0	9
Control Delay (s)	0.4	0.0	0.0	13.1
Lane LOS	A		A	B
Approach Delay (s)	0.4	0.0	0.0	13.1
Approach LOS			A	B

Intersection Summary

Average Delay	1.4			
Intersection Capacity Utilization	29.6%		ICU Level of Service	A
Analysis Period (min)	15			

NBC Coastal Campus

22: 3rd St & Palm Ave

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: AM PEAK











Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	273	4	26	208	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	317	5	28	224	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	322	28	249	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.1	5.5	5.1	5.7						
Degree Utilization, x	0.01	0.49	0.05	0.38	0.26	0.07						
Capacity (veh/h)	579	635	566	631	636	548						
Control Delay (s)	7.9	12.5	8.2	10.6	9.9	9.1						
Approach Delay (s)	12.3		10.3		9.9	9.1						
Approach LOS	B		B		A	A						

Intersection Summary

Delay	11.0			
Level of Service	B			
Intersection Capacity Utilization	37.5%		ICU Level of Service	A
Analysis Period (min)	15			



















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	226	425	332	152	17	68
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	286	538	405	185	24	96
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	590				1608	295
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	590				1608	295
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	71				65	86
cM capacity (veh/h)	981				68	701
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	286	538	270	320	120	
Volume Left	286	0	0	0	24	
Volume Right	0	0	0	185	96	
cSH	981	1700	1700	1700	244	
Volume to Capacity	0.29	0.32	0.16	0.19	0.49	
Queue Length 95th (ft)	30	0	0	0	62	
Control Delay (s)	10.2	0.0	0.0	0.0	33.1	
Lane LOS	B				D	
Approach Delay (s)	3.5		0.0		33.1	
Approach LOS					D	
Intersection Summary						
Average Delay			4.5			
Intersection Capacity Utilization			41.7%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	418	15	26	333	0	65	37	81	1	21	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1721			1858	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.88			0.98	1.00
Satd. Flow (perm)	933	3521		822	3539			1538			1830	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	543	19	34	432	0	98	56	123	2	36	47
RTOR Reduction (vph)	0	3	0	0	0	0	0	33	0	0	0	30
Lane Group Flow (vph)	21	559	0	34	432	0	0	244	0	0	38	17
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.2	13.2		13.2	13.2			13.2			13.2	13.2
Effective Green, g (s)	13.2	13.2		13.2	13.2			13.2			13.2	13.2
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	345	1305		304	1312			570			678	586
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.16			0.02	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.43			0.06	0.03
Uniform Delay, d1	7.2	8.4		7.4	8.0			8.4			7.2	7.1
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.1			0.5			0.0	0.0
Delay (s)	7.3	8.6		7.5	8.2			8.9			7.2	7.1
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.6			8.1			8.9			7.2	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.4			HCM 2000 Level of Service			A			
HCM 2000 Volume to Capacity ratio			0.43									
Actuated Cycle Length (s)			35.6			Sum of lost time (s)			9.2			
Intersection Capacity Utilization			46.4%			ICU Level of Service			A			
Analysis Period (min)			15									
c. Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	502	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	546	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			550		546	546
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			550		546	546
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1020		499	538
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	546	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	526			
Volume to Capacity	0.32	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	11.9			
Lane LOS			B			
Approach Delay (s)	0.0		11.9			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: AM PEAK








	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑	↘	↗	↑↑↑		↗	↑↑↑	↘	↗	↑↑↑	↘
Volume (vph)	21	653	34	23	1891	43	162	36	1900	88	45	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6				4.6
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95				0.95
Frt	1.00	0.99		1.00	1.00			0.97				0.98
Flt Protected	0.95	1.00		0.95	1.00			0.97				0.97
Satd. Flow (prot)	1770	5048		1770	5068			3324				3364
Flt Permitted	0.95	1.00		0.95	1.00			0.97				0.97
Satd. Flow (perm)	1770	5048		1770	5068			3324				3364
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	777	40	25	2078	47	195	43	60	107	55	29
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	814	0	25	2124	0	0	286	0	0	183	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2235		118	2159			646			654	
v/s Ratio Prot	0.01	c0.16		c0.01	c0.42			c0.09			c0.05	
v/s Ratio Perm												
v/c Ratio	0.17	0.36		0.21	0.98			0.44			0.28	
Uniform Delay, d1	76.7	33.3		79.5	51.0			63.9			61.8	
Progression Factor	1.00	1.00		1.24	0.77			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.7	13.9			0.5			0.2	
Delay (s)	77.3	33.8		99.5	53.0			64.4			62.0	
Level of Service	E	C		F	D			E			E	
Approach Delay (s)		35.1			53.6			64.4			62.0	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		50.5			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		74.6%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: AM PEAK









Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	881	34	20	2062	11	18	4	30	54	10	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5081			1688		1770	1695	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5057		1770	5081			1542		1237	1695	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	990	38	23	2343	12	25	5	41	77	14	21
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	18	0
Lane Group Flow (vph)	2	1026	0	23	2355	0	0	44	0	77	18	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			257		206	282	
v/s Ratio Prot	0.00	0.20		c0.01	c0.46						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.30		0.19	0.63			0.17		0.37	0.06	
Uniform Delay, d1	86.1	11.0		79.4	12.1			64.3		66.7	63.2	
Progression Factor	1.69	0.27		1.43	0.32			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.5	0.5			0.3		1.1	0.1	
Delay (s)	146.5	3.2		113.9	4.3			64.6		67.8	63.2	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.5			5.4			64.6			66.4	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		7.9			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		73.5%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	951	62	95	1918	51	144	19	89	166	35	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5038		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5038		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1069	70	114	2311	61	162	21	100	221	47	20
RTOR Reduction (vph)	0	4	0	0	0	29	0	0	83	0	3	0
Lane Group Flow (vph)	3	1135	0	114	2311	32	0	183	17	0	285	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.23		c0.06	c0.45			c0.10			c0.08	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.51		0.58	0.85	0.04		0.60	0.06		0.49	
Uniform Delay, d1	86.2	36.1		76.0	36.2	20.2		68.7	62.3		67.4	
Progression Factor	1.22	0.63		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.8		4.3	3.7	0.1		3.1	0.1		0.7	
Delay (s)	106.2	23.4		80.4	39.9	20.2		71.8	62.4		68.0	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.7			41.3			68.5			68.0	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		40.2			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		91.0%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	↰
Volume (vph)	14	1214	25	43	2046	11	16	6	48	37	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1671			1722	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.78	
Satd. Flow (perm)	1770	5070		1770	5081			1562			1382	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	15	1320	27	50	2379	13	19	7	57	49	3	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	45	0	0	22	0
Lane Group Flow (vph)	15	1346	0	50	2392	0	0	38	0	0	58	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Effective Green, g (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2666		72	2829			331			293	
v/s Ratio Prot	0.01	0.27		c0.03	c0.47							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.88	0.50		0.69	0.85			0.12			0.20	
Uniform Delay, d1	35.2	10.9		33.7	13.2			22.6			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	159.7	0.2		25.2	2.5			0.2			0.3	
Delay (s)	194.9	11.0		58.8	15.7			22.8			23.4	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		13.0			16.6			22.8			23.4	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		15.6			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		71.1			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		56.4%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	90	1226	29	242	1986	213	75	72	765	233	92	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	105	1426	34	257	2113	227	83	80	850	277	110	90
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	183	0	3	59
Lane Group Flow (vph)	105	1458	0	257	2113	160	83	318	276	277	116	22
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.3	29.8	29.8	10.4	31.9	31.9
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.3	29.8	29.8	10.4	31.9	31.9
Actuated g/C Ratio	0.05	0.31		0.16	0.41	0.41	0.07	0.26	0.26	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	178	1548		275	2079	647	127	400	389	309	484	416
v/s Ratio Prot	0.03	0.29		c0.15	c0.42		0.05	c0.20		c0.08	0.07	
v/s Ratio Perm						0.10			0.18			0.01
v/c Ratio	0.59	0.94		0.93	1.02	0.25	0.65	0.79	0.71	0.90	0.24	0.05
Uniform Delay, d1	53.4	39.0		48.1	34.0	22.4	52.0	39.8	38.8	51.9	32.3	30.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.9	11.7		36.9	23.9	0.2	11.5	10.4	5.8	26.5	0.3	0.1
Delay (s)	58.3	50.7		84.9	58.0	22.6	63.5	50.2	44.6	78.4	32.5	30.6
Level of Service	E	D		F	E	C	E	D	D	E	C	C
Approach Delay (s)		51.3			57.5			48.8			58.8	
Approach LOS		D			E			D			E	
Intersection Summary												
HCM 2000 Control Delay		54.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.95										
Actuated Cycle Length (s)		115.2			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		86.9%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	282	1148	0	154	1295
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	317	1234	0	171	1439
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	317	1234	0	171	1434
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.35		0.10	c0.51
v/s Ratio Perm						
v/c Ratio		0.12	1.06		0.83	0.94
Uniform Delay, d1		2.5	26.8		34.5	16.7
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	42.9		22.8	11.0
Delay (s)		2.5	69.7		57.3	27.7
Level of Service		A	E		E	C
Approach Delay (s)		2.5	69.7		30.9	
Approach LOS		A	E		C	
Intersection Summary						
HCM 2000 Control Delay			43.2		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			1.05			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			67.8%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	437	0	0	422	520	828	1	142	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.96				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3246		1681	1633				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3246		1681	1633				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	502	0	0	459	565	900	1	154	0	0	0
RTOR Reduction (vph)	0	0	0	0	357	0	0	28	0	0	0	0
Lane Group Flow (vph)	0	502	0	0	667	0	540	487	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.7			16.7		20.6	20.6				
Effective Green, g (s)		16.7			16.7		20.6	20.6				
Actuated g/C Ratio		0.37			0.37		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1304			1196		764	742				
v/s Ratio Prot		0.14			c0.21							
v/s Ratio Perm							c0.32	0.30				
v/c Ratio		0.38			0.56		0.71	0.66				
Uniform Delay, d1		10.5			11.4		9.9	9.6				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.6		3.0	2.1				
Delay (s)		10.7			11.9		12.9	11.7				
Level of Service		B			B		B	B				
Approach Delay (s)		10.7			11.9		12.3				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					11.9					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.64							
Actuated Cycle Length (s)					45.3					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					69.0%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰		↰	↱	↱	
Volume (veh/h)	0	3	4	65	13	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	90	32	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	133	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	133	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	858	1042	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	96	32			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	1042	1581	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		1.0				
Intersection Capacity Utilization		16.7%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St







MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Volume (veh/h)	0	4090	17	0	1810	244	0	0	908	0	0	55
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%			0%			0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4260	18	0	1866	252	0	0	1009	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2138			4298			5015	6427	1469	3452	6310	788
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2138			4298			5015	6427	1469	3452	6310	788
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	246			32			0	0	1838	1	0	323
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1704	1704	870	746	746	625	1009	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	252	1009	83				
cSH	1700	1700	1700	1700	1700	1700	1838	323				
Volume to Capacity	1.00	1.00	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	88	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3	20.0				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.3	20.0				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				144.2%			ICU Level of Service	H				
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↑	
Volume (veh/h)	3855	130	0	1847	0	200	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3974	134	0	1924	0	244	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4128		4723	1432	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4128		4723	1432	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			38		1	120	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1590	1590	929	641	641	641	244
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	244
cSH	1700	1700	1700	1700	1700	1700	120
Volume to Capacity	0.94	0.94	0.55	0.38	0.38	0.38	2.04
Queue Length 95th (ft)	0	0	0	0	0	0	502
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	556.4
Lane LOS							F
Approach Delay (s)	0.0			0.0			556.4
Approach LOS							F
Intersection Summary							
Average Delay			21.6				
Intersection Capacity Utilization			98.4%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↑	↑↑↑		↑	↑↑			↑↑	↑
Volume (vph)	0	0	0	974	634	109	95	252		0	0	861
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4636		1770	3539				3528
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4636		1770	3539				3528
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1025	667	115	98	260	0	0	888	16
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	512	1283	0	98	260	0	0	902	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1432		98	1989				1568
v/s Ratio Prot				c0.34	0.28		c0.06	0.07				c0.26
v/s Ratio Perm												
v/c Ratio				1.09	0.97dl		1.00	0.13				0.58
Uniform Delay, d1				31.1	29.7		42.5	9.3				18.7
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				67.9	7.7		90.9	0.0				0.5
Delay (s)				99.0	37.4		133.4	9.3				19.2
Level of Service				F	D		F	A				B
Approach Delay (s)		0.0			54.8			43.3				19.2
Approach LOS		A			D			D				B
Intersection Summary												
HCM 2000 Control Delay			43.0			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			0.80									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			17.2			
Intersection Capacity Utilization		135.6%				ICU Level of Service			H			
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔↔	
Volume (vph)	7	2110	108	0	0	0	0	347	476	760	1097	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3115	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3115	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2319	119	0	0	0	0	403	553	792	1143	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2327	90	0	0	0	0	651	270	792	1143	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					945	409	865	2022	
v/s Ratio Prot		c0.46						c0.21		c0.23	0.32	
v/s Ratio Perm			0.06						0.20			
v/c Ratio		1.26	0.16					0.69	0.66	0.92	0.57	
Uniform Delay, d1		55.8	37.7					53.7	53.1	63.6	23.7	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		123.3	0.1					2.1	3.8	14.1	0.4	
Delay (s)		179.1	37.9					55.8	56.9	77.7	24.1	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		172.2		0.0				56.1			46.1	
Approach LOS		F		A				E			D	
Intersection Summary												
HCM 2000 Control Delay		105.7		HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio		0.98										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		135.6%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave













MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔
Volume (vph)	171	12	913	679	0	1211
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3266			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3266			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	219	15	1026	763	0	1302
RTOR Reduction (vph)	2	0	64	0	0	0
Lane Group Flow (vph)	232	0	1725	0	0	1302
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	296		2467			2540
v/s Ratio Prot	c0.15		c0.53			0.39
v/s Ratio Perm						
v/c Ratio	0.79		0.70			0.51
Uniform Delay, d1	61.9		10.1			7.8
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	12.8		1.7			0.7
Delay (s)	74.7		11.8			8.5
Level of Service	E		B			A
Approach Delay (s)	74.7		11.8			8.5
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay		15.0		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.73				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		80.4%		ICU Level of Service		D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2018 Alt 1/2/3













Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	141	9	28	25	9	24	22	1511	48	66	1432	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1695	1583		1721		1770	3523		1770	3489	
Flt Permitted	0.69	0.69	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1219	1217	1583		1462		1770	3523		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	181	12	36	39	14	38	24	1625	52	72	1557	163
RTOR Reduction (vph)	0	0	30	0	23	0	0	1	0	0	2	0
Lane Group Flow (vph)	96	97	6	0	68	0	24	1676	0	72	1718	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4		4							
Actuated Green, G (s)	19.0	19.0	19.0		19.0		3.1	72.0		8.0	76.9	
Effective Green, g (s)	19.0	19.0	19.0		19.0		3.1	72.0		8.0	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	203	203	264		244		48	2228		124	2357	
v/s Ratio Prot							0.01	0.48		c0.04	c0.49	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.47	0.48	0.02		0.28		0.50	0.75		0.58	0.73	
Uniform Delay, d1	42.9	42.9	39.6		41.4		54.6	14.7		51.3	11.8	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	1.8	0.0		0.6		8.0	1.5		6.8	1.2	
Delay (s)	44.6	44.7	39.7		42.0		62.6	16.1		58.0	12.9	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.9			42.0			16.8			14.8	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		18.1			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		113.8			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		74.3%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	7	0	142	0	1320	0	31	1570	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1619			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1619			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	10	0	206	0	1404	0	33	1688	0
RTOR Reduction (vph)	0	0	0	0	168	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	48	0	0	1404	0	33	1688	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			45.4		1.7	51.3	
Effective Green, g (s)					14.1			45.4		1.7	51.3	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					302			2128		39	2404	
v/s Ratio Prot					c0.03			0.40		0.02	c0.48	
v/s Ratio Perm												
v/c Ratio					0.16			0.66		0.85	0.70	
Uniform Delay, d1					25.7			9.9		36.8	7.4	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			0.8		84.9	0.9	
Delay (s)					26.0			10.7		121.6	8.4	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			26.0			10.7			10.5	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay		11.6			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		75.5			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		61.0%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	288	49	117	6	68	416	27	629	2	137	1395	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1516		1855	1511	1770	3539	1348	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1516		1855	1511	1770	3539	1348	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	379	64	154	7	74	452	30	691	2	146	1484	69
RTOR Reduction (vph)	0	0	124	0	0	214	0	0	1	0	2	0
Lane Group Flow (vph)	379	64	30	0	81	238	30	691	1	146	1551	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.7	27.7	27.7		24.6	24.6	2.9	55.9	55.9	16.9	69.9	
Effective Green, g (s)	27.7	27.7	27.7		24.6	24.6	2.9	55.9	55.9	16.9	69.9	
Actuated g/C Ratio	0.19	0.19	0.19		0.17	0.17	0.02	0.39	0.39	0.12	0.48	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	339	357	290		315	257	35	1369	521	207	1698	
v/s Ratio Prot	c0.21	0.03			0.04		0.02	0.20		c0.08	c0.44	
v/s Ratio Perm			0.02			c0.16		0.00				
v/c Ratio	1.12	0.18	0.10		0.26	0.93	0.86	0.50	0.00	0.71	0.91	
Uniform Delay, d1	58.4	48.9	48.1		52.0	59.1	70.6	33.8	27.2	61.4	34.5	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	84.7	0.2	0.2		0.4	36.4	94.8	1.3	0.0	10.4	9.1	
Delay (s)	143.1	49.1	48.3		52.5	95.5	165.4	35.1	27.2	71.8	43.6	
Level of Service	F	D	D		D	F	F	D	C	E	D	
Approach Delay (s)		108.5			88.9			40.5			46.0	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay		61.8			HCM 2000 Level of Service					E		
HCM 2000 Volume to Capacity ratio		0.97										
Actuated Cycle Length (s)		144.5			Sum of lost time (s)					19.4		
Intersection Capacity Utilization		79.8%			ICU Level of Service					D		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	312	488	3	43	177	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	347	542	4	61	201	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	440	35			65	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	440	35			65	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	31	48			87	
cM capacity (veh/h)	499	1039			1537	
Direction, Lane #						
Volume Total	889	65	205			
Volume Left	347	0	201			
Volume Right	542	61	0			
cSH	1005	1700	1537			
Volume to Capacity	0.88	0.04	0.13			
Queue Length 95th (ft)	309	0	11			
Control Delay (s)	28.4	0.0	7.6			
Lane LOS	D		A			
Approach Delay (s)	28.4	0.0	7.6			
Approach LOS	D					
Intersection Summary						
Average Delay		23.1				
Intersection Capacity Utilization		40.6%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕		↕
Volume (vph)	315	6	665	46	0	1520
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	399	8	739	51	0	1708
RTOR Reduction (vph)	1	0	0	29	0	0
Lane Group Flow (vph)	406	0	739	22	0	1708
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.23		0.21			c0.48
v/s Ratio Perm				0.01		
v/c Ratio	0.48		0.49	0.03		1.12
Uniform Delay, d1	18.7		21.6	17.3		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.2	0.0		64.9
Delay (s)	19.1		21.8	17.4		94.8
Level of Service	B		C	B		F
Approach Delay (s)	19.1		21.6			94.8
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay		64.3		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		0.79				
Actuated Cycle Length (s)		105.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		91.9%		ICU Level of Service		F
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕	↕	↕
Volume (veh/h)	4	6	522	3	15	1458
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	607	3	16	1602
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1443	305			610	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1443	305			610	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	98			98	
cM capacity (veh/h)	121	691			964	
Direction, Lane #						
Volume Total	20	405	206	16	801	801
Volume Left	8	0	0	16	0	0
Volume Right	12	0	3	0	0	0
cSH	239	1700	1700	964	1700	1700
Volume to Capacity	0.08	0.24	0.12	0.02	0.47	0.47
Queue Length 95th (ft)	7	0	0	1	0	0
Control Delay (s)	21.4	0.0	0.0	8.8	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	21.4	0.0		0.1		
Approach LOS	C					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			50.3%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↕	↖	↗	↕
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	29	56	469	12	101	1362
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	32	61	533	14	111	1497
RTOR Reduction (vph)	0	45	0	8	0	0
Lane Group Flow (vph)	32	16	533	6	111	1497
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	18	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.3	21.5	27.7	27.7	7.1	43.6
Effective Green, g (s)	9.3	16.4	27.7	27.7	7.1	43.6
Actuated g/C Ratio	0.15	0.26	0.45	0.45	0.11	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	264	417	1576	704	202	2480
v/s Ratio Prot	c0.02	0.01	0.15		0.06	c0.42
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.04	0.34	0.01	0.55	0.60
Uniform Delay, d1	22.9	17.0	11.3	9.6	26.0	4.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.0	3.0	0.4
Delay (s)	23.1	17.1	11.4	9.6	29.1	5.2
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.2		11.3			6.9
Approach LOS	B		B			A

Intersection Summary

HCM 2000 Control Delay	8.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	62.2	Sum of lost time (s)	18.1
Intersection Capacity Utilization	49.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: PM PEAK







	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↕	↖	↗	↕
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (veh/h)	0	22	460	18	0	1391
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	29	529	21	0	1512
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1295	275			549	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1295	275			549	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	154	723			1016	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	29	352	197	756	756	
Volume Left	0	0	0	0	0	
Volume Right	29	0	21	0	0	
cSH	723	1700	1700	1700	1700	
Volume to Capacity	0.04	0.21	0.12	0.44	0.44	
Queue Length 95th (ft)	3	0	0	0	0	
Control Delay (s)	10.2	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.2	0.0		0.0		
Approach LOS	B					

Intersection Summary

Average Delay	0.1				
Intersection Capacity Utilization	41.8%		ICU Level of Service	A	
Analysis Period (min)	15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd





MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	29	25	453	18	22	1367
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	40	35	482	19	24	1502
RTOR Reduction (vph)	0	32	0	8	0	0
Lane Group Flow (vph)	40	3	482	11	24	1502
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	27.5	27.5	1.7	36.7
Effective Green, g (s)	2.6	4.3	27.5	27.5	1.7	36.7
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	148	2120	948	65	2829
v/s Ratio Prot	c0.02	0.00	0.14		0.01	c0.42
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.40	0.02	0.23	0.01	0.37	0.53
Uniform Delay, d1	20.9	18.9	4.3	3.7	21.6	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.6	0.1	0.1	0.0	3.5	0.2
Delay (s)	23.5	19.0	4.3	3.7	25.1	1.8
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.4		4.3			2.2
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	3.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	45.9	Sum of lost time (s)	14.1
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	10	14	83	7	0	175	13	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	10	15	108	9	0	197	15	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	10	15	117	211						
Volume Left (vph)	0	0	108	0						
Volume Right (vph)	0	15	0	15						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.13	0.19						
Capacity (veh/h)	872	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	6.9						
Approach Delay (s)	6.6		7.8	6.9						
Approach LOS	A		A	A						

Intersection Summary			
Delay	7.2		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑		↰	↑	↰	↰	↑	↰			
Volume (vph)	9	181	0	0	80	135	12	376	67	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1299	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	10	206	0	0	92	155	13	413	74	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	122	0	40	0	0	0	0
Lane Group Flow (vph)	10	206	0	0	92	33	13	413	34	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.5	8.5			8.5	8.5	18.5	18.5	18.5			
Effective Green, g (s)	8.5	8.5			8.5	8.5	18.5	18.5	18.5			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	273	391			391	333	810	1620	724			
v/s Ratio Prot		c0.11			0.05		0.01	c0.12				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.53			0.24	0.10	0.02	0.25	0.05			
Uniform Delay, d1	12.7	14.2			13.3	12.9	6.0	6.7	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.3			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.7	15.4			13.6	13.0	6.0	6.8	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.3			13.2		6.7			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.3			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.34										
Actuated Cycle Length (s)		40.4			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		40.4%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd









MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↰	↰	↑	↰	↰	↰
Volume (veh/h)	61	376	28	456	0	1517	15
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	244	1504	32	518	0	1686	17
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2017	851	1702		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2017	851	1702		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	0	91		0		
cM capacity (veh/h)	46	303	370		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	1748	32	259	259	1124	579	0
Volume Left	244	32	0	0	0	0	0
Volume Right	1504	0	0	0	0	17	0
cSH	171	370	1700	1700	1700	1700	1700
Volume to Capacity	10.22	0.09	0.15	0.15	0.66	0.34	0.00
Queue Length 95th (ft)	Err	7	0	0	0	0	0
Control Delay (s)	Err	15.6	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C					
Approach Delay (s)	Err	0.9			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			4369.4				
Intersection Capacity Utilization			75.7%		ICU Level of Service		
Analysis Period (min)			15				D









NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	0	66	1	1	0	71	343	12	1	1457	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3522		1770	3478	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3522		1770	3478	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	113	0	88	2	2	0	78	377	13	1	1619	211
RTOR Reduction (vph)	0	71	0	0	0	0	0	2	0	0	7	0
Lane Group Flow (vph)	113	17	0	2	2	0	78	388	0	1	1823	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	17.9	17.9		0.8	0.8		5.8	52.4		0.8	47.4	
Effective Green, g (s)	17.9	17.9		0.8	0.8		5.8	52.4		0.8	47.4	
Actuated g/C Ratio	0.20	0.20		0.01	0.01		0.06	0.58		0.01	0.52	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	348	312		15	16		113	2032		15	1815	
v/s Ratio Prot	c0.06	0.01		c0.00	0.00		c0.04	0.11		0.00	c0.52	
v/s Ratio Perm												
v/c Ratio	0.32	0.06		0.13	0.12		0.69	0.19		0.07	1.00	
Uniform Delay, d1	31.3	29.6		44.7	44.7		41.6	9.1		44.6	21.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.1		4.0	3.5		16.6	0.0		1.9	22.2	
Delay (s)	31.8	29.7		48.7	48.2		58.2	9.2		46.5	43.9	
Level of Service	C	C		D	D		E	A		D	D	
Approach Delay (s)		30.9			48.4			17.4			43.9	
Approach LOS		C			D			B			D	
Intersection Summary												
HCM 2000 Control Delay		37.9										
HCM 2000 Volume to Capacity ratio		0.80										
Actuated Cycle Length (s)		90.8										
Intersection Capacity Utilization		73.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	56	1411	59	0	378	34	13	39	4	23	25	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.99			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5055			5023		1770	1836			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.17	
Satd. Flow (perm)	1770	5055			5023		1313	1836			299	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	64	1603	67	0	402	36	19	56	6	27	29	24
RTOR Reduction (vph)	0	2	0	0	6	0	0	2	0	0	8	0
Lane Group Flow (vph)	64	1668	0	0	432	0	19	60	0	0	72	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1912			2039		255	357			49	
v/s Ratio Prot	c0.04	c0.33			c0.09			c0.03				
v/s Ratio Perm							0.01				c0.24	
v/c Ratio	0.33	0.87			0.21		0.07	0.17			1.46	
Uniform Delay, d1	73.8	51.9			34.7		59.3	60.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	5.8			0.2		0.1	0.2			291.2	
Delay (s)	74.8	57.7			35.0		59.4	60.6			366.2	
Level of Service	E	E			C		E	E			F	
Approach Delay (s)		58.4			35.0			60.3			366.2	
Approach LOS		E			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		64.6										
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑↑			↑↑	↑↑							↑
Volume (vph)	0	1441	0	489	415	37	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3496							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3496							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1619	0	520	441	39	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1619	0	520	480	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3177							609
v/s Ratio Prot		c0.32		c0.15	c0.14							
v/s Ratio Perm												0.00
v/c Ratio		0.84		0.27	0.15							0.00
Uniform Delay, d1		51.0		20.5	0.9							34.8
Progression Factor		0.22		1.00	1.00							1.00
Incremental Delay, d2		2.2		0.1	0.0							0.0
Delay (s)		13.6		20.6	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		13.6			11.1		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		12.8				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.54										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		51.0%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave




















MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑				↑↑
Volume (veh/h)	3	212	0	0	307	40	0	0	0	104	0	8
Sign Control		Free			Free			Stop				Stop
Grade		0%			0%			0%				0%
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	247	0	0	349	45	0	0	0	158	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	394			247			637	648	247	625	625	372
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	394			247			637	648	247	625	625	372
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	60	100	98
cM capacity (veh/h)	1164			1319			382	388	792	396	400	674
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	250	394	0	170								
Volume Left	3	0	0	158								
Volume Right	0	45	0	12								
cSH	1164	1319	1700	408								
Volume to Capacity	0.00	0.00	0.00	0.42								
Queue Length 95th (ft)	0	0	0	50								
Control Delay (s)	0.1	0.0	0.0	19.9								
Lane LOS	A		A	C								
Approach Delay (s)	0.1	0.0	0.0	19.9								
Approach LOS		A		C								
Intersection Summary												
Average Delay		4.2										
Intersection Capacity Utilization		31.5%			ICU Level of Service			A				
Analysis Period (min)		15										











NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	294	12	85	321	24	14	38	67	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	377	15	96	361	27	25	67	118	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	392	96	388	209	161						
Volume Left (vph)	9	0	96	0	25	61						
Volume Right (vph)	0	15	0	27	118	28						
Hadj (s)	0.53	0.01	0.53	-0.01	-0.28	0.00						
Departure Headway (s)	7.2	6.7	7.1	6.5	6.6	7.1						
Degree Utilization, x	0.02	0.73	0.19	0.70	0.38	0.32						
Capacity (veh/h)	471	519	485	529	478	436						
Control Delay (s)	9.1	24.2	10.5	22.5	13.7	13.3						
Approach Delay (s)	23.9		20.1		13.7	13.3						
Approach LOS	C		C		B	B						
Intersection Summary												
Delay			19.4									
Level of Service			C									
Intersection Capacity Utilization			41.4%	ICU Level of Service		A						
Analysis Period (min)			15									









NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	72	422	455	39	52	142
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	74	435	529	45	61	167
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	574				1135	287
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	574				1135	287
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	93				66	76
cM capacity (veh/h)	995				181	710
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	74	435	353	222	228	
Volume Left	74	0	0	0	61	
Volume Right	0	0	0	45	167	
cSH	995	1700	1700	1700	398	
Volume to Capacity	0.07	0.26	0.21	0.13	0.57	
Queue Length 95th (ft)	6	0	0	0	87	
Control Delay (s)	8.9	0.0	0.0	0.0	25.5	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		25.5	
Approach LOS					D	
Intersection Summary						
Average Delay			4.9			
Intersection Capacity Utilization			40.5%	ICU Level of Service		A
Analysis Period (min)			15			







NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	431	29	31	457	1900	54	19	1900	12	42	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3536			1754			1842	1583
Flt Permitted	0.47	1.00		0.45	1.00			0.78			0.90	1.00
Satd. Flow (perm)	869	3505		833	3536			1415			1673	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	513	35	34	502	3	66	23	27	16	55	39
RTOR Reduction (vph)	0	7	0	0	1	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	541	0	34	504	0	0	95	0	0	71	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Effective Green, g (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	414	1671		397	1686			309			365	345
v/s Ratio Prot		c0.15			0.14							
v/s Ratio Perm	0.04			0.04				c0.07			0.04	0.01
v/c Ratio	0.08	0.32		0.09	0.30			0.31			0.19	0.02
Uniform Delay, d1	4.3	4.9		4.3	4.8			9.9			9.6	9.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.6			0.3	0.0
Delay (s)	4.4	5.0		4.4	4.9			10.5			9.9	9.3
Level of Service	A	A		A	A			B			A	A
Approach Delay (s)		5.0			4.9			10.5			9.7	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		30.2			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		44.7%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												








NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	742	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	905	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			915		905	905
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			915		905	905
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	99
cM capacity (veh/h)			745		307	335
Direction, Lane #						
Volume Total	905	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	314			
Volume to Capacity	0.53	0.01	0.04			
Queue Length 95th (ft)	0	0	3			
Control Delay (s)	0.0	0.0	16.9			
Lane LOS			C			
Approach Delay (s)	0.0		16.9			
Approach LOS			C			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			49.1%		ICU Level of Service	A
Analysis Period (min)			15			








NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	41	1734	124	57	795	129	96	88	61	171	78	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5034		1770	4979			3342			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5034		1770	4979			3342			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	44	1845	132	58	803	130	105	97	67	192	88	28
RTOR Reduction (vph)	0	4	0	0	11	0	0	18	0	0	4	0
Lane Group Flow (vph)	44	1973	0	58	922	0	0	251	0	0	304	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2117		157	1983			649			658	
v/s Ratio Prot	0.02	c0.39		c0.03	0.19			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.22	0.93		0.37	0.46			0.39			0.46	
Uniform Delay, d1	72.9	49.7		77.2	40.0			63.2			64.2	
Progression Factor	1.00	1.00		1.24	0.73			1.00			1.00	
Incremental Delay, d2	0.6	8.2		1.4	0.8			0.4			0.5	
Delay (s)	73.5	57.9		97.3	29.9			63.5			64.7	
Level of Service	E	E		F	C			E			E	
Approach Delay (s)		58.2			33.8			63.5			64.7	
Approach LOS		E			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		52.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		117.5%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	2013	56	48	1195	54	21	10	34	62	12	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5065		1770	5052			1703		1770	1714	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.63	1.00	
Satd. Flow (perm)	1770	5065		1770	5052			1550		1169	1714	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2054	57	49	1232	56	25	12	41	73	14	16
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	14	0
Lane Group Flow (vph)	20	2110	0	49	1286	0	0	55	0	73	16	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Effective Green, g (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3565		157	3668			190		143	210	
v/s Ratio Prot	0.01	c0.42		c0.03	c0.25						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.59		0.31	0.35			0.29		0.51	0.08	
Uniform Delay, d1	79.3	13.5		76.8	9.1			71.8		73.9	69.9	
Progression Factor	1.44	0.10		1.56	0.30			1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.4		1.0	0.2			0.9		3.1	0.2	
Delay (s)	114.4	1.7		120.6	2.9			72.7		76.9	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		2.8			7.2			72.7			74.9	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		7.9			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		59.7%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	1821	196	155	1268	80	127	40	126	152	44	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5011		1770	5085	1583		1794	1583		3371	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5011		1770	5085	1583		1794	1583		3371	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.92	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	28	1937	209	160	1307	82	138	43	137	205	59	27
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	114	0	4	0
Lane Group Flow (vph)	28	2139	0	160	1307	45	0	181	23	0	287	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2218		192	2364	736		305	269		574	
v/s Ratio Prot	0.02	c0.43		c0.09	c0.26			c0.10			c0.09	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.18	0.96		0.83	0.55	0.06		0.59	0.09		0.50	
Uniform Delay, d1	75.9	48.8		78.6	34.7	26.5		68.9	62.8		67.7	
Progression Factor	1.03	0.94		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	10.8		25.5	0.9	0.2		8.2	0.6		3.1	
Delay (s)	78.7	56.4		104.1	35.6	26.7		77.1	63.5		70.8	
Level of Service	E	E		F	D	C		E	E		E	
Approach Delay (s)		56.7			42.2			71.3			70.8	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		53.5			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		103.5%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	2024	49	168	1564	16	38	8	80	23	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5067		1770	5077			1678			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.83	
Satd. Flow (perm)	1770	5067		1770	5077			1514			1505	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	10	2249	54	177	1646	17	45	9	94	28	12	12
RTOR Reduction (vph)	0	2	0	0	1	0	0	75	0	0	10	0
Lane Group Flow (vph)	10	2301	0	177	1662	0	0	73	0	0	42	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.4		11.2	50.8			17.2			17.2	
Effective Green, g (s)	0.8	40.4		11.2	50.8			17.2			17.2	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2422		234	3052			308			306	
v/s Ratio Prot	0.01	c0.45		c0.10	0.33							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.62	0.95		0.76	0.54			0.24			0.14	
Uniform Delay, d1	41.7	21.1		35.3	10.0			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	57.6	9.2		13.0	0.2			0.4			0.2	
Delay (s)	99.3	30.3		48.4	10.2			28.6			27.8	
Level of Service	F	C		D	B			C			C	
Approach Delay (s)		30.6			13.9			28.6			27.8	
Approach LOS		C			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		23.4			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		84.5			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		70.6%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	187	1965	26	325	1572	551	64	176	529	583	237	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		1770	5085	1583	1770	1631	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		1770	5085	1583	1770	1631	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	197	2068	27	349	1690	592	68	187	563	634	258	246
RTOR Reduction (vph)	0	1	0	0	0	87	0	26	272	0	2	131
Lane Group Flow (vph)	197	2094	0	349	1690	505	68	364	88	634	281	90
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.3	36.3		45.0	70.0	70.0	8.6	37.2	37.2	11.8	40.4	40.4
Effective Green, g (s)	11.3	36.3		45.0	70.0	70.0	8.6	37.2	37.2	11.8	40.4	40.4
Actuated g/C Ratio	0.07	0.24		0.30	0.46	0.46	0.06	0.24	0.24	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	254	1210		523	2338	728	100	398	367	266	463	399
v/s Ratio Prot	0.06	c0.41		c0.20	c0.33		0.04	c0.22		c0.18	c0.16	
v/s Ratio Perm					0.32			0.06				0.06
v/c Ratio	0.78	1.73		0.67	0.72	0.69	0.68	0.92	0.24	2.38	0.61	0.23
Uniform Delay, d1	69.2	57.9		47.0	33.3	32.6	70.4	56.0	46.2	70.2	48.9	43.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.8	332.3		3.2	1.1	2.9	17.3	25.2	0.3	634.0	2.2	0.3
Delay (s)	83.0	390.3		50.2	34.4	35.5	87.8	81.2	46.5	704.2	51.2	44.0
Level of Service	F	F		D	C	D	F	F	D	F	D	D
Approach Delay (s)		363.9			36.7			66.5			413.6	
Approach LOS		F			D			E			F	

Intersection Summary

HCM 2000 Control Delay	211.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	152.2	Sum of lost time (s)	21.9
Intersection Capacity Utilization	124.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2018 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Volume (vph)	0	501	847	0	437	1607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	563	901	0	480	1766
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	0	563	901	0	480	1762
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.16	c0.25		0.27	c0.63
v/s Ratio Perm						
v/c Ratio		0.32	1.05		0.72	0.99
Uniform Delay, d1		11.7	30.3		21.4	14.3
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	44.7		3.9	19.4
Delay (s)		11.8	75.0		25.4	33.7
Level of Service		B	E		C	C
Approach Delay (s)		11.8	75.0		31.9	
Approach LOS		B	E		C	

Intersection Summary

HCM 2000 Control Delay	39.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	84.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	932	0	0	523	249	432	2	106	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.25	0.25	0.25	
Adj. Flow (vph)	0	971	0	0	588	280	465	2	114	0	0	0
RTOR Reduction (vph)	0	0	0	0	99	0	0	36	0	0	0	0
Lane Group Flow (vph)	0	971	0	0	769	0	298	247	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.1			19.1		14.2	14.2				
Effective Green, g (s)		19.1			19.1		14.2	14.2				
Actuated g/C Ratio		0.46			0.46		0.34	0.34				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1636			1557		577	555				
v/s Ratio Prot		0.27			0.23							
v/s Ratio Perm							0.18	0.15				
v/c Ratio		0.59			0.49		0.52	0.44				
Uniform Delay, d1		8.2			7.7		10.8	10.5				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.6			0.2		0.8	0.6				
Delay (s)		8.8			8.0		11.6	11.1				
Level of Service		A			A		B	B				
Approach Delay (s)		8.8			8.0		11.3				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		9.1			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		41.3			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		47.7%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2018 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	3	36	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	3	52	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	73	52	52			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	73	52	52			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	926	1015	1554			
Direction, Lane #						
Volume Total	16	12	52			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	1015	1554	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.3	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.3	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.5				
Intersection Capacity Utilization		17.2%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St
















MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1405	34	0	3854	552	0	0	476	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1693	41	0	4189	600	0	0	595	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4809			1754			3162	6542	625	5093	6263	1736
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4809			1754			3162	6542	625	5093	6263	1736
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	84
cM capacity (veh/h)	20			347			3	0	1356	0	0	74
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	677	677	380	1676	1676	1438	595	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	600	595	12				
cSH	1700	1700	1700	1700	1700	1700	1356	74				
Volume to Capacity	0.40	0.40	0.22	0.99	0.99	0.85	0.44	0.16				
Queue Length 95th (ft)	0	0	0	0	0	0	57	14				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	62.9				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	62.9				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				101.9%			ICU Level of Service		G			
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	  			  		  	
Volume (veh/h)	1266	202	0	3754	0	232	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1439	230	0	4171	0	252	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1688		2984	634	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1688		2984	634	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	38	
cM capacity (veh/h)			368		11	408	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	575	575	517	1390	1390	1390	252
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	230	0	0	0	252
cSH	1700	1700	1700	1700	1700	1700	408
Volume to Capacity	0.34	0.34	0.30	0.82	0.82	0.82	0.62
Queue Length 95th (ft)	0	0	0	0	0	0	101
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.1
Lane LOS							D
Approach Delay (s)	0.0			0.0			27.1
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			87.4%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1617	1945	343	106	102	0	0	278	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4639		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4639		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1739	2091	369	143	138	0	0	320	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1043	3148	0	143	138	0	0	332	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3211		186	872			397	
v/s Ratio Prot				c0.69	0.68		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.99	0.98		0.77	0.16			0.84	
Uniform Delay, d1				28.5	27.9		82.5	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				25.3	11.7		17.2	0.1			14.2	
Delay (s)				53.9	39.6		99.7	56.1			96.5	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			43.1			78.3			96.5	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		48.9										
HCM 2000 Volume to Capacity ratio		0.94										
Actuated Cycle Length (s)		189.5										
Intersection Capacity Utilization		201.0%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	583	76	0	0	0	0	198	204	451	1500	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3257	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3257	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	634	83	0	0	0	0	230	222	490	1562	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	19	48	0	0	0
Lane Group Flow (vph)	0	635	54	0	0	0	0	293	92	490	1562	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.3	62.3	35.2	100.3	
Effective Green, g (s)		60.0	60.0					62.3	62.3	35.2	100.3	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.20	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1774	552					1180	522	702	2064	
v/s Ratio Prot								0.09		0.14	c0.44	
v/s Ratio Perm		0.12	0.03						0.06			
v/c Ratio		0.36	0.10					0.25	0.18	0.70	0.76	
Uniform Delay, d1		41.6	37.7					38.4	37.3	63.4	26.7	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.6	
Delay (s)		41.7	37.8					38.5	37.5	66.5	28.3	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.3			0.0			38.2			37.4	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.4										
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		171.9								14.4		
Intersection Capacity Utilization		201.0%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	215	6	1145	598	0	1174
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3316			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3316			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	250	7	1231	643	0	1236
RTOR Reduction (vph)	2	0	52	0	0	0
Lane Group Flow (vph)	255	0	1822	0	0	1236
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	16.8		43.2			43.2
Effective Green, g (s)	16.8		43.2			43.2
Actuated g/C Ratio	0.24		0.63			0.63
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	387		2073			2101
v/s Ratio Prot	c0.16		c0.55			0.37
v/s Ratio Perm						
v/c Ratio	0.66		0.88			0.59
Uniform Delay, d1	23.6		10.8			7.7
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	4.2		4.6			0.4
Delay (s)	27.8		15.4			8.1
Level of Service	C		B			A
Approach Delay (s)	27.8		15.4			8.1
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			13.6		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.86			
Actuated Cycle Length (s)			69.1		Sum of lost time (s)	12.1
Intersection Capacity Utilization			77.1%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↕	↕	↕	↔	↔	↔
Volume (vph)	46	2	9	7	0	5	19	1358	25	39	1315	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1708		1770	3530		1770	3525	
Frt Permitted	0.74	0.78	1.00		0.87		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1312	1384	1583		1526		1770	3530		1770	3525	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	53	2	10	14	0	10	23	1617	30	42	1429	39
RTOR Reduction (vph)	0	0	8	0	20	0	0	1	0	0	1	0
Lane Group Flow (vph)	28	27	2	0	4	0	23	1646	0	42	1467	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.3	15.3	15.3		15.3		2.7	64.0		4.0	65.3	
Effective Green, g (s)	15.3	15.3	15.3		15.3		2.7	64.0		4.0	65.3	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	206	217	248		239		49	2319		72	2363	
v/s Ratio Prot							0.01	c0.47		c0.02	0.42	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.14	0.12	0.01		0.02		0.47	0.71		0.58	0.62	
Uniform Delay, d1	35.4	35.3	34.6		34.7		46.6	10.7		45.9	9.1	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		6.9	1.0		11.5	0.5	
Delay (s)	35.7	35.6	34.6		34.7		53.6	11.8		57.4	9.6	
Level of Service	D	D	C		C		D	B		E	A	
Approach Delay (s)		35.5			34.7			12.3			10.9	
Approach LOS		D			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.3		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.60									
Actuated Cycle Length (s)			97.4		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			57.9%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	22	0	1303	7	424	882	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	33	0	1432	8	433	900	0
RTOR Reduction (vph)	0	0	0	0	30	0	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1432	4	433	900	0
Turn Type	Split			Split	NA		NA	Perm		Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.40		c0.24	0.25	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.86	0.01	0.71	0.30	
Uniform Delay, d1					60.6			34.3	20.4	41.2	2.4	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			4.0	0.0	3.8	0.3	
Delay (s)					60.6			16.6	20.4	45.0	2.6	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			16.6			16.4	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.0										
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		145.0										
Intersection Capacity Utilization		79.2%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	31	50	14	1	64	128	136	1142	5	289	323	309
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3232	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3232	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	48	77	22	1	73	145	151	1269	6	332	371	355
RTOR Reduction (vph)	0	0	20	0	0	122	0	0	3	0	119	0
Lane Group Flow (vph)	48	77	2	0	74	23	151	1269	3	332	607	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1060	
v/s Ratio Prot	0.03	c0.04			c0.04		0.09	c0.36		c0.19	0.19	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.39	0.60	0.02		0.25	0.10	0.28	0.81	0.00	0.97	0.57	
Uniform Delay, d1	64.6	65.6	62.9		53.5	52.1	37.7	34.8	22.3	58.1	40.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.92	
Incremental Delay, d2	2.1	7.7	0.1		0.4	0.2	0.3	4.5	0.0	40.9	2.2	
Delay (s)	66.7	73.3	63.0		53.9	52.3	38.0	39.3	22.3	96.6	39.3	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		69.6			52.8			39.0			57.3	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		48.4										
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		145.0										
Intersection Capacity Utilization		85.2%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑	↘	↙	↓
Volume (veh/h)	31	197	4	88	324	8
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	36	232	5	110	352	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	773	60			115	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	773	60			115	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	87	77			76	
cM capacity (veh/h)	280	1005			1474	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	268	115	361			
Volume Left	36	0	352			
Volume Right	232	110	0			
cSH	1164	1700	1474			
Volume to Capacity	0.23	0.07	0.24			
Queue Length 95th (ft)	22	0	23			
Control Delay (s)	11.0	0.0	8.1			
Lane LOS	B		A			
Approach Delay (s)	11.0	0.0	8.1			
Approach LOS	B					
Intersection Summary						
Average Delay		7.9				
Intersection Capacity Utilization		35.0%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑	↘	↙	↓
Volume (vph)	34	3	1295	407	0	298
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1742		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1742		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	45	4	1363	428	0	466
RTOR Reduction (vph)	4	0	0	120	0	0
Lane Group Flow (vph)	45	0	1363	308	0	466
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	2.0		30.7	30.7		30.7
Effective Green, g (s)	2.0		30.7	30.7		30.7
Actuated g/C Ratio	0.05		0.72	0.72		0.72
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	81		2550	1095		2550
v/s Ratio Prot	c0.03		c0.39			0.13
v/s Ratio Perm				0.20		
v/c Ratio	0.56		0.53	0.28		0.18
Uniform Delay, d1	19.9		2.7	2.1		1.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	8.1		0.2	0.1		0.0
Delay (s)	28.0		2.9	2.2		1.9
Level of Service	C		A	A		A
Approach Delay (s)	28.0		2.8			1.9
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.1		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.54				
Actuated Cycle Length (s)		42.6		Sum of lost time (s)		9.9
Intersection Capacity Utilization		48.2%		ICU Level of Service		A
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↙
Volume (veh/h)	0	15	2112	5	5	336
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2271	5	7	494
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2535	1138			2276	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2535	1138			2276	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	87			97	
cM capacity (veh/h)	22	195			220	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1514	762	7	247	247
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	195	1700	1700	220	1700	1700
Volume to Capacity	0.13	0.89	0.45	0.03	0.15	0.15
Queue Length 95th (ft)	11	0	0	3	0	0
Control Delay (s)	26.2	0.0	0.0	21.9	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	26.2	0.0		0.3		
Approach LOS	D					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		68.5%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↙
Volume (vph)	17	85	2027	12	37	298
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	105	2180	13	54	432
RTOR Reduction (vph)	0	4	0	1	0	0
Lane Group Flow (vph)	21	101	2180	12	54	432
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.7	25.8	68.3	68.3	5.0	82.1
Effective Green, g (s)	15.7	20.7	68.3	68.3	5.0	82.1
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	259	305	2256	1009	82	2712
v/s Ratio Prot	0.01	c0.06	c0.62		c0.03	0.12
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.33	0.97	0.01	0.66	0.16
Uniform Delay, d1	39.5	37.2	18.3	7.1	50.2	3.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	12.0	0.0	17.5	0.0
Delay (s)	39.6	37.9	30.3	7.1	67.7	3.4
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.2		30.1			10.5
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay		27.1		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio		0.84				
Actuated Cycle Length (s)		107.1		Sum of lost time (s)		18.1
Intersection Capacity Utilization		72.1%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↑↑			↑↑
Volume (veh/h)	0	32	2005	25	0	314
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	52	2111	26	0	424
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2336	1068			2137	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2336	1068			2137	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	76			100	
cM capacity (veh/h)	31	217			250	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	52	1407	730	212	212	
Volume Left	0	0	0	0	0	
Volume Right	52	0	26	0	0	
cSH	217	1700	1700	1700	1700	
Volume to Capacity	0.24	0.83	0.43	0.12	0.12	
Queue Length 95th (ft)	22	0	0	0	0	
Control Delay (s)	26.6	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	26.6	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		66.2%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	9	6	2030	32	15	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	15	10	2115	33	19	358
RTOR Reduction (vph)	0	5	0	7	0	0
Lane Group Flow (vph)	15	5	2115	26	19	358
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.8	59.8	2.0	69.3
Effective Green, g (s)	1.4	3.4	59.8	59.8	2.0	69.3
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2737	1224	45	3172
v/s Ratio Prot	c0.01	0.00	c0.60		c0.01	0.10
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.47	0.08	0.77	0.02	0.42	0.11
Uniform Delay, d1	37.6	35.4	4.9	2.0	37.1	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.5	0.5	1.4	0.0	6.3	0.0
Delay (s)	48.0	35.9	6.3	2.0	43.4	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	43.2		6.3			2.6
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		6.1		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.75				
Actuated Cycle Length (s)		77.3		Sum of lost time (s)		14.1
Intersection Capacity Utilization		68.9%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	44	1	0	43	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	81	2	0	68	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	83	68	3					
Volume Left (vph)	0	0	81	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	834	1121	816	842	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.4						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.2%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: AM PEAK















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	36	0	0	32	223	3	1837	50	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1357	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	48	0	0	44	310	3	1954	53	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	22	0	0	0	0
Lane Group Flow (vph)	3	48	0	0	44	254	3	1954	31	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.4	16.4			16.4	16.4	47.7	43.6	43.6			
Effective Green, g (s)	16.4	16.4			16.4	16.4	47.7	43.6	43.6			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	303	416			416	353	1150	2102	940			
v/s Ratio Prot		0.03			0.02		0.00	c0.55				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.12			0.11	0.72	0.00	0.93	0.03			
Uniform Delay, d1	22.2	22.7			22.7	26.4	4.5	13.5	6.2			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	6.9	0.0	7.9	0.0			
Delay (s)	22.2	22.8			22.8	33.3	4.5	21.4	6.2			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.8			32.0			21.0			0.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay		22.6						HCM 2000 Level of Service			C	
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		73.4				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		84.2%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

























							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	9	17	548	1630	0	177	83
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	36	68	571	1698	0	224	105
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None		None		
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2267	165	329		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2267	165	329		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	92	53		0		
cM capacity (veh/h)	18	851	1227		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	104	571	849	849	149	180	0
Volume Left	36	571	0	0	0	0	0
Volume Right	68	0	0	0	0	105	0
cSH	51	1227	1700	1700	1700	1700	1700
Volume to Capacity	2.04	0.47	0.50	0.50	0.09	0.11	0.00
Queue Length 95th (ft)	260	63	0	0	0	0	0
Control Delay (s)	657.7	10.5	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B					
Approach Delay (s)	657.7	2.6			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay		27.5					
Intersection Capacity Utilization		61.7%		ICU Level of Service		B	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	389	0	38	2	1	2	25	2058	0	0	149	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3421	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3421	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	442	0	43	6	3	6	26	2166	0	0	216	62
RTOR Reduction (vph)	0	30	0	0	6	0	0	0	0	0	23	0
Lane Group Flow (vph)	442	13	0	6	3	0	26	2166	0	0	255	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	25.5	25.5		1.7	1.7		1.9	43.5			37.4	
Effective Green, g (s)	25.5	25.5		1.7	1.7		1.9	43.5			37.4	
Actuated g/C Ratio	0.30	0.30		0.02	0.02		0.02	0.51			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	528	472		35	33		39	1802			1498	
v/s Ratio Prot	c0.25	0.01		c0.00	0.00		0.01	c0.61			0.07	
v/s Ratio Perm												
v/c Ratio	0.84	0.03		0.17	0.09		0.67	1.20			0.17	
Uniform Delay, d1	28.0	21.2		41.2	41.1		41.4	21.0			14.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	11.1	0.0		2.3	1.2		35.5	96.5			0.1	
Delay (s)	39.1	21.2		43.5	42.3		77.0	117.4			14.6	
Level of Service	D	C		D	D		E	F			B	
Approach Delay (s)		37.5			42.8			117.0			14.6	
Approach LOS		D			D			F			B	
Intersection Summary												
HCM 2000 Control Delay		94.0						HCM 2000 Level of Service		F		
HCM 2000 Volume to Capacity ratio		1.11										
Actuated Cycle Length (s)		85.4					Sum of lost time (s)	18.9				
Intersection Capacity Utilization		93.5%					ICU Level of Service		F			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	7	196	14	0	1915	17	39	22	1	19	40	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5034			5078		1770	1852			1732	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.19	
Satd. Flow (perm)	1770	5034			5078		1240	1852			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	
Adj. Flow (vph)	8	220	16	0	2104	19	46	26	1	25	52	66
RTOR Reduction (vph)	0	4	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	8	232	0	0	2122	0	46	26	0	0	126	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1904			2062		241	360			53	
v/s Ratio Prot	c0.00	0.05			c0.42			0.01				
v/s Ratio Perm							c0.04				c0.39	
v/c Ratio	0.04	0.12			1.03		0.19	0.07			2.37	
Uniform Delay, d1	71.4	36.5			53.5		60.7	59.2			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			26.1		0.4	0.1			669.6	
Delay (s)	71.5	36.6			79.6		61.0	59.3			744.6	
Level of Service	E	D			E		E	E			F	
Approach Delay (s)		37.7			79.6			60.4			744.6	
Approach LOS		D			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		111.9			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.97										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		75.8%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	214	0	388	1923	8	0	0	0	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3537							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3537							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	261	0	413	2046	9	0	0	0	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	261	0	413	2055	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3214							609
v/s Ratio Prot		0.05		0.12	c0.58							
v/s Ratio Perm												0.00
v/c Ratio		0.14		0.24	0.64							0.01
Uniform Delay, d1		36.7		25.6	1.8							34.9
Progression Factor		0.41		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.1	0.4							0.0
Delay (s)		15.3		25.7	2.2							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.3			6.1		0.0				35.0	
Approach LOS		B			A		A				C	
Intersection Summary												
HCM 2000 Control Delay		7.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		75.1%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	9	235	0	0	128	104	0	0	0	47	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	11	280	0	0	138	112	0	0	0	52	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	249			280			499	551	280	495	495	194
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	249			280			499	551	280	495	495	194
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1316			1283			476	439	759	482	472	848
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	290	249	0	56								
Volume Left	11	0	0	52								
Volume Right	0	112	0	4								
cSH	1316	1283	1700	499								
Volume to Capacity	0.01	0.00	0.00	0.11								
Queue Length 95th (ft)	1	0	0	9								
Control Delay (s)	0.4	0.0	0.0	13.1								
Lane LOS	A			B								
Approach Delay (s)	0.4	0.0	0.0	13.1								
Approach LOS				B								
Intersection Summary												
Average Delay				1.4								
Intersection Capacity Utilization				29.7%								A
Analysis Period (min)				15								

NBC Coastal Campus

22: 3rd St & Palm Ave











MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	273	4	26	209	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	317	5	28	225	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	322	28	251	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.1	5.5	5.1	5.7						
Degree Utilization, x	0.01	0.49	0.05	0.38	0.26	0.07						
Capacity (veh/h)	578	635	566	631	636	548						
Control Delay (s)	7.9	12.5	8.2	10.6	9.9	9.1						
Approach Delay (s)	12.3		10.4		9.9	9.1						
Approach LOS	B		B		A	A						
Intersection Summary												
Delay				11.0								
Level of Service				B								
Intersection Capacity Utilization				37.5%								A
Analysis Period (min)				15								


















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	227	425	332	152	17	69
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	287	538	405	185	24	97
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	590				1610	295
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	590				1610	295
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	71				64	86
cM capacity (veh/h)	981				67	701
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	287	538	270	320	121	
Volume Left	287	0	0	0	24	
Volume Right	0	0	0	185	97	
cSH	981	1700	1700	1700	245	
Volume to Capacity	0.29	0.32	0.16	0.19	0.49	
Queue Length 95th (ft)	31	0	0	0	63	
Control Delay (s)	10.2	0.0	0.0	0.0	33.2	
Lane LOS	B				D	
Approach Delay (s)	3.5		0.0		33.2	
Approach LOS					D	
Intersection Summary						
Average Delay			4.5			
Intersection Capacity Utilization			41.8%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	418	15	26	333	0	65	37	81	1	21	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1721			1858	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.88			0.98	1.00
Satd. Flow (perm)	933	3521		822	3539			1538			1830	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	543	19	34	432	0	98	56	123	2	36	47
RTOR Reduction (vph)	0	3	0	0	0	0	0	33	0	0	0	30
Lane Group Flow (vph)	21	559	0	34	432	0	0	244	0	0	38	17
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.2	13.2		13.2	13.2			13.2			13.2	13.2
Effective Green, g (s)	13.2	13.2		13.2	13.2			13.2			13.2	13.2
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	345	1305		304	1312			570			678	586
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.16			0.02	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.43			0.06	0.03
Uniform Delay, d1	7.2	8.4		7.4	8.0			8.4			7.2	7.1
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.1			0.5			0.0	0.0
Delay (s)	7.3	8.6		7.5	8.2			8.9			7.2	7.1
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.6			8.1			8.9			7.2	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.4			HCM 2000 Level of Service			A			
HCM 2000 Volume to Capacity ratio			0.43									
Actuated Cycle Length (s)			35.6			Sum of lost time (s)			9.2			
Intersection Capacity Utilization			46.4%			ICU Level of Service			A			
Analysis Period (min)			15									
c. Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	503	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	547	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			551		547	547
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			551		547	547
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1019		498	537
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	547	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	525			
Volume to Capacity	0.32	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.0			
Lane LOS			B			
Approach Delay (s)	0.0		12.0			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.5%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: AM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑↑↑	↑	↑	↑	↑	↑	↑	↑
Volume (vph)	21	661	35	23	2068	43	163	37	1900	1900	89	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6				4.6
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95				0.95
Frt	1.00	0.99		1.00	1.00			0.97				0.98
Flt Protected	0.95	1.00		0.95	1.00			0.97				0.97
Satd. Flow (prot)	1770	5047		1770	5070			3325				3364
Flt Permitted	0.95	1.00		0.95	1.00			0.97				0.97
Satd. Flow (perm)	1770	5047		1770	5070			3325				3364
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	787	42	25	2273	47	196	45	60	109	55	29
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	826	0	25	2319	0	0	289	0	0	185	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0				35.0
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0				35.0
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19				0.19
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6				4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0				3.0
Lane Grp Cap (vph)	147	2234		118	2160			646				654
v/s Ratio Prot	0.01	c0.16		c0.01	c0.46			c0.09				c0.05
v/s Ratio Perm												
v/c Ratio	0.17	0.37		0.21	1.07			0.45				0.28
Uniform Delay, d1	76.7	33.4		79.5	51.6			64.0				61.8
Progression Factor	1.00	1.00		1.20	0.85			1.00				1.00
Incremental Delay, d2	0.6	0.5		0.7	40.5			0.5				0.2
Delay (s)	77.3	33.9		96.0	84.5			64.5				62.0
Level of Service	E	C		F	F			E				E
Approach Delay (s)		35.2			84.6			64.5				62.0
Approach LOS		D			F			E				E
Intersection Summary												
HCM 2000 Control Delay		70.4			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		78.0%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: AM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	891	35	20	2241	12	18	4	30	54	10	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5081			1688		1770	1695	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5057		1770	5081			1542		1237	1695	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	1001	39	23	2547	14	25	5	41	77	14	21
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	18	0
Lane Group Flow (vph)	2	1038	0	23	2561	0	0	44	0	77	18	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			257		206	282	
v/s Ratio Prot	0.00	0.21		c0.01	c0.50						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.30		0.19	0.69			0.17		0.37	0.06	
Uniform Delay, d1	86.1	11.1		79.4	13.1			64.3		66.7	63.2	
Progression Factor	1.68	0.27		1.42	0.34			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.4	0.5			0.3		1.1	0.1	
Delay (s)	145.1	3.2		113.2	5.0			64.6		67.8	63.2	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.5			6.0			64.6			66.4	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.1			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		77.0%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

28: 13th St & SR-75 (Palm Ave)









MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	961	63	95	2096	51	145	19	90	167	36	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5038		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5038		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1080	71	114	2525	61	163	21	101	223	48	20
RTOR Reduction (vph)	0	4	0	0	0	29	0	0	84	0	3	0
Lane Group Flow (vph)	3	1147	0	114	2525	32	0	184	17	0	288	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.23		c0.06	c0.50			c0.10			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.51		0.58	0.93	0.04		0.60	0.06		0.50	
Uniform Delay, d1	86.2	36.2		76.0	39.2	20.2		68.8	62.4		67.4	
Progression Factor	1.21	0.63		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.8		4.3	7.5	0.1		3.1	0.1		0.7	
Delay (s)	105.5	23.5		80.4	46.8	20.2		71.9	62.5		68.1	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.7			47.6			68.6			68.1	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		44.1			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		94.4%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	14	1226	25	43	2224	12	16	6	48	38	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1671			1723	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.78	
Satd. Flow (perm)	1770	5070		1770	5081			1561			1379	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	15	1333	27	50	2586	14	19	7	57	50	3	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	45	0	0	22	0
Lane Group Flow (vph)	15	1359	0	50	2600	0	0	38	0	0	59	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Effective Green, g (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2666		72	2829			331			292	
v/s Ratio Prot	0.01	0.27		c0.03	c0.51							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.88	0.51		0.69	0.92			0.12			0.20	
Uniform Delay, d1	35.2	10.9		33.7	14.3			22.6			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	159.7	0.2		25.2	5.4			0.2			0.3	
Delay (s)	194.9	11.1		58.8	19.7			22.8			23.4	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		13.1			20.4			22.8			23.4	
Approach LOS		B			C			C			C	
Intersection Summary												
HCM 2000 Control Delay		18.1			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		71.1			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		60.1%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	91	1239	29	244	2163	215	75	72	770	234	92	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.90	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	106	1441	34	260	2301	229	83	80	856	279	110	90
RTOR Reduction (vph)	0	2	0	0	0	67	0	155	183	0	3	59
Lane Group Flow (vph)	106	1473	0	260	2301	162	83	319	279	279	116	22
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.3	29.8	29.8	10.4	31.9	31.9
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.3	29.8	29.8	10.4	31.9	31.9
Actuated g/C Ratio	0.05	0.31		0.16	0.41	0.41	0.07	0.26	0.26	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	178	1548		275	2079	647	127	400	389	309	484	416
v/s Ratio Prot	0.03	0.29		c0.15	c0.45		0.05	c0.21		c0.08	0.07	
v/s Ratio Perm						0.10			0.19			0.01
v/c Ratio	0.60	0.95		0.95	1.11	0.25	0.65	0.80	0.72	0.90	0.24	0.05
Uniform Delay, d1	53.4	39.2		48.2	34.0	22.4	52.0	39.9	38.9	51.9	32.3	30.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.3	13.1		39.4	55.8	0.2	11.5	10.6	6.2	27.8	0.3	0.1
Delay (s)	58.7	52.3		87.5	89.8	22.6	63.5	50.5	45.1	79.7	32.5	30.6
Level of Service	E	D		F	F	C	E	D	D	E	C	C
Approach Delay (s)		52.7			84.1			49.1			59.7	
Approach LOS		D			F			D			E	
Intersection Summary												
HCM 2000 Control Delay		67.6			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		1.00										
Actuated Cycle Length (s)		115.2			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		90.5%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↔	↔
Volume (vph)	0	285	1189	0	155	1435
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	320	1278	0	172	1594
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	0	320	1278	0	172	1590
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	18
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.36		0.10	c0.57
v/s Ratio Perm						
v/c Ratio		0.12	1.10		0.83	1.04
Uniform Delay, d1		2.5	26.8		34.5	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	56.3		23.7	33.4
Delay (s)		2.5	83.1		58.2	51.4
Level of Service		A	F		E	D
Approach Delay (s)		2.5	83.1		52.1	
Approach LOS		A	F		D	
Intersection Summary						
HCM 2000 Control Delay			59.2		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			1.13			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			72.7%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↔	↔				
Volume (vph)	0	441	0	0	426	523	865	1	143	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.96				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3247		1681	1635				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3247		1681	1635				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	507	0	0	463	568	940	1	155	0	0	0
RTOR Reduction (vph)	0	0	0	0	361	0	0	26	0	0	0	0
Lane Group Flow (vph)	0	507	0	0	670	0	555	515	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.8			16.8		21.2	21.2				
Effective Green, g (s)		16.8			16.8		21.2	21.2				
Actuated g/C Ratio		0.37			0.37		0.46	0.46				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1292			1185		774	753				
v/s Ratio Prot		0.14			c0.21							
v/s Ratio Perm							c0.33	0.31				
v/c Ratio		0.39			0.57		0.72	0.68				
Uniform Delay, d1		10.8			11.7		10.0	9.8				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.6		3.2	2.6				
Delay (s)		11.0			12.3		13.2	12.3				
Level of Service		B			B		B	B				
Approach Delay (s)		11.0			12.3		12.8				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					12.2		HCM 2000 Level of Service			B		
HCM 2000 Volume to Capacity ratio					0.65							
Actuated Cycle Length (s)					46.0		Sum of lost time (s)			8.0		
Intersection Capacity Utilization					70.3%		ICU Level of Service			C		
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰			↱	↰	↱
Volume (veh/h)	0	3	4	65	13	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	90	32	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	133	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	133	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	858	1042	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	96	32			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	1042	1581	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			16.7%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St







MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↱			↰↱				↰			↱
Volume (veh/h)	0	4105	17	0	1814	244	0	0	908	0	0	55
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4276	18	0	1870	252	0	0	1009	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2142			4314			5032	6447	1474	3461	6330	789
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2142			4314			5032	6447	1474	3461	6330	789
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	245			32			0	0	1841	1	0	322
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1710	1710	873	748	748	626	1009	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	252	1009	83				
cSH	1700	1700	1700	1700	1700	1700	1841	322				
Volume to Capacity	1.01	1.01	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	88	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3	20.0				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.3	20.0				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				144.5%	ICU Level of Service		H					
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↑	
Volume (veh/h)	3870	130	0	1851	0	200	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3990	134	0	1928	0	244	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4144		4739	1437	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4144		4739	1437	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			38		1	119	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1596	1596	932	643	643	643	244
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	244
cSH	1700	1700	1700	1700	1700	1700	119
Volume to Capacity	0.94	0.94	0.55	0.38	0.38	0.38	2.06
Queue Length 95th (ft)	0	0	0	0	0	0	505
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	564.2
Lane LOS							F
Approach Delay (s)	0.0			0.0			564.2
Approach LOS							F
Intersection Summary							
Average Delay			21.9				
Intersection Capacity Utilization			98.7%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↑	↑↑↑		↑	↑↑			↑↑	↑
Volume (vph)	0	0	0	978	634	109	98	252			861	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3528	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3528	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1029	667	115	101	260	0	0	888	16
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	514	1285	0	101	260	0	0	902	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1432		98	1989			1568	
v/s Ratio Prot				c0.34	0.28		c0.06	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.09	0.97dl		1.03	0.13			0.58	
Uniform Delay, d1				31.1	29.7		42.5	9.3			18.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				69.3	7.8		99.4	0.0			0.5	
Delay (s)				100.4	37.5		141.9	9.3			19.2	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			55.4			46.4			19.2	
Approach LOS		A			E			D			B	
Intersection Summary												
HCM 2000 Control Delay			43.7		HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio			0.80									
Actuated Cycle Length (s)			90.0		Sum of lost time (s)			17.2				
Intersection Capacity Utilization		135.7%			ICU Level of Service			H				
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔↔	
Volume (vph)	7	2110	109	0	0	0	0	350	490	761	1102	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3112	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3112	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2319	120	0	0	0	0	407	570	793	1148	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2327	91	0	0	0	0	663	279	793	1148	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					944	409	865	2022	
v/s Ratio Prot		c0.46						c0.21		c0.23	0.32	
v/s Ratio Perm			0.06						0.21			
v/c Ratio		1.26	0.16					0.70	0.68	0.92	0.57	
Uniform Delay, d1		55.8	37.8					54.0	53.5	63.7	23.8	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		123.3	0.1					2.4	4.6	14.2	0.4	
Delay (s)		179.1	37.9					56.4	58.2	77.9	24.2	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		172.2			0.0			56.9			46.1	
Approach LOS		F			A			E			D	
Intersection Summary												
HCM 2000 Control Delay		105.6									F	
HCM 2000 Volume to Capacity ratio		0.98										
Actuated Cycle Length (s)		175.0							14.4			
Intersection Capacity Utilization		135.7%							H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave













MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔
Volume (vph)	172	12	939	684	0	1225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3269			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3269			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	221	15	1055	769	0	1317
RTOR Reduction (vph)	2	0	63	0	0	0
Lane Group Flow (vph)	234	0	1761	0	0	1317
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	296		2470			2540
v/s Ratio Prot	c0.15		c0.54			0.39
v/s Ratio Perm						
v/c Ratio	0.79		0.71			0.52
Uniform Delay, d1	62.0		10.4			7.9
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	13.5		1.8			0.8
Delay (s)	75.5		12.1			8.6
Level of Service	E		B			A
Approach Delay (s)	75.5		12.1			8.6
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay		15.2				B
HCM 2000 Volume to Capacity ratio		0.74				
Actuated Cycle Length (s)		160.0				12.1
Intersection Capacity Utilization		81.3%				D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2019 Alt 1/2/3













Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	142	9	28	25	9	24	22	1541	49	66	1448	151
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1695	1583		1721		1770	3523		1770	3489	
Flt Permitted	0.69	0.69	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1219	1216	1583		1461		1770	3523		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	182	12	36	39	14	38	24	1657	53	72	1574	164
RTOR Reduction (vph)	0	0	30	0	23	0	0	1	0	0	2	0
Lane Group Flow (vph)	96	98	6	0	68	0	24	1709	0	72	1736	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4		4							
Actuated Green, G (s)	19.0	19.0	19.0		19.0		3.1	72.0		8.0	76.9	
Effective Green, g (s)	19.0	19.0	19.0		19.0		3.1	72.0		8.0	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	203	203	264		243		48	2228		124	2357	
v/s Ratio Prot							0.01	c0.49		c0.04	0.50	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.47	0.48	0.02		0.28		0.50	0.77		0.58	0.74	
Uniform Delay, d1	42.9	42.9	39.6		41.4		54.6	14.9		51.3	11.9	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	1.8	0.0		0.6		8.0	1.6		6.8	1.2	
Delay (s)	44.6	44.8	39.7		42.0		62.6	16.6		58.0	13.1	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.9			42.0			17.2			14.9	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		18.3			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		113.8			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		74.8%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	7	0	144	0	1348	0	32	1586	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1619			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1619			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	10	0	209	0	1434	0	34	1705	0
RTOR Reduction (vph)	0	0	0	0	170	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	49	0	0	1434	0	34	1705	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			45.3		1.7	51.2	
Effective Green, g (s)					14.1			45.3		1.7	51.2	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					302			2126		39	2403	
v/s Ratio Prot					c0.03			0.41		0.02	c0.48	
v/s Ratio Perm												
v/c Ratio					0.16			0.67		0.87	0.71	
Uniform Delay, d1					25.7			10.1		36.7	7.5	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			0.9		94.3	1.0	
Delay (s)					26.0			11.0		131.1	8.5	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			26.0			11.0			10.9	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					11.9			HCM 2000 Level of Service			B	
HCM 2000 Volume to Capacity ratio					0.68							
Actuated Cycle Length (s)					75.4			Sum of lost time (s)			18.9	
Intersection Capacity Utilization					61.6%			ICU Level of Service			B	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: PM PEAK







Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	290	50	118	6	69	419	27	654	2	138	1410	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1515		1855	1510	1770	3539	1347	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1515		1855	1510	1770	3539	1347	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	382	66	155	7	75	455	30	719	2	147	1500	69
RTOR Reduction (vph)	0	0	125	0	0	209	0	0	1	0	2	0
Lane Group Flow (vph)	382	66	30	0	82	246	30	719	1	147	1567	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.7	27.7	27.7		25.5	25.5	2.9	55.8	55.8	17.0	69.9	
Effective Green, g (s)	27.7	27.7	27.7		25.5	25.5	2.9	55.8	55.8	17.0	69.9	
Actuated g/C Ratio	0.19	0.19	0.19		0.18	0.18	0.02	0.38	0.38	0.12	0.48	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	337	354	288		325	264	35	1358	516	206	1688	
v/s Ratio Prot	c0.22	0.04			0.04		0.02	0.20		c0.08	c0.45	
v/s Ratio Perm			0.02			c0.16		0.00				
v/c Ratio	1.13	0.19	0.10		0.25	0.93	0.86	0.53	0.00	0.71	0.93	
Uniform Delay, d1	58.9	49.4	48.6		51.7	59.1	71.0	34.6	27.6	61.9	35.4	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	90.3	0.3	0.2		0.4	37.0	94.8	1.5	0.0	11.1	10.4	
Delay (s)	149.1	49.6	48.7		52.1	96.1	165.8	36.1	27.6	73.0	45.8	
Level of Service	F	D	D		D	F	F	D	C	E	D	
Approach Delay (s)		112.4			89.4			41.3			48.2	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay		63.6								E		
HCM 2000 Volume to Capacity ratio		0.98										
Actuated Cycle Length (s)		145.4				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		80.4%				ICU Level of Service		D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	314	492	3	45	178	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	349	547	4	63	202	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	444	36			68	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	444	36			68	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	30	47			87	
cM capacity (veh/h)	496	1037			1534	
Direction, Lane #						
Volume Total	896	68	206			
Volume Left	349	0	202			
Volume Right	547	63	0			
cSH	1001	1700	1534			
Volume to Capacity	0.89	0.04	0.13			
Queue Length 95th (ft)	322	0	11			
Control Delay (s)	29.8	0.0	7.6			
Lane LOS	D		A			
Approach Delay (s)	29.8	0.0	7.6			
Approach LOS	D					
Intersection Summary						
Average Delay		24.1				
Intersection Capacity Utilization		40.7%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	318	6	690	48	0	1537
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	403	8	767	53	0	1727
RTOR Reduction (vph)	1	0	0	30	0	0
Lane Group Flow (vph)	410	0	767	23	0	1727
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.23		0.22			c0.49
v/s Ratio Perm				0.02		
v/c Ratio	0.49		0.50	0.04		1.14
Uniform Delay, d1	18.8		21.8	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.3	0.0		69.9
Delay (s)	19.2		22.1	17.4		99.9
Level of Service	B		C	B		F
Approach Delay (s)	19.2		21.8			99.9
Approach LOS	B		C			F

Intersection Summary

HCM 2000 Control Delay	67.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	9.9
Intersection Capacity Utilization	92.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (veh/h)	4	6	547	3	15	1475
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	636	3	16	1621
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1481	320			640	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1481	320			640	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	98			98	
cM capacity (veh/h)	114	676			941	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	20	424	216	16	810	810
Volume Left	8	0	0	16	0	0
Volume Right	12	0	3	0	0	0
cSH	228	1700	1700	941	1700	1700
Volume to Capacity	0.09	0.25	0.13	0.02	0.48	0.48
Queue Length 95th (ft)	7	0	0	1	0	0
Control Delay (s)	22.3	0.0	0.0	8.9	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	22.3	0.0		0.1		
Approach LOS	C					

Intersection Summary







Average Delay	0.3		
Intersection Capacity Utilization	50.8%	ICU Level of Service	A
Analysis Period (min)	15		

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: PM PEAK





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	30	56	493	12	101	1378
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	33	61	560	14	111	1514
RTOR Reduction (vph)	0	45	0	8	0	0
Lane Group Flow (vph)	33	16	560	6	111	1514
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.3	21.5	28.0	28.0	7.1	43.9
Effective Green, g (s)	9.3	16.4	28.0	28.0	7.1	43.9
Actuated g/C Ratio	0.15	0.26	0.45	0.45	0.11	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	263	415	1585	709	201	2485
v/s Ratio Prot	c0.02	0.01	0.16		0.06	c0.43
v/s Ratio Perm				0.00		
v/c Ratio	0.13	0.04	0.35	0.01	0.55	0.61
Uniform Delay, d1	23.1	17.2	11.3	9.6	26.2	4.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.0	3.3	0.4
Delay (s)	23.3	17.2	11.4	9.6	29.5	5.3
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.3		11.4			6.9
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			8.6		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.63			
Actuated Cycle Length (s)			62.5		Sum of lost time (s)	18.1
Intersection Capacity Utilization			50.0%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave







MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	22	484	18	0	1408
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	29	556	21	0	1530
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1332	289			577	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1332	289			577	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	146	708			993	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	29	371	206	765	765	
Volume Left	0	0	0	0	0	
Volume Right	29	0	21	0	0	
cSH	708	1700	1700	1700	1700	
Volume to Capacity	0.04	0.22	0.12	0.45	0.45	
Queue Length 95th (ft)	3	0	0	0	0	
Control Delay (s)	10.3	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.3	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			42.3%		ICU Level of Service	A
Analysis Period (min)			15			





NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	30	25	477	18	22	1384
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	42	35	507	19	24	1521
RTOR Reduction (vph)	0	32	0	8	0	0
Lane Group Flow (vph)	42	3	507	11	24	1521
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	27.6	27.6	1.7	36.8
Effective Green, g (s)	2.6	4.3	27.6	27.6	1.7	36.8
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	147	2123	949	65	2831
v/s Ratio Prot	c0.02	0.00	0.14		0.01	c0.43
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.42	0.02	0.24	0.01	0.37	0.54
Uniform Delay, d1	21.0	18.9	4.3	3.7	21.6	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.8	0.1	0.1	0.0	3.5	0.2
Delay (s)	23.8	19.0	4.4	3.7	25.1	1.8
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.6		4.3			2.2
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.4		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.65			
Actuated Cycle Length (s)			46.0		Sum of lost time (s)	14.1
Intersection Capacity Utilization			49.2%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	11	14	83	7	0	176	13	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	11	15	108	9	0	198	15	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	11	15	117	212						
Volume Left (vph)	0	0	108	0						
Volume Right (vph)	0	15	0	15						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.13	0.19						
Capacity (veh/h)	872	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	6.9						
Approach Delay (s)	6.6		7.8	6.9						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑		↰	↑	↰	↰	↑	↰			
Volume (vph)	9	183	0	0	80	136	12	399	68	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1299	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	10	208	0	0	92	156	13	438	75	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	123	0	41	0	0	0	0
Lane Group Flow (vph)	10	208	0	0	92	33	13	438	34	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.4	18.4	18.4			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.4	18.4	18.4			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	271	389			389	330	810	1619	724			
v/s Ratio Prot		c0.11			0.05		0.01	c0.12				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.53			0.24	0.10	0.02	0.27	0.05			
Uniform Delay, d1	12.7	14.2			13.2	12.8	6.0	6.7	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.4			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.7	15.6			13.5	13.0	6.0	6.8	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.2		6.7			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.2			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.35										
Actuated Cycle Length (s)		40.2			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		40.5%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd









MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰		↰	↑	↰	↑	↰
Volume (veh/h)	82	546	38	460	0	1528	21
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	328	2184	43	523	0	1698	23
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2057	861	1721		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2057	861	1721		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	0	88		0		
cM capacity (veh/h)	42	299	364		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	2512	43	261	261	1132	589	0
Volume Left	328	43	0	0	0	0	0
Volume Right	2184	0	0	0	0	23	0
cSH	166	364	1700	1700	1700	1700	1700
Volume to Capacity	15.11	0.12	0.15	0.15	0.67	0.35	0.00
Queue Length 95th (ft)	Err	10	0	0	0	0	0
Control Delay (s)	Err	16.2	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C					
Approach Delay (s)	Err	1.2			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay		5234.0					
Intersection Capacity Utilization		87.8%			ICU Level of Service		
Analysis Period (min)		15					E









NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	0	66	1	1	0	72	355	12	1	1634	192
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3522		1770	3483	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3522		1770	3483	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	115	0	88	2	2	0	79	390	13	1	1816	213
RTOR Reduction (vph)	0	71	0	0	0	0	0	2	0	0	7	0
Lane Group Flow (vph)	115	17	0	2	2	0	79	401	0	1	2022	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	18.0	18.0		0.8	0.8		5.8	52.3		0.8	47.3	
Effective Green, g (s)	18.0	18.0		0.8	0.8		5.8	52.3		0.8	47.3	
Actuated g/C Ratio	0.20	0.20		0.01	0.01		0.06	0.58		0.01	0.52	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	350	313		15	16		113	2028		15	1814	
v/s Ratio Prot	c0.06	0.01		c0.00	0.00		c0.04	0.11		0.00	c0.58	
v/s Ratio Perm												
v/c Ratio	0.33	0.06		0.13	0.12		0.70	0.20		0.07	1.11	
Uniform Delay, d1	31.2	29.5		44.7	44.7		41.6	9.2		44.6	21.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.1		4.0	3.5		17.2	0.0		1.9	60.0	
Delay (s)	31.8	29.6		48.7	48.2		58.9	9.3		46.5	81.7	
Level of Service	C	C		D	D		E	A		D	F	
Approach Delay (s)		30.8			48.4			17.4			81.7	
Approach LOS		C			D			B			F	
Intersection Summary												
HCM 2000 Control Delay		66.5										
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		90.8										
Intersection Capacity Utilization		78.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	56	1587	59	0	391	34	14	39	4	23	25	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.99			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5058			5025		1770	1836			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.17	
Satd. Flow (perm)	1770	5058			5025		1313	1836			299	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	64	1803	67	0	416	36	20	56	6	27	29	24
RTOR Reduction (vph)	0	2	0	0	5	0	0	2	0	0	8	0
Lane Group Flow (vph)	64	1868	0	0	447	0	20	60	0	0	72	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1913			2040		255	357			49	
v/s Ratio Prot	c0.04	c0.37			c0.09			c0.03				
v/s Ratio Perm							0.02				c0.24	
v/c Ratio	0.33	0.98			0.22		0.08	0.17			1.46	
Uniform Delay, d1	73.8	55.2			34.8		59.3	60.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	15.7			0.2		0.1	0.2			291.2	
Delay (s)	74.8	70.9			35.1		59.4	60.6			366.2	
Level of Service	E	E			D		E	E			F	
Approach Delay (s)		71.0			35.1			60.3			366.2	
Approach LOS		E			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		73.6										
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		70.4%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	←←←	←	←	←	←	←	←	←	←	←	←	←
Volume (vph)	0	1617	0	493	428	37	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3497							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3497							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1817	0	524	455	39	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1817	0	524	494	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3178							609
v/s Ratio Prot		c0.36		c0.15	c0.14							
v/s Ratio Perm												0.00
v/c Ratio		0.94		0.27	0.16							0.00
Uniform Delay, d1		54.1		20.6	0.9							34.8
Progression Factor		0.29		1.00	1.00							1.00
Incremental Delay, d2		3.7		0.1	0.0							0.0
Delay (s)		19.6		20.6	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		19.6			11.1		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		16.6				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		54.5%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave




















MILCON_NorthOp Year 2019 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		←	←	←	←	←	←	←	←	←	←	←
Volume (veh/h)	3	214	0	0	307	40	0	0	0	104	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	249	0	0	349	45	0	0	0	158	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	394			249			640	650	249	627	627	372
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	394			249			640	650	249	627	627	372
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	60	100	98
cM capacity (veh/h)	1164			1317			381	387	790	395	399	674
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	252	394	0	170								
Volume Left	3	0	0	158								
Volume Right	0	45	0	12								
cSH	1164	1317	1700	407								
Volume to Capacity	0.00	0.00	0.00	0.42								
Queue Length 95th (ft)	0	0	0	50								
Control Delay (s)	0.1	0.0	0.0	20.0								
Lane LOS	A		A	C								
Approach Delay (s)	0.1	0.0	0.0	20.0								
Approach LOS			A	C								
Intersection Summary												
Average Delay		4.2										
Intersection Capacity Utilization		31.5%				ICU Level of Service		A				
Analysis Period (min)		15										











NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop			Stop				Stop			Stop	
Volume (vph)	7	295	12	85	321	24	14	38	67	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	378	15	96	361	27	25	67	118	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	394	96	388	209	161						
Volume Left (vph)	9	0	96	0	25	61						
Volume Right (vph)	0	15	0	27	118	28						
Hadj (s)	0.53	0.01	0.53	-0.01	-0.28	0.00						
Departure Headway (s)	7.2	6.7	7.1	6.5	6.6	7.1						
Degree Utilization, x	0.02	0.73	0.19	0.71	0.38	0.32						
Capacity (veh/h)	471	519	484	528	477	435						
Control Delay (s)	9.1	24.4	10.6	22.5	13.7	13.3						
Approach Delay (s)	24.0		20.1		13.7	13.3						
Approach LOS	C		C		B	B						
Intersection Summary												
Delay			19.4									
Level of Service			C									
Intersection Capacity Utilization			41.4%	ICU Level of Service				A				
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	74	422	455	39	52	142
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	76	435	529	45	61	167
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)	908					
pX, platoon unblocked						
vC, conflicting volume	574				1139	287
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	574				1139	287
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	92				66	76
cM capacity (veh/h)	995				180	710
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	76	435	353	222	228	
Volume Left	76	0	0	0	61	
Volume Right	0	0	0	45	167	
cSH	995	1700	1700	1700	396	
Volume to Capacity	0.08	0.26	0.21	0.13	0.58	
Queue Length 95th (ft)	6	0	0	0	87	
Control Delay (s)	8.9	0.0	0.0	0.0	25.7	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		25.7	
Approach LOS					D	
Intersection Summary						
Average Delay			5.0			
Intersection Capacity Utilization			40.5%	ICU Level of Service		A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↱		↰	↰↱			↱		↰	↰↱	↱
Volume (vph)	28	431	29	31	457	3	54	20	22	12	42	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3536			1755			1842	1583
Flt Permitted	0.47	1.00		0.45	1.00			0.79			0.90	1.00
Satd. Flow (perm)	869	3505		833	3536			1418			1673	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	513	35	34	502	3	66	24	27	16	55	39
RTOR Reduction (vph)	0	7	0	0	1	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	541	0	34	504	0	0	96	0	0	71	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Effective Green, g (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	414	1671		397	1686			309			365	345
v/s Ratio Prot		c0.15			0.14							
v/s Ratio Perm	0.04			0.04				c0.07			0.04	0.01
v/c Ratio	0.08	0.32		0.09	0.30			0.31			0.19	0.02
Uniform Delay, d1	4.3	4.9		4.3	4.8			9.9			9.6	9.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.6			0.3	0.0
Delay (s)	4.4	5.0		4.4	4.9			10.5			9.9	9.3
Level of Service	A	A		A	A			B			A	A
Approach Delay (s)		5.0			4.9			10.5			9.7	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		30.2			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		44.7%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↰			↰	↰
Volume (veh/h)	873	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1065	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			1074		1065	1065
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1074		1065	1065
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		96	99
cM capacity (veh/h)			649		247	271
Direction, Lane #						
Volume Total	1065	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	252			
Volume to Capacity	0.63	0.01	0.05			
Queue Length 95th (ft)	0	0	4			
Control Delay (s)	0.0	0.0	20.0			
Lane LOS			C			
Approach Delay (s)	0.0		20.0			
Approach LOS			C			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			55.9%		ICU Level of Service	B
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	41	1911	124	58	810	130	97	89	62	172	78	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Flt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5039		1770	4980			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5039		1770	4980			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	44	2033	132	59	818	131	107	98	68	193	88	28
RTOR Reduction (vph)	0	4	0	0	11	0	0	18	0	0	4	0
Lane Group Flow (vph)	44	2161	0	59	938	0	0	255	0	0	305	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2119		157	1983			649			658	
v/s Ratio Prot	0.02	c0.43		c0.03	0.19			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.22	1.02		0.38	0.47			0.39			0.46	
Uniform Delay, d1	72.9	52.1		77.3	40.1			63.2			64.2	
Progression Factor	1.00	1.00		1.24	0.75			1.00			1.00	
Incremental Delay, d2	0.6	24.7		1.4	0.8			0.4			0.5	
Delay (s)	73.5	76.8		97.2	30.7			63.6			64.7	
Level of Service	E	E		F	C			E			E	
Approach Delay (s)		76.8			34.6			63.6			64.7	
Approach LOS		E			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		63.7			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		118.3%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	20	2191	57	48	1213	54	21	10	35	63	13	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	0.99			0.93			1.00	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.95	
Satd. Flow (prot)	1770	5066		1770	5053			1702			1770	
Flt Permitted	0.95	1.00		0.95	1.00			0.90			0.62	
Satd. Flow (perm)	1770	5066		1770	5053			1551			1162	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2236	58	49	1251	56	25	12	42	74	15	16
RTOR Reduction (vph)	0	1	0	0	2	0	0	24	0	0	14	0
Lane Group Flow (vph)	20	2293	0	49	1305	0	0	55	0	74	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4				8	
Actuated Green, G (s)	12.0	126.7		16.0	130.7			22.1			22.1	
Effective Green, g (s)	12.0	126.7		16.0	130.7			22.1			22.1	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12			0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	118	3565		157	3669			190			142	
v/s Ratio Prot	0.01	c0.45		c0.03	c0.26						0.01	
v/s Ratio Perm								0.04			c0.06	
v/c Ratio	0.17	0.64		0.31	0.36			0.29			0.52	
Uniform Delay, d1	79.3	14.4		76.8	9.1			71.8			74.0	
Progression Factor	1.45	0.15		1.56	0.30			1.00			1.00	
Incremental Delay, d2	0.2	0.3		1.0	0.2			0.9			3.4	
Delay (s)	115.5	2.5		120.7	2.9			72.7			77.4	
Level of Service	F	A		F	A			E			E	
Approach Delay (s)		3.5			7.2			72.7			75.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		63.3%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	1961	198	156	1286	81	129	40	127	153	44	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5015		1770	5085	1583		1794	1583		3371	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5015		1770	5085	1583		1794	1583		3371	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	28	2086	211	161	1326	84	140	43	138	207	59	27
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	114	0	4	0
Lane Group Flow (vph)	28	2290	0	161	1326	47	0	183	24	0	289	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2220		192	2364	736		305	269		574	
v/s Ratio Prot	0.02	c0.46		c0.09	c0.26			c0.10			c0.09	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.18	1.03		0.84	0.56	0.06		0.60	0.09		0.50	
Uniform Delay, d1	75.9	50.1		78.6	34.8	26.6		69.0	62.9		67.7	
Progression Factor	1.01	0.96		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.4	25.7		26.1	1.0	0.2		8.5	0.6		3.1	
Delay (s)	76.8	73.7		104.7	35.8	26.7		77.4	63.5		70.9	
Level of Service	E	E		F	D	C		E	E		E	
Approach Delay (s)		73.7			42.4			71.4			70.9	
Approach LOS		E			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		62.4			HCM 2000 Level of Service					E		
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)					19.3		
Intersection Capacity Utilization		106.2%			ICU Level of Service					G		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	2202	49	170	1584	16	39	8	81	23	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5069		1770	5078			1678			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.83	
Satd. Flow (perm)	1770	5069		1770	5078			1512			1504	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	10	2447	54	179	1667	17	46	9	95	28	12	12
RTOR Reduction (vph)	0	2	0	0	1	0	0	76	0	0	10	0
Lane Group Flow (vph)	10	2499	0	179	1683	0	0	74	0	0	42	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.4		11.2	50.8			17.3			17.3	
Effective Green, g (s)	0.8	40.4		11.2	50.8			17.3			17.3	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2420		234	3049			309			307	
v/s Ratio Prot	0.01	c0.49		c0.10	0.33							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.62	1.03		0.76	0.55			0.24			0.14	
Uniform Delay, d1	41.8	22.1		35.4	10.1			28.2			27.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	57.6	27.4		13.8	0.2			0.4			0.2	
Delay (s)	99.3	49.5		49.2	10.3			28.6			27.8	
Level of Service	F	D		D	B			C			C	
Approach Delay (s)		49.7			14.1			28.6			27.8	
Approach LOS		D			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		34.2			HCM 2000 Level of Service					C		
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		84.6			Sum of lost time (s)					15.7		
Intersection Capacity Utilization		74.2%			ICU Level of Service					D		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	188	2141	26	328	1591	555	66	177	533	587	239	227
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	198	2254	27	353	1711	597	70	188	567	638	260	247
RTOR Reduction (vph)	0	1	0	0	0	87	0	26	274	0	2	130
Lane Group Flow (vph)	198	2280	0	353	1711	510	70	366	89	638	283	92
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.3	36.3		45.0	70.0	70.0	8.6	37.4	37.4	11.8	40.6	40.6
Effective Green, g (s)	11.3	36.3		45.0	70.0	70.0	8.6	37.4	37.4	11.8	40.6	40.6
Actuated g/C Ratio	0.07	0.24		0.30	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	254	1209		522	2335	727	99	400	369	265	465	400
v/s Ratio Prot	0.06	c0.45		c0.20	c0.34		0.04	c0.22		c0.19	c0.16	
v/s Ratio Perm					0.32			0.06				0.06
v/c Ratio	0.78	1.89		0.68	0.73	0.70	0.71	0.92	0.24	2.41	0.61	0.23
Uniform Delay, d1	69.3	58.1		47.3	33.6	32.9	70.7	56.0	46.1	70.3	48.9	43.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.0	401.9		3.5	1.2	3.1	20.5	25.2	0.3	644.8	2.3	0.3
Delay (s)	83.3	459.9		50.7	34.8	35.9	91.2	81.1	46.5	715.1	51.2	44.0
Level of Service	F	F		D	C	D	F	F	D	F	D	D
Approach Delay (s)		429.8			37.2			66.7			419.7	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		239.1			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.25										
Actuated Cycle Length (s)		152.4			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		128.4%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	↔
Volume (vph)	0	506	855	0	440	1625
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	569	910	0	484	1786
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	0	569	910	0	484	1782
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.16	c0.26		0.27	c0.64
v/s Ratio Perm						
v/c Ratio		0.32	1.06		0.73	1.00
Uniform Delay, d1		11.7	30.3		21.5	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	48.1		4.1	22.2
Delay (s)		11.8	78.4		25.6	36.7
Level of Service		B	E		C	D
Approach Delay (s)		11.8	78.4		34.3	
Approach LOS		B	E		C	
Intersection Summary						
HCM 2000 Control Delay		41.6			HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio		1.09				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		85.5%			ICU Level of Service	E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	940	0	0	526	250	437	2	107	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	979	0	0	591	281	470	2	115	0	0	0
RTOR Reduction (vph)	0	0	0	0	99	0	0	35	0	0	0	0
Lane Group Flow (vph)	0	979	0	0	773	0	301	251	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases							2					
Actuated Green, G (s)		19.2			19.2		14.5	14.5				
Effective Green, g (s)		19.2			19.2		14.5	14.5				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1629			1550		584	561				
v/s Ratio Prot		0.28			0.23							
v/s Ratio Perm							0.18	0.16				
v/c Ratio		0.60			0.50		0.52	0.45				
Uniform Delay, d1		8.4			7.9		10.8	10.5				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.6			0.3		0.8	0.6				
Delay (s)		9.0			8.1		11.6	11.1				
Level of Service		A			A		B	B				
Approach Delay (s)		9.0			8.1		11.3			0.0		
Approach LOS		A			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		9.3			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		41.7			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		48.1%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2019 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	3	36	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	3	52	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	73	52	52			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	73	52	52			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	926	1015	1554			
Direction, Lane #						
Volume Total	16	12	52			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	1015	1554	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.3	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.3	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.5				
Intersection Capacity Utilization		17.2%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St







MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1409	34	0	3875	553	0	0	476	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1698	41	0	4212	601	0	0	595	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4833			1759			3174	6571	626	5118	6291	1745
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4833			1759			3174	6571	626	5118	6291	1745
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	84
cM capacity (veh/h)	19			346			3	0	1356	0	0	73
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	679	679	380	1685	1685	1443	595	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	601	595	12				
cSH	1700	1700	1700	1700	1700	1700	1356	73				
Volume to Capacity	0.40	0.40	0.22	0.99	0.99	0.85	0.44	0.16				
Queue Length 95th (ft)	0	0	0	0	0	0	57	14				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	63.8				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	63.8				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				102.3%			ICU Level of Service		G			
Analysis Period (min)				15								

* User Entered Value



















NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑↑			↑↑↑↑		↑	
Volume (veh/h)	1269	202	0	3775	0	232	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1442	230	0	4194	0	252	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1692		2995	635	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1692		2995	635	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	38	
cM capacity (veh/h)			367		10	407	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	577	577	518	1398	1398	1398	252
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	230	0	0	0	252
cSH	1700	1700	1700	1700	1700	1700	407
Volume to Capacity	0.34	0.34	0.30	0.82	0.82	0.82	0.62
Queue Length 95th (ft)	0	0	0	0	0	0	101
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.2
Lane LOS							D
Approach Delay (s)	0.0			0.0			27.2
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			87.8%		ICU Level of Service		E
Analysis Period (min)			15				





























NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1637	1945	343	107	102	0	0	278	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4639		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4639		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1760	2091	369	145	138	0	0	320	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1038	3174	0	145	138	0	0	332	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3211		186	872			397	
v/s Ratio Prot				0.68	c0.68		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.99	0.99		0.78	0.16			0.84	
Uniform Delay, d1				28.2	28.4		82.6	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				24.1	13.2		18.4	0.1			14.2	
Delay (s)				52.3	41.6		101.0	56.1			96.5	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			44.2			79.1			96.5	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay			49.9	HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio			0.94									
Actuated Cycle Length (s)			189.5	Sum of lost time (s)				16.8				
Intersection Capacity Utilization			201.0%	ICU Level of Service				H				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		   						   		   	 	
Volume (vph)	1	583	80	0	0	0	0	199	208	451	1520	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3252	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3252	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	634	87	0	0	0	0	231	226	490	1583	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	20	48	0	0	0
Lane Group Flow (vph)	0	635	58	0	0	0	0	297	92	490	1583	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.6	62.6	35.2	100.6	
Effective Green, g (s)		60.0	60.0					62.6	62.6	35.2	100.6	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.20	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1771	551					1182	523	701	2067	
v/s Ratio Prot								0.09		0.14	c0.45	
v/s Ratio Perm		0.12	0.04						0.06			
v/c Ratio		0.36	0.10					0.25	0.18	0.70	0.77	
Uniform Delay, d1		41.8	37.9					38.4	37.3	63.6	26.9	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.1	1.7	
Delay (s)		41.9	38.0					38.5	37.4	66.6	28.7	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.4			0.0			38.2			37.7	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.6		HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		172.2		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		201.0%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↕	↕
Volume (vph)	217	6	1156	603	0	1210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3316			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3316			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	252	7	1243	648	0	1274
RTOR Reduction (vph)	2	0	52	0	0	0
Lane Group Flow (vph)	257	0	1839	0	0	1274
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	16.8		43.5			43.5
Effective Green, g (s)	16.8		43.5			43.5
Actuated g/C Ratio	0.24		0.63			0.63
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	385		2078			2107
v/s Ratio Prot	c0.16		c0.55			0.38
v/s Ratio Perm						
v/c Ratio	0.67		0.89			0.60
Uniform Delay, d1	23.8		10.9			7.8
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	4.4		4.9			0.5
Delay (s)	28.1		15.8			8.3
Level of Service	C		B			A
Approach Delay (s)	28.1		15.8			8.3
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			13.9		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.87			
Actuated Cycle Length (s)			69.4		Sum of lost time (s)	12.1
Intersection Capacity Utilization			77.6%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↕	↕	↕	↕	↕	↕
Volume (vph)	47	2	10	7	0	5	19	1371	26	39	1351	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1708		1770	3529		1770	3525	
Frt Permitted	0.74	0.78	1.00		0.87		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1312	1380	1583		1526		1770	3529		1770	3525	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	55	2	12	14	0	10	23	1632	31	42	1468	39
RTOR Reduction (vph)	0	0	10	0	20	0	0	1	0	0	1	0
Lane Group Flow (vph)	29	28	2	0	4	0	23	1662	0	42	1506	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.4	15.4	15.4		15.4		2.7	64.2		4.0	65.5	
Effective Green, g (s)	15.4	15.4	15.4		15.4		2.7	64.2		4.0	65.5	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	206	217	249		240		48	2318		72	2363	
v/s Ratio Prot							0.01	c0.47		c0.02	0.43	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.14	0.13	0.01		0.02		0.48	0.72		0.58	0.64	
Uniform Delay, d1	35.5	35.4	34.7		34.8		46.8	10.9		46.0	9.3	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		7.4	1.1		11.5	0.6	
Delay (s)	35.8	35.7	34.7		34.8		54.2	11.9		57.5	9.8	
Level of Service	D	D	C		C		D	B		E	A	
Approach Delay (s)		35.5			34.8			12.5			11.1	
Approach LOS		D			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.5		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.60									
Actuated Cycle Length (s)			97.7		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			58.9%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	22	0	1316	7	427	915	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	33	0	1446	8	436	934	0
RTOR Reduction (vph)	0	0	0	0	30	0	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1446	4	436	934	0
Turn Type	Split			Split	NA		NA	Perm		Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.41		c0.25	0.26	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.87	0.01	0.71	0.31	
Uniform Delay, d1					60.6			34.5	20.4	41.3	2.4	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			4.3	0.0	4.0	0.3	
Delay (s)					60.6			16.8	20.4	45.3	2.7	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			16.9			16.2	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.1			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		80.5%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	31	50	14	1	65	129	137	1154	5	291	352	312
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3244	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3244	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	48	77	22	1	74	147	152	1282	6	334	405	359
RTOR Reduction (vph)	0	0	20	0	0	124	0	0	3	0	110	0
Lane Group Flow (vph)	48	77	2	0	75	23	152	1282	3	334	654	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1064	
v/s Ratio Prot	0.03	c0.04			c0.04		0.09	c0.36		c0.19	0.20	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.39	0.60	0.02		0.25	0.10	0.28	0.81	0.00	0.98	0.61	
Uniform Delay, d1	64.6	65.6	62.9		53.5	52.1	37.7	35.0	22.3	58.2	41.0	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.92	
Incremental Delay, d2	2.1	7.7	0.1		0.5	0.2	0.3	4.7	0.0	42.2	2.6	
Delay (s)	66.7	73.3	63.0		53.9	52.3	38.0	39.7	22.3	98.0	40.4	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		69.6			52.9			39.4			58.0	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		49.0			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		86.4%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (veh/h)	35	199	4	88	326	9
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	41	234	5	110	354	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)			915		600	
pX, platoon unblocked						
vC, conflicting volume	778	60			115	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	778	60			115	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	85	77			76	
cM capacity (veh/h)	277	1005			1474	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	275	115	364			
Volume Left	41	0	354			
Volume Right	234	110	0			
cSH	1182	1700	1474			
Volume to Capacity	0.23	0.07	0.24			
Queue Length 95th (ft)	23	0	24			
Control Delay (s)	11.2	0.0	8.0			
Lane LOS	B		A			
Approach Delay (s)	11.2	0.0	8.0			
Approach LOS	B					
Intersection Summary						
Average Delay		8.0				
Intersection Capacity Utilization		35.2%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (vph)	39	3	1308	410	0	327
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1746		3539	1521		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1746		3539	1521		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	52	4	1377	432	0	511
RTOR Reduction (vph)	4	0	0	122	0	0
Lane Group Flow (vph)	52	0	1377	310	0	511
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	2.0		30.1	30.1		30.1
Effective Green, g (s)	2.0		30.1	30.1		30.1
Actuated g/C Ratio	0.05		0.72	0.72		0.72
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	83		2536	1090		2536
v/s Ratio Prot	c0.03		c0.39			0.14
v/s Ratio Perm				0.20		
v/c Ratio	0.63		0.54	0.28		0.20
Uniform Delay, d1	19.6		2.8	2.1		2.0
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	14.0		0.2	0.1		0.0
Delay (s)	33.6		3.0	2.3		2.0
Level of Service	C		A	A		A
Approach Delay (s)	33.6		2.8			2.0
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.4		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.55				
Actuated Cycle Length (s)		42.0		Sum of lost time (s)	9.9	
Intersection Capacity Utilization		48.6%		ICU Level of Service	A	
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖↗		↖	↖↗
Volume (veh/h)	0	15	2132	5	5	367
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2292	5	7	540
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2580	1149			2298	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2580	1149			2298	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	87			97	
cM capacity (veh/h)	20	192			216	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1528	770	7	270	270
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	192	1700	1700	216	1700	1700
Volume to Capacity	0.13	0.90	0.45	0.03	0.16	0.16
Queue Length 95th (ft)	11	0	0	3	0	0
Control Delay (s)	26.7	0.0	0.0	22.3	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	26.7	0.0		0.3		
Approach LOS	D					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		69.1%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖↗	↖	↖	↖↗
Volume (vph)	17	86	2046	12	37	328
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	106	2200	13	54	475
RTOR Reduction (vph)	0	4	0	1	0	0
Lane Group Flow (vph)	21	102	2200	12	54	475
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.7	25.8	68.3	68.3	5.0	82.1
Effective Green, g (s)	15.7	20.7	68.3	68.3	5.0	82.1
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	259	305	2256	1009	82	2712
v/s Ratio Prot	0.01	c0.06	c0.62		c0.03	0.13
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.33	0.98	0.01	0.66	0.18
Uniform Delay, d1	39.5	37.3	18.6	7.1	50.2	3.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	13.5	0.0	17.5	0.0
Delay (s)	39.6	37.9	32.1	7.1	67.7	3.4
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.2		31.9			10.0
Approach LOS	D		C			A
Intersection Summary						
HCM 2000 Control Delay		28.2		HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio		0.84				
Actuated Cycle Length (s)		107.1		Sum of lost time (s)	18.1	
Intersection Capacity Utilization		72.7%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↑↑			↑↑
Volume (veh/h)	0	32	2024	26	0	344
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	52	2131	27	0	465
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2377	1079			2158	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2377	1079			2158	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	76			100	
cM capacity (veh/h)	29	214			245	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	52	1420	738	232	232	
Volume Left	0	0	0	0	0	
Volume Right	52	0	27	0	0	
cSH	214	1700	1700	1700	1700	
Volume to Capacity	0.24	0.84	0.43	0.14	0.14	
Queue Length 95th (ft)	23	0	0	0	0	
Control Delay (s)	27.1	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	27.1	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		66.8%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	10	6	2049	32	15	321
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	16	10	2134	33	19	396
RTOR Reduction (vph)	0	4	0	7	0	0
Lane Group Flow (vph)	16	6	2134	26	19	396
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.7	59.7	2.0	69.2
Effective Green, g (s)	1.4	3.4	59.7	59.7	2.0	69.2
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2736	1224	45	3172
v/s Ratio Prot	c0.01	0.00	c0.60		c0.01	0.11
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.50	0.09	0.78	0.02	0.42	0.12
Uniform Delay, d1	37.6	35.4	5.0	2.0	37.0	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.8	0.6	1.5	0.0	6.3	0.0
Delay (s)	49.3	36.0	6.5	2.0	43.3	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	44.2		6.4			2.4
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		6.1		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.76				
Actuated Cycle Length (s)		77.2		Sum of lost time (s)		14.1
Intersection Capacity Utilization		69.5%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	45	1	0	44	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	83	2	0	70	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	85	70	3					
Volume Left (vph)	0	0	83	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	833	1121	815	841	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.2%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: AM PEAK















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	36	0	0	32	224	3	1855	50	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1357	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	48	0	0	44	311	3	1973	53	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	22	0	0	0	0
Lane Group Flow (vph)	3	48	0	0	44	255	3	1973	31	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.4	16.4			16.4	16.4	47.7	43.6	43.6			
Effective Green, g (s)	16.4	16.4			16.4	16.4	47.7	43.6	43.6			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	303	416			416	353	1150	2102	940			
v/s Ratio Prot		0.03			0.02		0.00	c0.56				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.12			0.11	0.72	0.00	0.94	0.03			
Uniform Delay, d1	22.2	22.7			22.7	26.4	4.5	13.7	6.2			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	7.1	0.0	8.8	0.0			
Delay (s)	22.2	22.8			22.8	33.5	4.5	22.5	6.2			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.8			32.2			22.0			0.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay		23.5						HCM 2000 Level of Service			C	
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		73.4				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		84.7%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: AM PEAK

























							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	13	23	773	1643	0	178	112
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	52	92	805	1711	0	225	142
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None			None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2762	184	367		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2762	184	367		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	89	32		0		
cM capacity (veh/h)	5	827	1188		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	144	805	856	856	150	217	0
Volume Left	52	805	0	0	0	0	0
Volume Right	92	0	0	0	0	142	0
cSH	14	1188	1700	1700	1700	1700	1700
Volume to Capacity	10.48	0.68	0.50	0.50	0.09	0.13	0.00
Queue Length 95th (ft)	Err	141	0	0	0	0	0
Control Delay (s)	Err	14.1	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B					
Approach Delay (s)	Err	4.5			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay		479.3					
Intersection Capacity Utilization		64.7%		ICU Level of Service		C	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	393	0	38	2	1	2	26	2293	0	0	155	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3422	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3422	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	447	0	43	6	3	6	27	2414	0	0	225	64
RTOR Reduction (vph)	0	30	0	0	6	0	0	0	0	0	23	0
Lane Group Flow (vph)	447	13	0	6	3	0	27	2414	0	0	266	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	25.6	25.6		1.7	1.7		1.9	43.5			37.4	
Effective Green, g (s)	25.6	25.6		1.7	1.7		1.9	43.5			37.4	
Actuated g/C Ratio	0.30	0.30		0.02	0.02		0.02	0.51			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	529	473		35	33		39	1800			1496	
v/s Ratio Prot	c0.25	0.01		c0.00	0.00		0.02	c0.68			0.08	
v/s Ratio Perm												
v/c Ratio	0.84	0.03		0.17	0.09		0.69	1.34			0.18	
Uniform Delay, d1	28.1	21.2		41.2	41.1		41.5	21.0			14.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	11.8	0.0		2.3	1.2		41.8	157.3			0.1	
Delay (s)	39.9	21.2		43.5	42.4		83.3	178.3			14.7	
Level of Service	D	C		D	D		F	F			B	
Approach Delay (s)		38.2			42.8			177.3			14.7	
Approach LOS		D			D			F			B	
Intersection Summary												
HCM 2000 Control Delay		141.1						HCM 2000 Level of Service		F		
HCM 2000 Volume to Capacity ratio		1.20										
Actuated Cycle Length (s)		85.5					Sum of lost time (s)	18.9				
Intersection Capacity Utilization		100.2%					ICU Level of Service	G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	7	204	14	0	2148	17	40	22	1	19	40	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5035			5079		1770	1852			1732	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.19	
Satd. Flow (perm)	1770	5035			5079		1240	1852			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	
Adj. Flow (vph)	8	229	16	0	2360	19	48	26	1	25	52	66
RTOR Reduction (vph)	0	4	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	8	241	0	0	2378	0	48	26	0	0	126	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1904			2062		241	360			53	
v/s Ratio Prot	c0.00	0.05			c0.47			0.01				
v/s Ratio Perm							c0.04				c0.39	
v/c Ratio	0.04	0.13			1.15		0.20	0.07			2.37	
Uniform Delay, d1	71.4	36.5			53.5		60.8	59.2			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			73.8		0.4	0.1			669.6	
Delay (s)	71.5	36.7			127.3		61.2	59.3			744.6	
Level of Service	E	D			F		E	E			F	
Approach Delay (s)		37.8			127.3			60.5			744.6	
Approach LOS		D			F			E			F	
Intersection Summary												
HCM 2000 Control Delay		148.5			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.02										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		80.3%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	222	0	391	2157	9	0	0	0	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3537							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3537							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	271	0	416	2295	10	0	0	0	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	271	0	416	2305	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3214							609
v/s Ratio Prot		0.05		0.12	c0.65							
v/s Ratio Perm												0.00
v/c Ratio		0.14		0.24	0.72							0.01
Uniform Delay, d1		36.7		25.6	2.1							34.9
Progression Factor		0.41		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.1	0.8							0.0
Delay (s)		15.1		25.7	2.9							35.0
Level of Service		B		C	A							C
Approach Delay (s)		15.1			6.4		0.0				35.0	
Approach LOS		B			A		A				C	
Intersection Summary												
HCM 2000 Control Delay		7.4			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		81.6%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	9	236	0	0	128	104	0	0	0	47	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	11	281	0	0	138	112	0	0	0	52	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	249			281			500	552	281	496	496	194
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	249			281			500	552	281	496	496	194
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1316			1282			475	438	758	481	471	848
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	292	249	0	56								
Volume Left	11	0	0	52								
Volume Right	0	112	0	4								
cSH	1316	1282	1700	498								
Volume to Capacity	0.01	0.00	0.00	0.11								
Queue Length 95th (ft)	1	0	0	9								
Control Delay (s)	0.4	0.0	0.0	13.1								
Lane LOS	A			B								
Approach Delay (s)	0.4	0.0	0.0	13.1								
Approach LOS				B								
Intersection Summary												
Average Delay		1.4										
Intersection Capacity Utilization		29.7%			ICU Level of Service			A				
Analysis Period (min)		15										

NBC Coastal Campus

22: 3rd St & Palm Ave











MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	274	4	26	209	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	319	5	28	225	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	323	28	251	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.1	5.5	5.1	5.7						
Degree Utilization, x	0.01	0.49	0.05	0.38	0.26	0.07						
Capacity (veh/h)	578	635	565	630	635	547						
Control Delay (s)	7.9	12.5	8.2	10.6	9.9	9.1						
Approach Delay (s)	12.4		10.4		9.9	9.1						
Approach LOS	B		B		A	A						
Intersection Summary												
Delay		11.0										
Level of Service		B										
Intersection Capacity Utilization		37.5%		ICU Level of Service				A				
Analysis Period (min)		15										


















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	228	426	333	152	17	69
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	289	539	406	185	24	97
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	591				1615	296
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	591				1615	296
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	71				64	86
cM capacity (veh/h)	980				67	701
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	289	539	271	321	121	
Volume Left	289	0	0	0	24	
Volume Right	0	0	0	185	97	
cSH	980	1700	1700	1700	243	
Volume to Capacity	0.29	0.32	0.16	0.19	0.50	
Queue Length 95th (ft)	31	0	0	0	64	
Control Delay (s)	10.2	0.0	0.0	0.0	33.6	
Lane LOS	B				D	
Approach Delay (s)	3.6		0.0		33.6	
Approach LOS					D	
Intersection Summary						
Average Delay			4.6			
Intersection Capacity Utilization			41.9%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	419	15	26	334	0	66	38	81	1	21	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1722			1858	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.88			0.98	1.00
Satd. Flow (perm)	931	3521		821	3539			1537			1830	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	544	19	34	434	0	100	58	123	2	36	47
RTOR Reduction (vph)	0	3	0	0	0	0	0	33	0	0	0	29
Lane Group Flow (vph)	21	560	0	34	434	0	0	248	0	0	38	18
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.2	13.2		13.2	13.2			13.3			13.3	13.3
Effective Green, g (s)	13.2	13.2		13.2	13.2			13.3			13.3	13.3
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	344	1301		303	1308			572			681	589
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.16			0.02	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.43			0.06	0.03
Uniform Delay, d1	7.3	8.4		7.4	8.1			8.4			7.2	7.1
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.2			0.5			0.0	0.0
Delay (s)	7.3	8.7		7.6	8.2			8.9			7.2	7.1
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.6			8.2			8.9			7.2	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.4		HCM 2000 Level of Service				A			
HCM 2000 Volume to Capacity ratio			0.43									
Actuated Cycle Length (s)			35.7		Sum of lost time (s)				9.2			
Intersection Capacity Utilization			46.6%		ICU Level of Service				A			
Analysis Period (min)			15									
c. Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	503	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	547	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			551		547	547
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			551		547	547
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1019		498	537
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	547	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	525			
Volume to Capacity	0.32	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.0			
Lane LOS			B			
Approach Delay (s)	0.0		12.0			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.5%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑	↘	↗	↑↑↑		↗	↑↑	↘	↗	↑↑	↘
Volume (vph)	21	672	35	23	2300	43	165	37	51	90	45	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5047		1770	5071			3325			3364	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5047		1770	5071			3325			3364	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	800	42	25	2527	47	199	45	61	110	55	29
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	839	0	25	2573	0	0	293	0	0	186	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2234		118	2160			646			654	
v/s Ratio Prot	0.01	c0.17		c0.01	c0.51			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.17	0.38		0.21	1.19			0.45			0.28	
Uniform Delay, d1	76.7	33.5		79.5	51.6			64.0			61.8	
Progression Factor	1.00	1.00		1.15	0.93			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.6	89.3			0.5			0.2	
Delay (s)	77.3	34.0		91.8	137.6			64.6			62.1	
Level of Service	E	C		F	F			E			E	
Approach Delay (s)		35.3			137.2			64.6			62.1	
Approach LOS		D			F			E			E	
Intersection Summary												
HCM 2000 Control Delay		105.6			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		82.5%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: AM PEAK

	↖	→	↗	↖	←	↖	↖	↑	↗	↗	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↖↖		↖	↖↖↖			↖		↖	↖	
Volume (vph)	2	902	35	20	2474	12	18	4	31	55	11	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5082			1687		1770	1704	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5057		1770	5082			1542		1231	1704	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	1013	39	23	2811	14	25	5	42	79	16	21
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	18	0
Lane Group Flow (vph)	2	1050	0	23	2825	0	0	44	0	79	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases						4				8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3718			257		205	284	
v/s Ratio Prot	0.00	0.21		c0.01	c0.56						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.30		0.19	0.76			0.17		0.39	0.07	
Uniform Delay, d1	86.1	11.1		79.4	14.6			64.3		66.8	63.2	
Progression Factor	1.69	0.27		1.43	0.37			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.2	0.4			0.3		1.2	0.1	
Delay (s)	146.3	3.2		113.7	5.8			64.6		68.0	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.5			6.6			64.6			66.5	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.5			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		81.5%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: AM PEAK

	↖	→	↗	↖	←	↖	↖	↑	↗	↗	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↖↖		↖	↖↖↖	↖		↖	↖	↖	↖↖	
Volume (vph)	3	973	63	96	2327	52	147	19	91	169	36	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.85	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1093	71	116	2804	63	165	21	102	225	48	20
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	84	0	3	0
Lane Group Flow (vph)	3	1160	0	116	2804	33	0	186	18	0	290	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.23		c0.07	c0.55			c0.10			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.52		0.59	1.04	0.04		0.61	0.06		0.50	
Uniform Delay, d1	86.2	36.3		76.1	42.1	20.2		68.9	62.4		67.5	
Progression Factor	1.22	0.62		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.8		4.7	27.9	0.1		3.4	0.1		0.7	
Delay (s)	105.8	23.5		80.8	70.1	20.3		72.2	62.5		68.2	
Level of Service	F	C		F	E	C		E	E		E	
Approach Delay (s)		23.7			69.5			68.8			68.2	
Approach LOS		C			E			E			E	
Intersection Summary												
HCM 2000 Control Delay		58.0			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		98.9%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰	↰	↰	↰	↰
Volume (vph)	14	1239	25	43	2456	12	16	6	48	38	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5082			1671			1723	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.78	
Satd. Flow (perm)	1770	5070		1770	5082			1561			1379	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	15	1347	27	50	2856	14	19	7	57	50	3	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	45	0	0	22	0
Lane Group Flow (vph)	15	1373	0	50	2870	0	0	38	0	0	59	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Effective Green, g (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2666		72	2830			331			292	
v/s Ratio Prot	0.01	0.27		c0.03	c0.56							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.88	0.51		0.69	1.01			0.12			0.20	
Uniform Delay, d1	35.2	11.0		33.7	15.7			22.6			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	159.7	0.2		25.2	20.5			0.2			0.3	
Delay (s)	194.9	11.1		58.8	36.2			22.8			23.4	
Level of Service	F	B		E	D			C			C	
Approach Delay (s)		13.1			36.6			22.8			23.4	
Approach LOS		B			D			C			C	
Intersection Summary												
HCM 2000 Control Delay		28.8			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		71.1			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		64.6%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰	↰	↰
Volume (vph)	92	1253	29	245	2394	216	77	73	775	236	93	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	107	1457	34	261	2547	230	86	81	861	281	111	92
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	183	0	3	60
Lane Group Flow (vph)	107	1489	0	261	2547	163	86	324	282	281	117	23
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.3	30.0	30.0	10.4	32.1	32.1
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.3	30.0	30.0	10.4	32.1	32.1
Actuated g/C Ratio	0.05	0.31		0.16	0.41	0.41	0.07	0.26	0.26	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	178	1545		274	2075	646	127	402	390	309	486	418
v/s Ratio Prot	0.03	0.29		c0.15	c0.50		0.05	c0.21		c0.08	0.07	
v/s Ratio Perm						0.10			0.19			0.02
v/c Ratio	0.60	0.96		0.95	1.23	0.25	0.68	0.81	0.72	0.91	0.24	0.06
Uniform Delay, d1	53.5	39.5		48.3	34.1	22.5	52.2	40.0	38.9	52.0	32.2	30.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.6	15.1		41.3	106.8	0.2	13.4	11.2	6.5	28.8	0.3	0.1
Delay (s)	59.1	54.5		89.7	141.0	22.7	65.6	51.2	45.4	80.8	32.5	30.6
Level of Service	E	D		F	F	C	E	D	D	F	C	C
Approach Delay (s)		54.8			127.6			49.8			60.2	
Approach LOS		D			F			D			E	
Intersection Summary												
HCM 2000 Control Delay		90.4			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.07										
Actuated Cycle Length (s)		115.4			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		95.2%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↔	↔
Volume (vph)	0	286	1240	0	156	1617
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	321	1333	0	173	1797
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	321	1333	0	173	1794
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	18
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.38		0.10	c0.64
v/s Ratio Perm						
v/c Ratio		0.12	1.14		0.84	1.17
Uniform Delay, d1		2.5	26.8		34.5	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	74.6		24.3	84.3
Delay (s)		2.5	101.4		58.8	102.3
Level of Service		A	F		E	F
Approach Delay (s)		2.5	101.4		98.4	
Approach LOS		A	F		F	
Intersection Summary						
HCM 2000 Control Delay			91.0		HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio			1.24			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			79.1%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↔	↔				
Volume (vph)	0	443	0	0	429	527	913	1	144	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.96				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3246		1681	1637				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3246		1681	1637				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	509	0	0	466	573	992	1	157	0	0	0
RTOR Reduction (vph)	0	0	0	0	366	0	0	24	0	0	0	0
Lane Group Flow (vph)	0	509	0	0	673	0	585	541	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.8			16.8		21.8	21.8				
Effective Green, g (s)		16.8			16.8		21.8	21.8				
Actuated g/C Ratio		0.36			0.36		0.47	0.47				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1275			1170		786	765				
v/s Ratio Prot		0.14			c0.21							
v/s Ratio Perm							c0.35	0.33				
v/c Ratio		0.40			0.57		0.74	0.71				
Uniform Delay, d1		11.1			12.0		10.1	9.9				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		3.8	3.0				
Delay (s)		11.3			12.7		14.0	12.8				
Level of Service		B			B		B	B				
Approach Delay (s)		11.3			12.7		13.4				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					12.8					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.67							
Actuated Cycle Length (s)					46.6					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					71.8%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰		↰	↰	↰	↰
Volume (veh/h)	0	3	4	66	13	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	92	32	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	134	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	134	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	856	1042	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	97	32			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	1042	1581	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			16.7%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰
Volume (veh/h)	0	4126	17	0	1820	244	0	0	909	0	0	55
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%			0%			0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4298	18	0	1876	252	0	0	1010	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2148			4336			5056	6475	1481	3475	6358	791
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2148			4336			5056	6475	1481	3475	6358	791
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	243			31			0	0	1845	1	0	321
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1719	1719	877	751	751	627	1010	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	252	1010	83				
cSH	1700	1700	1700	1700	1700	1700	1845	321				
Volume to Capacity	1.01	1.01	0.52	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	88	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3	20.1				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.3	20.1				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				145.0%	ICU Level of Service		H					
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3891	130	0	1857	0	201	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	4011	134	0	1934	0	245	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4165		4763	1444	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4165		4763	1444	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			37		1	117	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1605	1605	936	645	645	645	245
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	245
cSH	1700	1700	1700	1700	1700	1700	117
Volume to Capacity	0.94	0.94	0.55	0.38	0.38	0.38	2.09
Queue Length 95th (ft)	0	0	0	0	0	0	512
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	579.7
Lane LOS							F
Approach Delay (s)	0.0			0.0			579.7
Approach LOS							F
Intersection Summary							
Average Delay			22.5				
Intersection Capacity Utilization			99.2%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑↑			↑↑↑	
Volume (vph)	0	0	0	984	635	109	102	252		0	0	861
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4636		1770	3539				3528
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4636		1770	3539				3528
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1036	668	115	105	260	0	0	888	16
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	518	1289	0	105	260	0	0	902	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1432		98	1989			1568	
v/s Ratio Prot				c0.34	0.28		c0.06	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.10	0.98dl		1.07	0.13			0.58	
Uniform Delay, d1				31.1	29.8		42.5	9.3			18.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				72.2	8.1		111.5	0.0			0.5	
Delay (s)				103.3	37.9		154.0	9.3			19.2	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			56.5			51.0			19.2	
Approach LOS		A			E			D			B	
Intersection Summary												
HCM 2000 Control Delay			44.9			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			0.81									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			17.2			
Intersection Capacity Utilization		135.8%				ICU Level of Service			H			
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔↔	
Volume (vph)	7	2111	110	0	0	0	0	354	510	761	1107	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.97	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3103	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3103	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2320	121	0	0	0	0	412	593	793	1153	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2328	92	0	0	0	0	685	285	793	1153	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					941	409	865	2022	
v/s Ratio Prot		c0.46						c0.22		c0.23	0.33	
v/s Ratio Perm			0.06						0.21			
v/c Ratio		1.26	0.16					0.73	0.70	0.92	0.57	
Uniform Delay, d1		55.8	37.8					54.5	53.8	63.7	23.8	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		123.5	0.1					2.8	5.1	14.2	0.4	
Delay (s)		179.3	37.9					57.3	58.9	77.9	24.2	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		172.4		0.0				57.8			46.1	
Approach LOS		F		A				E			D	
Intersection Summary												
HCM 2000 Control Delay		105.5		HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio		0.99										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		135.8%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave













MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔
Volume (vph)	173	12	970	689	0	1240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3273			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3273			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	222	15	1090	774	0	1333
RTOR Reduction (vph)	2	0	61	0	0	0
Lane Group Flow (vph)	235	0	1803	0	0	1333
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	296		2473			2540
v/s Ratio Prot	c0.15		c0.55			0.40
v/s Ratio Perm						
v/c Ratio	0.80		0.73			0.52
Uniform Delay, d1	62.1		10.6			7.9
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	13.7		1.9			0.8
Delay (s)	75.8		12.6			8.7
Level of Service	E		B			A
Approach Delay (s)	75.8		12.6			8.7
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay		15.4		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.76				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		82.3%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2020 Alt 1/2/3













Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	144	10	29	26	10	24	22	1578	49	67	1465	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1725		1770	3523		1770	3489	
Flt Permitted	0.68	0.68	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1205	1207	1583		1458		1770	3523		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	185	13	37	41	16	38	24	1697	53	73	1592	165
RTOR Reduction (vph)	0	0	31	0	22	0	0	1	0	0	2	0
Lane Group Flow (vph)	98	100	6	0	73	0	24	1749	0	73	1755	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	19.1	19.1	19.1		19.1		3.1	72.0		8.0	76.9	
Effective Green, g (s)	19.1	19.1	19.1		19.1		3.1	72.0		8.0	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	202	265		244		48	2227		124	2355	
v/s Ratio Prot							0.01	c0.50		c0.04	0.50	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.49	0.50	0.02		0.30		0.50	0.79		0.59	0.75	
Uniform Delay, d1	42.9	43.0	39.6		41.5		54.6	15.3		51.4	12.1	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.8	1.9	0.0		0.7		8.0	1.9		7.0	1.3	
Delay (s)	44.8	44.9	39.6		42.2		62.6	17.2		58.3	13.4	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		44.0			42.2			17.8			15.2	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		18.8			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		113.9			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		75.3%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: PM PEAK




































Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	7	0	145	0	1383	0	32	1604	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1619			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1619			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	10	0	210	0	1471	0	34	1725	0
RTOR Reduction (vph)	0	0	0	0	171	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	49	0	0	1471	0	34	1725	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			45.3		1.7	51.2	
Effective Green, g (s)					14.1			45.3		1.7	51.2	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					302			2126		39	2403	
v/s Ratio Prot					c0.03			0.42		0.02	c0.49	
v/s Ratio Perm												
v/c Ratio					0.16			0.69		0.87	0.72	
Uniform Delay, d1					25.7			10.3		36.7	7.6	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			1.0		94.3	1.0	
Delay (s)					26.0			11.3		131.1	8.6	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			26.0			11.3			11.0	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					12.1			HCM 2000 Level of Service			B	
HCM 2000 Volume to Capacity ratio					0.69							
Actuated Cycle Length (s)					75.4			Sum of lost time (s)			18.9	
Intersection Capacity Utilization					62.1%			ICU Level of Service			B	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: PM PEAK

																		
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR						
Lane Configurations																		
Volume (vph)	292	50	119	6	69	422	28	686	2	139	1427	66						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900						
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0							
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95							
Frpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00							
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00							
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99							
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00							
Satd. Flow (prot)	1770	1863	1515		1855	1510	1770	3539	1345	1770	3512							
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00							
Satd. Flow (perm)	1770	1863	1515		1855	1510	1770	3539	1345	1770	3512							
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94						
Adj. Flow (vph)	384	66	157	7	75	459	31	754	2	148	1518	70						
RTOR Reduction (vph)	0	0	127	0	0	206	0	0	1	0	2	0						
Lane Group Flow (vph)	384	66	30	0	82	253	31	754	1	148	1586	0						
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20						
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA							
Protected Phases	3	3		4	4		5	2		1	6							
Permitted Phases			3			4			2									
Actuated Green, G (s)	27.7	27.7	27.7		26.0	26.0	4.0	56.4	56.4	17.3	69.7							
Effective Green, g (s)	27.7	27.7	27.7		26.0	26.0	4.0	56.4	56.4	17.3	69.7							
Actuated g/C Ratio	0.19	0.19	0.19		0.18	0.18	0.03	0.38	0.38	0.12	0.47							
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0							
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0							
Lane Grp Cap (vph)	333	351	285		328	267	48	1359	516	208	1667							
v/s Ratio Prot	c0.22	0.04			0.04		0.02	0.21		c0.08	c0.45							
v/s Ratio Perm			0.02			c0.17			0.00									
v/c Ratio	1.15	0.19	0.10		0.25	0.95	0.65	0.55	0.00	0.71	0.95							
Uniform Delay, d1	59.6	50.1	49.3		52.0	59.7	70.7	35.4	27.9	62.3	36.9							
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00							
Incremental Delay, d2	97.6	0.3	0.2		0.4	40.7	26.1	1.6	0.0	10.9	13.2							
Delay (s)	157.2	50.4	49.4		52.4	100.5	96.8	37.0	27.9	73.3	50.1							
Level of Service	F	D	D		D	F	F	D	C	E	D							
Approach Delay (s)		117.7			93.2			39.3			52.1							
Approach LOS		F			F			D			D							
Intersection Summary																		
HCM 2000 Control Delay			66.3		HCM 2000 Level of Service					E								
HCM 2000 Volume to Capacity ratio			1.00															
Actuated Cycle Length (s)			146.8		Sum of lost time (s)					19.4								
Intersection Capacity Utilization			81.0%		ICU Level of Service					D								
Analysis Period (min)			15															
c Critical Lane Group																		

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	318	496	3	49	180	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	353	551	4	69	205	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	451	39			73	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	451	39			73	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	28	47			87	
cM capacity (veh/h)	490	1033			1527	
Direction, Lane #						
Volume Total	904	73	208			
Volume Left	353	0	205			
Volume Right	551	69	0			
cSH	988	1700	1527			
Volume to Capacity	0.92	0.04	0.13			
Queue Length 95th (ft)	348	0	12			
Control Delay (s)	32.8	0.0	7.6			
Lane LOS	D		A			
Approach Delay (s)	32.8	0.0	7.6			
Approach LOS	D					
Intersection Summary						
Average Delay		26.4				
Intersection Capacity Utilization		41.1%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	321	6	722	52	0	1554
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	406	8	802	58	0	1746
RTOR Reduction (vph)	1	0	0	33	0	0
Lane Group Flow (vph)	413	0	802	25	0	1746
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.23		0.23			c0.49
v/s Ratio Perm				0.02		
v/c Ratio	0.49		0.53	0.04		1.15
Uniform Delay, d1	18.8		22.1	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.5		0.3	0.0		75.1
Delay (s)	19.3		22.4	17.4		105.0
Level of Service	B		C	B		F
Approach Delay (s)	19.3		22.1			105.0
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay		69.6		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		0.80				
Actuated Cycle Length (s)		105.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		92.9%		ICU Level of Service		F
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (veh/h)	4	6	579	3	15	1493
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	673	3	16	1641
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1528	338			677	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1528	338			677	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	98			98	
cM capacity (veh/h)	106	657			911	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	20	449	228	16	820	820
Volume Left	8	0	0	16	0	0
Volume Right	12	0	3	0	0	0
cSH	213	1700	1700	911	1700	1700
Volume to Capacity	0.09	0.26	0.13	0.02	0.48	0.48
Queue Length 95th (ft)	8	0	0	1	0	0
Control Delay (s)	23.6	0.0	0.0	9.0	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	23.6	0.0		0.1		
Approach LOS	C					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			51.3%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	30	56	525	12	102	1395
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	33	61	597	14	112	1533
RTOR Reduction (vph)	0	45	0	8	0	0
Lane Group Flow (vph)	33	16	597	6	112	1533
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.3	21.5	27.9	27.9	7.1	43.8
Effective Green, g (s)	9.3	16.4	27.9	27.9	7.1	43.8
Actuated g/C Ratio	0.15	0.26	0.45	0.45	0.11	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	263	416	1582	707	201	2484
v/s Ratio Prot	c0.02	0.01	0.17		0.06	c0.43
v/s Ratio Perm				0.00		
v/c Ratio	0.13	0.04	0.38	0.01	0.56	0.62
Uniform Delay, d1	23.0	17.1	11.5	9.6	26.2	4.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.2	0.0	3.3	0.5
Delay (s)	23.2	17.2	11.6	9.6	29.5	5.4
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.3		11.6			7.0
Approach LOS	B		B			A

Intersection Summary

HCM 2000 Control Delay	8.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	62.4	Sum of lost time (s)	18.1
Intersection Capacity Utilization	50.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↕	↕			↕
Volume (veh/h)	0	22	516	18	0	1425
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	29	593	21	0	1549
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1378	307			614	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1378	307			614	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	136	689			962	







Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	29	395	218	774	774
Volume Left	0	0	0	0	0
Volume Right	29	0	21	0	0
cSH	689	1700	1700	1700	1700
Volume to Capacity	0.04	0.23	0.13	0.46	0.46
Queue Length 95th (ft)	3	0	0	0	0
Control Delay (s)	10.5	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.5	0.0		0.0	
Approach LOS	B				

Intersection Summary

Average Delay	0.1				
Intersection Capacity Utilization	42.7%		ICU Level of Service	A	
Analysis Period (min)	15				





NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	30	26	509	18	22	1401
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	42	36	541	19	24	1540
RTOR Reduction (vph)	0	33	0	8	0	0
Lane Group Flow (vph)	42	3	541	11	24	1540
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	27.6	27.6	1.7	36.8
Effective Green, g (s)	2.6	4.3	27.6	27.6	1.7	36.8
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	147	2123	949	65	2831
v/s Ratio Prot	c0.02	0.00	0.15		0.01	c0.44
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.42	0.02	0.25	0.01	0.37	0.54
Uniform Delay, d1	21.0	18.9	4.3	3.7	21.6	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.8	0.1	0.1	0.0	3.5	0.2
Delay (s)	23.8	19.0	4.4	3.7	25.1	1.8
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.6		4.4			2.2
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.4		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.66			
Actuated Cycle Length (s)			46.0		Sum of lost time (s)	14.1
Intersection Capacity Utilization			49.6%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	11	14	84	7	0	178	13	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	11	15	109	9	0	200	15	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	11	15	118	215						
Volume Left (vph)	0	0	109	0						
Volume Right (vph)	0	15	0	15						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.19						
Capacity (veh/h)	872	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑		↰	↑	↰	↰	↑	↰			
Volume (vph)	10	184	0	0	81	137	12	431	68	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1298	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	11	209	0	0	93	157	13	474	75	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	124	0	41	0	0	0	0
Lane Group Flow (vph)	11	209	0	0	93	33	13	474	34	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.4	18.4	18.4			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.4	18.4	18.4			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	271	389			389	330	810	1619	724			
v/s Ratio Prot		c0.11			0.05		0.01	c0.13				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.54			0.24	0.10	0.02	0.29	0.05			
Uniform Delay, d1	12.7	14.2			13.2	12.8	6.0	6.8	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.4			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.7	15.6			13.6	13.0	6.0	6.9	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.5			13.2		6.8			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.2			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.37										
Actuated Cycle Length (s)		40.2			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		40.6%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: PM PEAK





















Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↰	↰	↑	↰	↰	↰
Volume (veh/h)	111	770	51	463	0	1540	28
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	444	3080	58	526	0	1711	31
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2106	871	1742		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2106	871	1742		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	0	84		0		
cM capacity (veh/h)	37	294	357		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	3524	58	263	263	1141	601	0
Volume Left	444	58	0	0	0	0	0
Volume Right	3080	0	0	0	0	31	0
cSH	157	357	1700	1700	1700	1700	1700
Volume to Capacity	22.47	0.16	0.15	0.15	0.67	0.35	0.00
Queue Length 95th (ft)	Err	14	0	0	0	0	0
Control Delay (s)	Err	17.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C					
Approach Delay (s)	Err	1.7			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay		6023.2					
Intersection Capacity Utilization		103.8%			ICU Level of Service		
Analysis Period (min)		15					G

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: PM PEAK









												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	87	0	67	1	1	0	72	371	12	1	1865	194
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3523		1770	3489	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3523		1770	3489	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	116	0	89	2	2	0	79	408	13	1	2072	216
RTOR Reduction (vph)	0	71	0	0	0	0	0	1	0	0	6	0
Lane Group Flow (vph)	116	18	0	2	2	0	79	420	0	1	2282	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	18.0	18.0		0.8	0.8		5.8	52.3		0.8	47.3	
Effective Green, g (s)	18.0	18.0		0.8	0.8		5.8	52.3		0.8	47.3	
Actuated g/C Ratio	0.20	0.20		0.01	0.01		0.06	0.58		0.01	0.52	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	350	313		15	16		113	2029		15	1817	
v/s Ratio Prot	c0.07	0.01		c0.00	0.00		c0.04	0.12		0.00	c0.65	
v/s Ratio Perm												
v/c Ratio	0.33	0.06		0.13	0.12		0.70	0.21		0.07	1.26	
Uniform Delay, d1	31.2	29.5		44.7	44.7		41.6	9.3		44.6	21.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.1		4.0	3.5		17.2	0.1		1.9	119.9	
Delay (s)	31.8	29.6		48.7	48.2		58.9	9.3		46.5	141.6	
Level of Service	C	C		D	D		E	A		D	F	
Approach Delay (s)		30.8			48.4			17.1			141.6	
Approach LOS		C			D			B			F	
Intersection Summary												
HCM 2000 Control Delay	113.1			HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio	0.97											
Actuated Cycle Length (s)	90.8			Sum of lost time (s)				18.9				
Intersection Capacity Utilization	79.7%			ICU Level of Service				D				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	56	1818	60	0	407	34	14	39	4	23	26	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	1.00			0.99		1.00	0.99			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5061			5027		1770	1836			1760	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.17	
Satd. Flow (perm)	1770	5061			5027		1311	1836			299	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	64	2066	68	0	433	36	20	56	6	27	31	24
RTOR Reduction (vph)	0	2	0	0	5	0	0	2	0	0	8	0
Lane Group Flow (vph)	64	2132	0	0	464	0	20	60	0	0	74	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1914			2041		254	357			49	
v/s Ratio Prot	c0.04	c0.42			c0.09			c0.03				
v/s Ratio Perm							0.02				c0.25	
v/c Ratio	0.33	1.11			0.23		0.08	0.17			1.50	
Uniform Delay, d1	73.8	56.0			35.0		59.3	60.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	59.2			0.3		0.1	0.2			307.4	
Delay (s)	74.8	115.2			35.2		59.4	60.6			382.4	
Level of Service	E	F			D		E	E			F	
Approach Delay (s)		114.0			35.2			60.3			382.4	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay	107.2			HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio	0.84											
Actuated Cycle Length (s)	180.0			Sum of lost time (s)				22.3				
Intersection Capacity Utilization	74.9%			ICU Level of Service				D				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←
Volume (vph)	0	1848	0	497	444	37	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3499							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3499							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	2076	0	529	472	39	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	2076	0	529	511	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3180							609
v/s Ratio Prot		c0.41		c0.15	c0.15							
v/s Ratio Perm												0.00
v/c Ratio		1.08		0.28	0.16							0.00
Uniform Delay, d1		56.0		20.6	0.9							34.8
Progression Factor		0.35		1.00	1.00							1.00
Incremental Delay, d2		36.9		0.1	0.0							0.0
Delay (s)		56.4		20.7	0.9							34.9
Level of Service		E		C	A							C
Approach Delay (s)		56.4			11.0		0.0				34.9	
Approach LOS		E			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		41.2				HCM 2000 Level of Service		D				
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		59.1%				ICU Level of Service		B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		←←			←←			←←			←←	
Volume (veh/h)	3	214	0	0	309	40	0	0	0	104	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	249	0	0	351	45	0	0	0	158	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	397			249			642	652	249	630	630	374
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	397			249			642	652	249	630	630	374
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	60	100	98
cM capacity (veh/h)	1162			1317			379	386	790	394	398	672
Direction, Lane #												
Volume Total	252	397	0	170								
Volume Left	3	0	0	158								
Volume Right	0	45	0	12								
cSH	1162	1317	1700	406								
Volume to Capacity	0.00	0.00	0.00	0.42								
Queue Length 95th (ft)	0	0	0	51								
Control Delay (s)	0.1	0.0	0.0	20.1								
Lane LOS	A			A			C					
Approach Delay (s)	0.1	0.0	0.0	20.1								
Approach LOS				A			C					
Intersection Summary												
Average Delay		4.2										
Intersection Capacity Utilization		31.6%				ICU Level of Service		A				
Analysis Period (min)		15										

NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱			↰	↱		↰	↱
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	295	12	85	323	24	14	38	68	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	378	15	96	363	27	25	67	119	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	394	96	390	211	161						
Volume Left (vph)	9	0	96	0	25	61						
Volume Right (vph)	0	15	0	27	119	28						
Hadj (s)	0.53	0.01	0.53	-0.01	-0.28	0.00						
Departure Headway (s)	7.2	6.7	7.1	6.6	6.6	7.1						
Degree Utilization, x	0.02	0.73	0.19	0.71	0.39	0.32						
Capacity (veh/h)	470	518	483	528	477	434						
Control Delay (s)	9.2	24.5	10.6	22.9	13.8	13.3						
Approach Delay (s)	24.2		20.4		13.8	13.3						
Approach LOS	C		C		B	B						
Intersection Summary												
Delay			19.6									
Level of Service			C									
Intersection Capacity Utilization			41.5%		ICU Level of Service		A					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱
Volume (veh/h)	74	423	456	39	52	143
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	76	436	530	45	61	168
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	576				1142	288
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	576				1142	288
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	92				66	76
cM capacity (veh/h)	994				179	709
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	76	436	353	222	229	
Volume Left	76	0	0	0	61	
Volume Right	0	0	0	45	168	
cSH	994	1700	1700	1700	396	
Volume to Capacity	0.08	0.26	0.21	0.13	0.58	
Queue Length 95th (ft)	6	0	0	0	88	
Control Delay (s)	8.9	0.0	0.0	0.0	25.8	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		25.8	
Approach LOS					D	
Intersection Summary						
Average Delay			5.0			
Intersection Capacity Utilization			40.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	28	432	29	31	458	3	54	20	22	12	43	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3536			1755			1843	1583
Flt Permitted	0.47	1.00		0.45	1.00			0.78			0.90	1.00
Satd. Flow (perm)	868	3505		832	3536			1416			1678	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	514	35	34	503	3	66	24	27	16	57	39
RTOR Reduction (vph)	0	7	0	0	1	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	542	0	34	505	0	0	96	0	0	73	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Effective Green, g (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	413	1671		396	1686			309			366	345
v/s Ratio Prot		c0.15			0.14							
v/s Ratio Perm	0.04			0.04				c0.07			0.04	0.01
v/c Ratio	0.08	0.32		0.09	0.30			0.31			0.20	0.02
Uniform Delay, d1	4.3	4.9		4.3	4.8			9.9			9.6	9.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.6			0.3	0.0
Delay (s)	4.4	5.0		4.4	4.9			10.5			9.9	9.3
Level of Service	A	A		A	A			B			A	A
Approach Delay (s)		5.0			4.9			10.5			9.7	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		30.2			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		44.7%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↰			↰	↰
Volume (veh/h)	1043	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1272	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			1282		1272	1272
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1282		1272	1272
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		95	99
cM capacity (veh/h)			541		185	205
Direction, Lane #						
Volume Total	1272	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	190			
Volume to Capacity	0.75	0.01	0.06			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.0	0.0	25.3			
Lane LOS			D			
Approach Delay (s)	0.0		25.3			
Approach LOS			D			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			64.9%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	41	2141	126	58	827	131	98	90	62	173	79	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Flt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5043		1770	4981			3342			3386	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5043		1770	4981			3342			3386	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	44	2278	134	59	835	132	108	99	68	194	89	28
RTOR Reduction (vph)	0	3	0	0	11	0	0	18	0	0	4	0
Lane Group Flow (vph)	44	2409	0	59	956	0	0	257	0	0	307	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2120		157	1984			649			658	
v/s Ratio Prot	0.02	c0.48		c0.03	0.19			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.22	1.14		0.38	0.48			0.40			0.47	
Uniform Delay, d1	72.9	52.1		77.3	40.3			63.3			64.2	
Progression Factor	1.00	1.00		1.24	0.76			1.00			1.00	
Incremental Delay, d2	0.6	67.7		1.4	0.8			0.4			0.5	
Delay (s)	73.5	119.8		97.0	31.6			63.7			64.8	
Level of Service	E	F		F	C			E			E	
Approach Delay (s)		119.0			35.3			63.7			64.8	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		90.0			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		118.3%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	20	2424	57	48	1233	55	21	11	35	63	13	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5068		1770	5053			1704		1770	1719	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.62	1.00	
Satd. Flow (perm)	1770	5068		1770	5053			1554		1155	1719	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2473	58	49	1271	57	25	13	42	74	15	16
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	14	0
Lane Group Flow (vph)	20	2530	0	49	1326	0	0	57	0	74	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Effective Green, g (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3567		157	3669			190		141	211	
v/s Ratio Prot	0.01	c0.50		c0.03	c0.26						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.71		0.31	0.36			0.30		0.52	0.08	
Uniform Delay, d1	79.3	15.8		76.8	9.2			71.9		74.0	69.9	
Progression Factor	1.46	0.30		1.56	0.29			1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		0.9	0.2			0.9		3.5	0.2	
Delay (s)	115.5	4.8		121.2	2.9			72.8		77.5	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		5.7			7.1			72.8			75.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		9.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		67.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰	↰↰	
Volume (vph)	26	2141	200	157	1306	81	130	40	127	154	44	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5020		1770	5085	1583		1794	1583		3371	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5020		1770	5085	1583		1794	1583		3371	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	28	2278	213	162	1346	84	141	43	138	208	59	27
RTOR Reduction (vph)	0	6	0	0	0	37	0	0	114	0	4	0
Lane Group Flow (vph)	28	2485	0	162	1346	47	0	184	24	0	290	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2			4				
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2222		192	2364	736		305	269		574	
v/s Ratio Prot	0.02	c0.49		c0.09	c0.26			c0.10			c0.09	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.18	1.12		0.84	0.57	0.06		0.60	0.09		0.50	
Uniform Delay, d1	75.9	50.1		78.7	35.0	26.6		69.0	62.9		67.8	
Progression Factor	0.96	1.00		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.4	58.2		27.2	1.0	0.2		8.6	0.6		3.2	
Delay (s)	73.1	108.1		105.9	36.0	26.7		77.6	63.5		70.9	
Level of Service	E	F		F	D	C		E	E		E	
Approach Delay (s)		107.7			42.7			71.5			70.9	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		81.1			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		0.86										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		109.7%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰	↰	↰	↰↰	
Volume (vph)	9	2432	50	171	1606	16	39	8	81	23	11	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1770	5070		1770	5078			1678			1756	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.84	
Satd. Flow (perm)	1770	5070		1770	5078			1510			1516	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	10	2702	56	180	1691	17	46	9	95	28	14	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	76	0	0	11	0
Lane Group Flow (vph)	10	2756	0	180	1707	0	0	74	0	0	45	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4				4	
Actuated Green, G (s)	0.8	40.4		11.2	50.8			17.3			17.3	
Effective Green, g (s)	0.8	40.4		11.2	50.8			17.3			17.3	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2421		234	3049			308			310	
v/s Ratio Prot	0.01	c0.54		c0.10	0.34							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.62	1.14		0.77	0.56			0.24			0.14	
Uniform Delay, d1	41.8	22.1		35.5	10.2			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	57.6	68.0		14.1	0.2			0.4			0.2	
Delay (s)	99.3	90.1		49.5	10.4			28.6			27.8	
Level of Service	F	F		D	B			C			C	
Approach Delay (s)		90.1			14.1			28.6			27.8	
Approach LOS		F			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		58.0			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		84.6			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		78.9%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	190	2371	27	330	1613	558	66	178	536	591	240	229
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5077		1770	5085	1583	1770	1631	1504	3433	1746	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5077		1770	5085	1583	1770	1631	1504	3433	1746	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	200	2496	28	355	1734	600	70	189	570	642	261	249
RTOR Reduction (vph)	0	1	0	0	0	87	0	26	275	0	2	129
Lane Group Flow (vph)	200	2523	0	355	1734	513	70	368	90	642	284	95
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.4	36.4		45.0	70.0	70.0	8.6	37.5	37.5	11.8	40.7	40.7
Effective Green, g (s)	11.4	36.4		45.0	70.0	70.0	8.6	37.5	37.5	11.8	40.7	40.7
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	256	1211		521	2332	726	99	400	369	265	465	401
v/s Ratio Prot	0.06	c0.50		c0.20	c0.34		0.04	c0.23		c0.19	c0.16	
v/s Ratio Perm						0.32			0.06			0.06
v/c Ratio	0.78	2.08		0.68	0.74	0.71	0.92	0.24	2.42	0.61	0.24	
Uniform Delay, d1	69.4	58.1		47.5	33.9	33.1	70.8	56.1	46.2	70.4	49.0	43.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.3	490.5		3.7	1.3	3.2	20.5	26.3	0.3	651.6	2.4	0.3
Delay (s)	83.7	548.6		51.1	35.2	36.2	91.3	82.4	46.5	722.0	51.4	44.1
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		514.4			37.6			67.3			423.7	
Approach LOS		F			D			E			F	

Intersection Summary

HCM 2000 Control Delay	276.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.31		
Actuated Cycle Length (s)	152.6	Sum of lost time (s)	21.9
Intersection Capacity Utilization	133.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2020 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Volume (vph)	0	511	864	0	442	1645
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	574	919	0	486	1808
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	0	574	919	0	486	1804
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.16	c0.26		0.27	c0.65
v/s Ratio Perm						
v/c Ratio		0.32	1.07		0.73	1.02
Uniform Delay, d1		11.7	30.3		21.5	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	51.6		4.2	25.4
Delay (s)		11.8	81.9		25.7	39.9
Level of Service		B	F		C	D
Approach Delay (s)		11.8	81.9		36.9	
Approach LOS		B	F		D	

Intersection Summary

HCM 2000 Control Delay	44.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	86.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	947	0	0	531	252	441	2	107	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1616				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1616				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	986	0	0	597	283	474	2	115	0	0	0
RTOR Reduction (vph)	0	0	0	0	99	0	0	35	0	0	0	0
Lane Group Flow (vph)	0	986	0	0	781	0	303	253	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases							2					
Actuated Green, G (s)		19.3			19.3		14.6	14.6				
Effective Green, g (s)		19.3			19.3		14.6	14.6				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)	1630			1551			585	563				
v/s Ratio Prot	c0.28			0.23								
v/s Ratio Perm							c0.18	0.16				
v/c Ratio	0.60			0.50			0.52	0.45				
Uniform Delay, d1	8.4			7.9			10.9	10.5				
Progression Factor	1.00			1.00			1.00	1.00				
Incremental Delay, d2	0.6			0.3			0.8	0.6				
Delay (s)	9.1			8.2			11.6	11.1				
Level of Service	A			A			B	B				
Approach Delay (s)	9.1			8.2			11.4			0.0		
Approach LOS	A			A			B			A		
Intersection Summary												
HCM 2000 Control Delay		9.3				HCM 2000 Level of Service		A				
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		41.9				Sum of lost time (s)		8.0				
Intersection Capacity Utilization		48.4%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2020 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	3	36	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	3	52	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	73	52	52			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	73	52	52			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	926	1015	1554			
Direction, Lane #						
Volume Total	16	12	52			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	1015	1554	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.3	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.3	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.5				
Intersection Capacity Utilization		17.2%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St















MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1412	34	0	3904	553	0	0	477	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1701	41	0	4243	601	0	0	596	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4865			1762			3188	6606	628	5151	6326	1755
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4865			1762			3188	6606	628	5151	6326	1755
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	83
cM capacity (veh/h)	19			345			3	0	1357	0	0	72
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	680	680	381	1697	1697	1450	596	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	601	596	12				
cSH	1700	1700	1700	1700	1700	1700	1357	72				
Volume to Capacity	0.40	0.40	0.22	1.00	1.00	0.85	0.44	0.17				
Queue Length 95th (ft)	0	0	0	0	0	0	57	14				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	64.9				
Lane LOS							A	F				
Approach Delay (s)	0.0				0.0			9.7	64.9			
Approach LOS							A	F				
Intersection Summary												
Average Delay	0.9											
Intersection Capacity Utilization	102.9%			ICU Level of Service				G				
Analysis Period (min)	15											

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	  			  		  	
Volume (veh/h)	1273	202	0	3804	0	232	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1447	230	0	4227	0	252	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1696		3010	637	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1696		3010	637	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	38	
cM capacity (veh/h)			366		10	406	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	579	579	519	1409	1409	1409	252
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	230	0	0	0	252
cSH	1700	1700	1700	1700	1700	1700	406
Volume to Capacity	0.34	0.34	0.31	0.83	0.83	0.83	0.62
Queue Length 95th (ft)	0	0	0	0	0	0	101
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.3
Lane LOS							D
Approach Delay (s)	0.0			0.0			27.3
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			88.4%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1666	1946	343	107	102	0	0	278	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flt Protected				1.00	0.98		1.00	1.00			0.99	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4638		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4638		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1791	2092	369	145	138	0	0	320	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1057	3187	0	145	138	0	0	332	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3211		186	872			397	
v/s Ratio Prot				c0.69	0.69		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				1.00	0.99		0.78	0.16			0.84	
Uniform Delay, d1				29.2	28.7		82.6	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				28.7	14.1		18.4	0.1			14.2	
Delay (s)				57.8	42.8		101.0	56.1			96.5	
Level of Service				E	D		F	E			F	
Approach Delay (s)		0.0			46.5			79.1			96.5	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay				51.8			HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio				0.96								
Actuated Cycle Length (s)				189.5			Sum of lost time (s)			16.8		
Intersection Capacity Utilization				201.0%			ICU Level of Service			H		
Analysis Period (min)				15								
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	584	86	0	0	0	0	199	211	451	1549	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Flt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3251	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3251	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	635	93	0	0	0	0	231	229	490	1614	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	20	48	0	0	0
Lane Group Flow (vph)	0	636	64	0	0	0	0	298	94	490	1614	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.6	62.6	35.2	100.6	
Effective Green, g (s)		60.0	60.0					62.6	62.6	35.2	100.6	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.20	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1771	551					1181	523	701	2067	
v/s Ratio Prot								0.09		0.14	c0.46	
v/s Ratio Perm		0.13	0.04						0.06			
v/c Ratio		0.36	0.12					0.25	0.18	0.70	0.78	
Uniform Delay, d1		41.8	38.1					38.4	37.3	63.6	27.4	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.1	2.0	
Delay (s)		41.9	38.2					38.5	37.5	66.6	29.4	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.4			0.0			38.2			38.0	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.8					HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		172.2					Sum of lost time (s)			14.4		
Intersection Capacity Utilization		201.0%					ICU Level of Service			H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	219	6	1169	608	0	1254
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3316			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3316			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	255	7	1257	654	0	1320
RTOR Reduction (vph)	1	0	54	0	0	0
Lane Group Flow (vph)	261	0	1857	0	0	1320
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	18.8		44.5			44.5
Effective Green, g (s)	18.8		44.5			44.5
Actuated g/C Ratio	0.26		0.61			0.61
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	413		2038			2066
v/s Ratio Prot	c0.16		c0.56			0.39
v/s Ratio Perm						
v/c Ratio	0.63		0.91			0.64
Uniform Delay, d1	23.7		12.2			8.9
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	3.1		6.7			0.7
Delay (s)	26.9		18.9			9.5
Level of Service	C		B			A
Approach Delay (s)	26.9		18.9			9.5
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			15.9		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.87			
Actuated Cycle Length (s)			72.4		Sum of lost time (s)	12.1
Intersection Capacity Utilization			78.2%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↕	↕	↕	↔	↔	↔
Volume (vph)	47	2	10	8	0	5	19	1385	26	40	1397	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1713		1770	3529		1770	3526	
Frt Permitted	0.74	0.78	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1310	1377	1583		1513		1770	3529		1770	3526	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	55	2	12	16	0	10	23	1649	31	43	1518	39
RTOR Reduction (vph)	0	0	10	0	22	0	0	1	0	0	1	0
Lane Group Flow (vph)	29	28	2	0	4	0	23	1679	0	43	1556	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.4	15.4	15.4		15.4		2.7	64.7		4.0	66.0	
Effective Green, g (s)	15.4	15.4	15.4		15.4		2.7	64.7		4.0	66.0	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	205	215	248		237		48	2325		72	2369	
v/s Ratio Prot							0.01	c0.48		c0.02	0.44	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.14	0.13	0.01		0.02		0.48	0.72		0.60	0.66	
Uniform Delay, d1	35.7	35.6	34.9		35.0		47.1	10.9		46.3	9.5	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		7.4	1.1		12.6	0.7	
Delay (s)	36.0	35.9	35.0		35.0		54.4	12.0		58.9	10.1	
Level of Service	D	D	C		D		D	B		E	B	
Approach Delay (s)		35.8			35.0			12.6			11.4	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.7		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.61									
Actuated Cycle Length (s)			98.2		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			60.2%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	23	0	1329	8	431	957	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	35	0	1460	9	440	977	0
RTOR Reduction (vph)	0	0	0	0	32	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1460	4	440	977	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.41		c0.25	0.28	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.88	0.01	0.72	0.33	
Uniform Delay, d1					60.6			34.7	20.4	41.4	2.5	
Progression Factor					1.00			0.36	1.00	1.00	1.00	
Incremental Delay, d2					0.1			4.5	0.0	4.2	0.3	
Delay (s)					60.6			17.1	20.5	45.6	2.7	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			17.1			16.1	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.1			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		82.0%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	31	50	14	1	65	130	138	1166	5	294	389	314
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3258	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3258	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	48	77	22	1	74	148	153	1296	6	338	447	361
RTOR Reduction (vph)	0	0	20	0	0	125	0	0	3	0	101	0
Lane Group Flow (vph)	48	77	2	0	75	23	153	1296	3	338	707	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1069	
v/s Ratio Prot	0.03	c0.04			c0.04		0.09	c0.37		c0.19	0.22	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.39	0.60	0.02		0.25	0.10	0.28	0.82	0.00	0.99	0.66	
Uniform Delay, d1	64.6	65.6	62.9		53.5	52.1	37.7	35.2	22.3	58.4	41.8	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.93	
Incremental Delay, d2	2.1	7.7	0.1		0.5	0.2	0.3	5.0	0.0	45.6	3.1	
Delay (s)	66.7	73.3	63.0		53.9	52.3	38.0	40.2	22.3	101.5	41.9	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		69.6			52.9			39.9			59.5	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		49.9			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		87.7%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑	↘	↙	↓
Volume (veh/h)	41	200	4	90	329	9
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	48	235	5	112	358	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	786	61			118	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	786	61			118	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	82	77			76	
cM capacity (veh/h)	273	1004			1471	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	284	118	367			
Volume Left	48	0	358			
Volume Right	235	112	0			
cSH	1210	1700	1471			
Volume to Capacity	0.23	0.07	0.24			
Queue Length 95th (ft)	23	0	24			
Control Delay (s)	11.6	0.0	8.1			
Lane LOS	B		A			
Approach Delay (s)	11.6	0.0	8.1			
Approach LOS	B					
Intersection Summary						
Average Delay		8.1				
Intersection Capacity Utilization		35.4%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑	↘	↙	↓
Volume (vph)	44	3	1322	415	0	365
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1753		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1753		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	59	4	1392	437	0	570
RTOR Reduction (vph)	4	0	0	132	0	0
Lane Group Flow (vph)	59	0	1392	305	0	570
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		29.7	29.7		29.7
Effective Green, g (s)	3.0		29.7	29.7		29.7
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	123		2467	1059		2467
v/s Ratio Prot	c0.03		c0.39			0.16
v/s Ratio Perm				0.20		
v/c Ratio	0.48		0.56	0.29		0.23
Uniform Delay, d1	19.1		3.2	2.4		2.3
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	3.0		0.3	0.2		0.0
Delay (s)	22.0		3.5	2.6		2.4
Level of Service	C		A	A		A
Approach Delay (s)	22.0		3.3			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.6		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.56				
Actuated Cycle Length (s)		42.6		Sum of lost time (s)		9.9
Intersection Capacity Utilization		49.0%		ICU Level of Service		A
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↑↑
Volume (veh/h)	0	15	2152	5	5	410
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2314	5	7	603
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2633	1160			2319	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2633	1160			2319	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			97	
cM capacity (veh/h)	18	189			212	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1543	777	7	301	301
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	189	1700	1700	212	1700	1700
Volume to Capacity	0.14	0.91	0.46	0.03	0.18	0.18
Queue Length 95th (ft)	12	0	0	3	0	0
Control Delay (s)	27.1	0.0	0.0	22.6	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	27.1	0.0		0.3		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			69.6%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	17	87	2065	12	38	371
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	107	2220	13	55	538
RTOR Reduction (vph)	0	4	0	1	0	0
Lane Group Flow (vph)	21	103	2220	12	55	538
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.8	25.9	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.8	20.8	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	261	307	2253	1008	82	2709
v/s Ratio Prot	0.01	c0.07	c0.63		c0.03	0.15
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.34	0.99	0.01	0.67	0.20
Uniform Delay, d1	39.4	37.2	19.0	7.1	50.2	3.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	15.5	0.0	19.4	0.0
Delay (s)	39.5	37.8	34.5	7.1	69.7	3.5
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.1		34.3			9.6
Approach LOS	D		C			A
Intersection Summary						
HCM 2000 Control Delay			29.5		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.85			
Actuated Cycle Length (s)			107.1		Sum of lost time (s)	18.1
Intersection Capacity Utilization			73.3%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: AM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement						
Lane Configurations		↑↑	↑↑↑			↑↑↑
Volume (veh/h)	0	32	2043	26	0	387
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	52	2151	27	0	523
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2426	1089			2178	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2426	1089			2178	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	75			100	
cM capacity (veh/h)	27	211			241	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	52	1434	744	261	261	
Volume Left	0	0	0	0	0	
Volume Right	52	0	27	0	0	
cSH	211	1700	1700	1700	1700	
Volume to Capacity	0.25	0.84	0.44	0.15	0.15	
Queue Length 95th (ft)	23	0	0	0	0	
Control Delay (s)	27.6	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	27.6	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			67.3%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: AM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement						
Lane Configurations		↑↑	↑↑↑	↑↑	↑↑	↑↑↑
Volume (vph)	10	6	2069	32	15	364
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	16	10	2155	33	19	449
RTOR Reduction (vph)	0	4	0	7	0	0
Lane Group Flow (vph)	16	6	2155	26	19	449
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.7	59.7	2.0	69.2
Effective Green, g (s)	1.4	3.4	59.7	59.7	2.0	69.2
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2736	1224	45	3172
v/s Ratio Prot	c0.01	0.00	c0.61		c0.01	0.13
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.50	0.09	0.79	0.02	0.42	0.14
Uniform Delay, d1	37.6	35.4	5.1	2.0	37.0	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.8	0.6	1.6	0.0	6.3	0.0
Delay (s)	49.3	36.0	6.6	2.0	43.3	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	44.2		6.6			2.2
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay			6.2		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.77			
Actuated Cycle Length (s)			77.2		Sum of lost time (s)	14.1
Intersection Capacity Utilization			70.0%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	45	1	0	44	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	83	2	0	70	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	85	70	3					
Volume Left (vph)	0	0	83	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	833	1121	815	841	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.2%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: AM PEAK















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	36	0	0	32	226	3	1873	50	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1357	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	48	0	0	44	314	3	1993	53	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	22	0	0	0	0
Lane Group Flow (vph)	3	48	0	0	44	258	3	1993	31	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.5	16.5			16.5	16.5	47.7	43.6	43.6			
Effective Green, g (s)	16.5	16.5			16.5	16.5	47.7	43.6	43.6			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	304	418			418	355	1148	2099	939			
v/s Ratio Prot		0.03			0.02		0.00	c0.56				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.11			0.11	0.73	0.00	0.95	0.03			
Uniform Delay, d1	22.2	22.7			22.6	26.4	4.5	13.9	6.2			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	7.2	0.0	10.1	0.0			
Delay (s)	22.2	22.8			22.7	33.7	4.5	24.0	6.2			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.8			32.3			23.5			0.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay		24.8						HCM 2000 Level of Service			C	
HCM 2000 Volume to Capacity ratio		0.89										
Actuated Cycle Length (s)		73.5				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		85.4%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: AM PEAK

























							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	17	32	735	1655	0	180	153
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	68	128	766	1724	0	228	194
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None			None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2718	211	422		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2718	211	422		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	84	32		0		
cM capacity (veh/h)	5	795	1134		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	196	766	862	862	152	270	0
Volume Left	68	766	0	0	0	0	0
Volume Right	128	0	0	0	0	194	0
cSH	15	1134	1700	1700	1700	1700	1700
Volume to Capacity	12.68	0.68	0.51	0.51	0.09	0.16	0.00
Queue Length 95th (ft)	Err	139	0	0	0	0	0
Control Delay (s)	Err	14.5	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B					
Approach Delay (s)	Err	4.5			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay		634.3					
Intersection Capacity Utilization		63.9%		ICU Level of Service		B	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	397	0	39	2	1	2	26	2265	0	0	164	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3427	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3427	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	451	0	44	6	3	6	27	2384	0	0	238	64
RTOR Reduction (vph)	0	31	0	0	6	0	0	0	0	0	21	0
Lane Group Flow (vph)	451	13	0	6	3	0	27	2384	0	0	281	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	25.8	25.8		1.7	1.7		1.9	43.5			37.4	
Effective Green, g (s)	25.8	25.8		1.7	1.7		1.9	43.5			37.4	
Actuated g/C Ratio	0.30	0.30		0.02	0.02		0.02	0.51			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	532	476		35	33		39	1796			1495	
v/s Ratio Prot	c0.25	0.01		c0.00	0.00		0.02	c0.67			0.08	
v/s Ratio Perm												
v/c Ratio	0.85	0.03		0.17	0.09		0.69	1.33			0.19	
Uniform Delay, d1	28.1	21.1		41.3	41.2		41.6	21.1			14.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	11.9	0.0		2.3	1.2		41.8	151.3			0.1	
Delay (s)	40.0	21.1		43.6	42.5		83.4	172.4			14.9	
Level of Service	D	C		D	D		F	F			B	
Approach Delay (s)		38.4			42.9			171.4			14.9	
Approach LOS		D			D			F			B	
Intersection Summary												
HCM 2000 Control Delay		135.7					HCM 2000 Level of Service			F		
HCM 2000 Volume to Capacity ratio		1.20										
Actuated Cycle Length (s)		85.7				Sum of lost time (s)		18.9				
Intersection Capacity Utilization		99.7%				ICU Level of Service		F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	8	214	14	0	2119	17	42	23	1	19	41	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5038			5079		1770	1853			1732	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.19	
Satd. Flow (perm)	1770	5038			5079		1239	1853			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	
Adj. Flow (vph)	9	240	16	0	2329	19	50	27	1	25	53	66
RTOR Reduction (vph)	0	4	0	0	1	0	0	1	0	0	17	0
Lane Group Flow (vph)	9	252	0	0	2347	0	50	27	0	0	127	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1906			2062		240	360			53	
v/s Ratio Prot	c0.01	0.05			c0.46			0.01				
v/s Ratio Perm							c0.04				c0.39	
v/c Ratio	0.05	0.13			1.14		0.21	0.08			2.40	
Uniform Delay, d1	71.5	36.6			53.5		60.9	59.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			67.5		0.4	0.1			684.8	
Delay (s)	71.6	36.8			120.9		61.3	59.4			759.8	
Level of Service	E	D			F		E	E			F	
Approach Delay (s)		37.9			120.9			60.6			759.8	
Approach LOS		D			F			E			F	
Intersection Summary												
HCM 2000 Control Delay		144.0			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.03										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		79.7%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	232	0	394	2127	9	0	0	0	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3537							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3537							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	283	0	419	2263	10	0	0	0	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	283	0	419	2273	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3214							609
v/s Ratio Prot		0.06		0.12	c0.64							
v/s Ratio Perm												0.00
v/c Ratio		0.15		0.24	0.71							0.01
Uniform Delay, d1		36.8		25.6	2.1							34.9
Progression Factor		0.40		1.00	1.00							1.00
Incremental Delay, d2		0.2		0.1	0.7							0.0
Delay (s)		14.9		25.7	2.8							35.0
Level of Service		B		C	A							C
Approach Delay (s)		14.9			6.4		0.0				35.0	
Approach LOS		B			A		A				C	
Intersection Summary												
HCM 2000 Control Delay		7.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		80.7%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	9	237	0	0	128	104	0	0	0	47	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	11	282	0	0	138	112	0	0	0	52	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	249			282			502	553	282	497	497	194
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	249			282			502	553	282	497	497	194
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1316			1280			475	437	757	480	471	848

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	293	249	0	56
Volume Left	11	0	0	52
Volume Right	0	112	0	4
cSH	1316	1280	1700	497
Volume to Capacity	0.01	0.00	0.00	0.11
Queue Length 95th (ft)	1	0	0	9
Control Delay (s)	0.4	0.0	0.0	13.2
Lane LOS	A		A	B
Approach Delay (s)	0.4	0.0	0.0	13.2
Approach LOS			A	B

Intersection Summary

Average Delay	1.4			
Intersection Capacity Utilization	29.8%		ICU Level of Service	A
Analysis Period (min)	15			

NBC Coastal Campus

22: 3rd St & Palm Ave

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: AM PEAK











Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	276	4	26	209	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	321	5	28	225	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	326	28	251	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.1	5.5	5.1	5.7						
Degree Utilization, x	0.01	0.50	0.05	0.38	0.26	0.07						
Capacity (veh/h)	578	635	565	630	634	546						
Control Delay (s)	7.9	12.6	8.2	10.6	9.9	9.1						
Approach Delay (s)	12.5		10.4		9.9	9.1						
Approach LOS	B		B		A	A						

Intersection Summary

Delay	11.0			
Level of Service	B			
Intersection Capacity Utilization	37.6%		ICU Level of Service	A
Analysis Period (min)	15			




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	229	426	333	152	17	69
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	290	539	406	185	24	97
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	591				1618	296
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	591				1618	296
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	70				64	86
cM capacity (veh/h)	980				66	701
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	290	539	271	321	121	
Volume Left	290	0	0	0	24	
Volume Right	0	0	0	185	97	
cSH	980	1700	1700	1700	242	
Volume to Capacity	0.30	0.32	0.16	0.19	0.50	
Queue Length 95th (ft)	31	0	0	0	64	
Control Delay (s)	10.2	0.0	0.0	0.0	33.8	
Lane LOS	B				D	
Approach Delay (s)	3.6		0.0		33.8	
Approach LOS					D	
Intersection Summary						
Average Delay			4.6			
Intersection Capacity Utilization			42.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	419	15	26	334	0	66	39	81	1	21	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1723			1858	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.88			0.98	1.00
Satd. Flow (perm)	931	3521		821	3539			1538			1830	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	544	19	34	434	0	100	59	123	2	36	47
RTOR Reduction (vph)	0	3	0	0	0	0	0	33	0	0	0	29
Lane Group Flow (vph)	21	560	0	34	434	0	0	249	0	0	38	18
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.2	13.2		13.2	13.2			13.3			13.3	13.3
Effective Green, g (s)	13.2	13.2		13.2	13.2			13.3			13.3	13.3
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	344	1301		303	1308			572			681	589
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.16			0.02	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.44			0.06	0.03
Uniform Delay, d1	7.3	8.4		7.4	8.1			8.4			7.2	7.1
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.2			0.5			0.0	0.0
Delay (s)	7.3	8.7		7.6	8.2			8.9			7.2	7.1
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.6			8.2			8.9			7.2	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.4			HCM 2000 Level of Service			A			
HCM 2000 Volume to Capacity ratio			0.43									
Actuated Cycle Length (s)			35.7			Sum of lost time (s)			9.2			
Intersection Capacity Utilization			46.6%			ICU Level of Service			A			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	504	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	548	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)			767			
pX, platoon unblocked						
vC, conflicting volume			552		548	548
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			552		548	548
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1018		498	536
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	548	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	525			
Volume to Capacity	0.32	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.0			
Lane LOS			B			
Approach Delay (s)	0.0		12.0			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.5%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑	↘	↗	↑↑↑		↗	↑↑	↘	↗	↑↑	↘
Volume (vph)	21	684	35	23	2269	43	167	37	1900	90	46	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5048		1770	5071			3325			3365	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5048		1770	5071			3325			3365	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	814	42	25	2493	47	201	45	61	110	56	29
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	853	0	25	2539	0	0	295	0	0	187	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2235		118	2160			646			654	
v/s Ratio Prot	0.01	c0.17		c0.01	c0.50			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.17	0.38		0.21	1.18			0.46			0.29	
Uniform Delay, d1	76.7	33.6		79.5	51.6			64.1			61.8	
Progression Factor	1.00	1.00		1.15	0.93			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.6	82.5			0.5			0.2	
Delay (s)	77.3	34.1		92.2	130.3			64.6			62.1	
Level of Service	E	C		F	F			E			E	
Approach Delay (s)		35.3			130.0			64.6			62.1	
Approach LOS		D			F			E			E	
Intersection Summary												
HCM 2000 Control Delay		100.4			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		81.9%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	
Volume (vph)	2	916	35	20	2444	12	18	4	31	55	11	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5081			1687		1770	1704	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5057		1770	5081			1542		1231	1704	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	1029	39	23	2777	14	25	5	42	79	16	21
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	18	0
Lane Group Flow (vph)	2	1066	0	23	2791	0	0	44	0	79	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			257		205	284	
v/s Ratio Prot	0.00	0.21		c0.01	c0.55						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.31		0.19	0.75			0.17		0.39	0.07	
Uniform Delay, d1	86.1	11.2		79.4	14.4			64.3		66.8	63.2	
Progression Factor	1.71	0.26		1.41	0.37			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.2	0.4			0.3		1.2	0.1	
Delay (s)	147.9	3.2		112.6	5.7			64.6		68.0	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.4			6.6			64.6			66.5	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.5			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		80.9%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰	↰↰	
Volume (vph)	3	987	64	96	2294	52	149	19	91	170	36	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.91	1.00		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1784	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1784	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1109	72	116	2764	63	167	21	102	227	48	20
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	84	0	3	0
Lane Group Flow (vph)	3	1177	0	116	2764	33	0	188	18	0	292	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.23		c0.07	c0.54			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.53		0.59	1.02	0.04		0.61	0.06		0.50	
Uniform Delay, d1	86.2	36.5		76.1	42.1	20.2		68.9	62.4		67.5	
Progression Factor	1.22	0.62		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.9		4.7	23.3	0.1		3.6	0.1		0.7	
Delay (s)	105.7	23.5		80.8	65.5	20.3		72.5	62.5		68.2	
Level of Service	F	C		F	E	C		E	E		E	
Approach Delay (s)		23.7			65.1			69.0			68.2	
Approach LOS		C			E			E			E	
Intersection Summary												
HCM 2000 Control Delay		55.1			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.84										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		98.2%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	↰
Volume (vph)	14	1255	25	43	2424	12	16	6	49	38	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5082			1670			1723	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.78	
Satd. Flow (perm)	1770	5070		1770	5082			1562			1378	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	15	1364	27	50	2819	14	19	7	58	50	3	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	46	0	0	22	0
Lane Group Flow (vph)	15	1390	0	50	2833	0	0	38	0	0	59	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Effective Green, g (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2666		72	2830			331			292	
v/s Ratio Prot	0.01	0.27		c0.03	c0.56							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.88	0.52		0.69	1.00			0.12			0.20	
Uniform Delay, d1	35.2	11.0		33.7	15.7			22.6			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	159.7	0.2		25.2	17.1			0.2			0.3	
Delay (s)	194.9	11.2		58.8	32.9			22.8			23.4	
Level of Service	F	B		E	C			C			C	
Approach Delay (s)		13.1			33.3			22.8			23.4	
Approach LOS		B			C			C			C	
Intersection Summary												
HCM 2000 Control Delay		26.6			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		71.1			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		64.0%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰	↰	↰	↰	↰↰	↰	↰
Volume (vph)	92	1268	30	247	2361	217	78	73	780	238	93	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	107	1474	35	263	2512	231	87	81	867	283	111	92
RTOR Reduction (vph)	0	2	0	0	0	67	0	155	182	0	3	60
Lane Group Flow (vph)	107	1507	0	263	2512	164	87	325	286	283	117	23
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.4	30.1	30.1	10.4	32.1	32.1
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.4	30.1	30.1	10.4	32.1	32.1
Actuated g/C Ratio	0.05	0.30		0.15	0.41	0.41	0.07	0.26	0.26	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	178	1544		274	2073	645	128	403	391	309	486	417
v/s Ratio Prot	0.03	0.30		c0.15	c0.49		0.05	c0.21		c0.08	0.07	
v/s Ratio Perm						0.10			0.19			0.02
v/c Ratio	0.60	0.98		0.96	1.21	0.25	0.68	0.81	0.73	0.92	0.24	0.06
Uniform Delay, d1	53.6	39.7		48.4	34.2	22.6	52.2	40.0	39.0	52.1	32.3	30.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.6	17.3		42.9	100.0	0.2	13.4	11.3	6.9	30.2	0.3	0.1
Delay (s)	59.2	57.1		91.3	134.2	22.8	65.7	51.3	45.9	82.3	32.5	30.6
Level of Service	E	E		F	F	C	E	D	D	F	C	C
Approach Delay (s)		57.2			121.9			50.1			61.2	
Approach LOS		E			F			D			E	
Intersection Summary												
HCM 2000 Control Delay		88.0			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.06										
Actuated Cycle Length (s)		115.5			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		94.7%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	288	1244	0	157	1584
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	324	1338	0	174	1760
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	324	1338	0	174	1757
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.38		0.10	c0.63
v/s Ratio Perm						
v/c Ratio		0.12	1.15		0.84	1.15
Uniform Delay, d1		2.5	26.8		34.6	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	76.4		25.2	74.2
Delay (s)		2.5	103.2		59.8	92.2
Level of Service		A	F		E	F
Approach Delay (s)		2.5	103.2		89.3	
Approach LOS		A	F		F	
Intersection Summary						
HCM 2000 Control Delay			86.6		HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio			1.23			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			78.0%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	446	0	0	435	530	912	1	145	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.96				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3248		1681	1637				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3248		1681	1637				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	513	0	0	473	576	991	1	158	0	0	0
RTOR Reduction (vph)	0	0	0	0	368	0	0	25	0	0	0	0
Lane Group Flow (vph)	0	513	0	0	681	0	585	540	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.9			16.9		21.8	21.8				
Effective Green, g (s)		16.9			16.9		21.8	21.8				
Actuated g/C Ratio		0.36			0.36		0.47	0.47				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1280			1175		784	764				
v/s Ratio Prot		0.14			c0.21							
v/s Ratio Perm							c0.35	0.33				
v/c Ratio		0.40			0.58		0.75	0.71				
Uniform Delay, d1		11.1			12.0		10.2	9.9				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		3.9	3.0				
Delay (s)		11.3			12.7		14.1	12.9				
Level of Service		B			B		B	B				
Approach Delay (s)		11.3			12.7		13.5				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					12.8					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.67							
Actuated Cycle Length (s)					46.7					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					72.1%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔			↕	↕	
Volume (veh/h)	0	3	4	66	13	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	92	32	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	134	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	134	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	856	1042	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	97	32			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	1042	1581	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			16.7%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕↕			↕↕↕				↕			↕
Volume (veh/h)	0	4155	17	0	1827	244	0	0	909	0	0	55
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4328	18	0	1884	252	0	0	1010	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2155			4366			5088	6512	1492	3492	6395	794
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2155			4366			5088	6512	1492	3492	6395	794
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	242			30			0	0	1852	1	0	320
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1731	1731	883	753	753	628	1010	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	252	1010	83				
cSH	1700	1700	1700	1700	1700	1700	1852	320				
Volume to Capacity	1.02	1.02	0.52	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	87	26				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3	20.2				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.3	20.2				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				145.5%	ICU Level of Service		H					
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↑	
Volume (veh/h)	3921	130	0	1864	0	201	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	4042	134	0	1942	0	245	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4196		4797	1454	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4196		4797	1454	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			36		1	115	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1617	1617	942	647	647	647	245
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	245
cSH	1700	1700	1700	1700	1700	1700	115
Volume to Capacity	0.95	0.95	0.55	0.38	0.38	0.38	2.12
Queue Length 95th (ft)	0	0	0	0	0	0	517
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	595.7
Lane LOS							F
Approach Delay (s)	0.0			0.0			595.7
Approach LOS							F
Intersection Summary							
Average Delay			22.9				
Intersection Capacity Utilization			99.8%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↑↑↑		↖	↑↑			↑↑	
Volume (vph)	0	0	0	991	635	109	108	252	0	0	861	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3528	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3528	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1043	668	115	111	260	0	0	888	16
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	521	1293	0	111	260	0	0	902	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1432		98	1989			1568	
v/s Ratio Prot				c0.34	0.28		c0.06	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.11	0.99d1		1.13	0.13			0.58	
Uniform Delay, d1				31.1	29.8		42.5	9.3			18.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				74.5	8.3		131.1	0.0			0.5	
Delay (s)				105.6	38.1		173.6	9.3			19.2	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			57.3			58.5			19.2	
Approach LOS		A			E			E			B	
Intersection Summary												
HCM 2000 Control Delay			46.4				HCM 2000 Level of Service				D	
HCM 2000 Volume to Capacity ratio			0.82									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)			17.2		
Intersection Capacity Utilization		135.9%					ICU Level of Service			H		
Analysis Period (min)			15									
d1 Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔↔	
Volume (vph)	7	2111	111	0	0	0	0	360	538	761	1114	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.97	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3094	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3094	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2320	122	0	0	0	0	419	626	793	1160	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2328	93	0	0	0	0	713	297	793	1160	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					938	409	865	2022	
v/s Ratio Prot		c0.46						c0.23		c0.23	0.33	
v/s Ratio Perm			0.06						0.22			
v/c Ratio		1.26	0.16					0.76	0.73	0.92	0.57	
Uniform Delay, d1		55.8	37.8					55.2	54.4	63.7	23.9	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		123.5	0.1					3.7	6.3	14.2	0.4	
Delay (s)		179.3	37.9					58.9	60.7	77.9	24.3	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		172.3			0.0			59.5			46.1	
Approach LOS		F			A			E			D	
Intersection Summary												
HCM 2000 Control Delay		105.4									F	
HCM 2000 Volume to Capacity ratio		1.00										
Actuated Cycle Length (s)		175.0							14.4			
Intersection Capacity Utilization		135.9%							H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔
Volume (vph)	175	12	1013	694	0	1259
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3279			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3279			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	224	15	1138	780	0	1354
RTOR Reduction (vph)	2	0	59	0	0	0
Lane Group Flow (vph)	237	0	1859	0	0	1354
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	296		2477			2540
v/s Ratio Prot	c0.15		c0.57			0.40
v/s Ratio Perm						
v/c Ratio	0.80		0.75			0.53
Uniform Delay, d1	62.2		11.0			8.0
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	14.4		2.1			0.8
Delay (s)	76.6		13.2			8.8
Level of Service	E		B			A
Approach Delay (s)	76.6		13.2			8.8
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay		15.8				B
HCM 2000 Volume to Capacity ratio		0.78				
Actuated Cycle Length (s)		160.0				12.1
Intersection Capacity Utilization		83.6%				E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↲	↰	↱	↲	↰	↱	↲	↰	↱	↲
Volume (vph)	145	10	29	26	10	25	23	1625	49	68	1485	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3	5.3	5.3	5.3	4.2	5.3	4.2	5.3	5.3	5.3
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	0.95
Flt	1.00	1.00	0.85	0.95	0.95	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Flt Protected	0.95	0.96	1.00	0.98	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1681	1696	1583	1724	1770	3524	1770	3524	1770	3490	3490	3490
Flt Permitted	0.68	0.68	1.00	0.83	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1201	1203	1583	1460	1770	3524	1770	3524	1770	3490	3490	3490
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	186	13	37	41	16	39	25	1747	53	74	1614	166
RTOR Reduction (vph)	0	0	31	0	22	0	0	1	0	0	2	0
Lane Group Flow (vph)	99	100	6	0	74	0	25	1799	0	74	1778	0
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Prot	NA	Prot	NA	NA
Protected Phases	4	4	4	4	4	5	2	1	6	6	6	6
Permitted Phases	4	4	4	4	4	5	2	1	6	6	6	6
Actuated Green, G (s)	19.1	19.1	19.1	19.1	19.1	3.1	71.9	8.1	76.9	8.1	76.9	76.9
Effective Green, g (s)	19.1	19.1	19.1	19.1	19.1	3.1	71.9	8.1	76.9	8.1	76.9	76.9
Actuated g/C Ratio	0.17	0.17	0.17	0.17	0.17	0.03	0.63	0.07	0.68	0.07	0.68	0.68
Clearance Time (s)	5.3	5.3	5.3	5.3	5.3	4.2	5.3	4.2	5.3	4.2	5.3	5.3
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	201	201	265	244	48	2224	125	2356	125	2356	2356	2356
v/s Ratio Prot	0.08	c0.08	0.00	0.05	0.05	0.01	c0.51	c0.04	0.51	c0.04	0.51	0.51
v/s Ratio Perm	0.49	0.50	0.02	0.30	0.30	0.52	0.81	0.59	0.75	0.59	0.75	0.75
v/c Ratio	0.49	0.50	0.02	0.30	0.30	0.52	0.81	0.59	0.75	0.59	0.75	0.75
Uniform Delay, d1	43.0	43.0	39.6	41.6	54.7	15.8	51.3	12.3	51.3	12.3	51.3	51.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.9	1.9	0.0	0.7	9.8	2.3	7.3	1.4	7.3	1.4	7.3	7.3
Delay (s)	44.9	45.0	39.6	42.2	64.5	18.1	58.6	13.7	58.6	13.7	58.6	58.6
Level of Service	D	D	D	D	E	B	E	B	E	B	E	E
Approach Delay (s)	44.1	44.1	42.2	42.2	18.7	18.7	15.5	15.5	15.5	15.5	15.5	15.5
Approach LOS	D	D	D	D	B	B	B	B	B	B	B	B
Intersection Summary												
HCM 2000 Control Delay	19.3	19.3	19.3	19.3	19.3	3.1	71.9	8.1	76.9	8.1	76.9	76.9
HCM 2000 Volume to Capacity ratio	0.73	0.73	0.73	0.73	0.73	0.03	0.63	0.07	0.68	0.07	0.68	0.68
Actuated Cycle Length (s)	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9
Intersection Capacity Utilization	75.8%	75.8%	75.8%	75.8%	75.8%	75.8%	75.8%	75.8%	75.8%	75.8%	75.8%	75.8%
Analysis Period (min)	15	15	15	15	15	15	15	15	15	15	15	15
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↲	↰	↱	↲	↰	↱	↲	↰	↱	↲
Volume (vph)	0	0	0	8	0	146	0	1429	0	32	1625	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flt	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Flt Protected	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Satd. Flow (prot)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Flt Permitted	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Satd. Flow (perm)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	12	0	212	0	1520	0	34	1747	0
RTOR Reduction (vph)	0	0	0	0	172	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	52	0	0	1520	0	34	1747	0
Turn Type	Split	Split	Split	NA	NA	NA	Perm	Prot	NA	Prot	NA	NA
Protected Phases	3	3	3	4	4	4	2	1	6	6	6	6
Permitted Phases	3	3	3	4	4	4	2	1	6	6	6	6
Actuated Green, G (s)	14.1	14.1	14.1	14.1	14.1	14.1	45.1	1.7	51.0	1.7	51.0	51.0
Effective Green, g (s)	14.1	14.1	14.1	14.1	14.1	14.1	45.1	1.7	51.0	1.7	51.0	51.0
Actuated g/C Ratio	0.19	0.19	0.19	0.19	0.19	0.19	0.60	0.02	0.68	0.02	0.68	0.68
Clearance Time (s)	4.6	4.6	4.6	4.6	4.6	4.6	5.5	4.2	5.5	4.2	5.5	5.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	303	303	303	303	303	303	2122	40	2400	40	2400	2400
v/s Ratio Prot	c0.03	c0.03	c0.03	c0.03	c0.03	c0.03	0.43	0.02	c0.49	0.02	c0.49	c0.49
v/s Ratio Perm	0.17	0.17	0.17	0.17	0.17	0.17	0.72	0.85	0.73	0.85	0.73	0.73
v/c Ratio	0.17	0.17	0.17	0.17	0.17	0.17	0.72	0.85	0.73	0.85	0.73	0.73
Uniform Delay, d1	25.6	25.6	25.6	25.6	25.6	25.6	10.6	36.6	7.7	36.6	7.7	7.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.3	0.3	0.3	0.3	0.3	1.2	84.3	1.1	84.3	1.1	1.1
Delay (s)	25.9	25.9	25.9	25.9	25.9	25.9	11.7	121.0	8.8	121.0	8.8	8.8
Level of Service	C	C	C	C	C	C	B	F	A	B	F	A
Approach Delay (s)	0.0	0.0	0.0	25.9	25.9	25.9	11.7	11.0	11.0	11.0	11.0	11.0
Approach LOS	A	A	A	C	C	C	B	B	B	B	B	B
Intersection Summary												
HCM 2000 Control Delay	12.2	12.2	12.2	12.2	12.2	12.2	10.6	36.6	7.7	36.6	7.7	7.7
HCM 2000 Volume to Capacity ratio	0.70	0.70	0.70	0.70	0.70	0.70	0.60	0.02	0.68	0.02	0.68	0.68
Actuated Cycle Length (s)	75.2	75.2	75.2	75.2	75.2	75.2	18.9	18.9	18.9	18.9	18.9	18.9
Intersection Capacity Utilization	62.8%	62.8%	62.8%	62.8%	62.8%	62.8%	62.8%	62.8%	62.8%	62.8%	62.8%	62.8%
Analysis Period (min)	15	15	15	15	15	15	15	15	15	15	15	15
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	295	50	120	6	70	425	28	729	2	140	1446	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1515		1855	1510	1770	3539	1344	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1515		1855	1510	1770	3539	1344	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	388	66	158	7	76	462	31	801	2	149	1538	70
RTOR Reduction (vph)	0	0	128	0	0	201	0	0	1	0	2	0
Lane Group Flow (vph)	388	66	30	0	83	261	31	801	1	149	1606	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.6	27.6	27.6		26.5	26.5	4.0	56.3	56.3	17.3	69.6	
Effective Green, g (s)	27.6	27.6	27.6		26.5	26.5	4.0	56.3	56.3	17.3	69.6	
Actuated g/C Ratio	0.19	0.19	0.19		0.18	0.18	0.03	0.38	0.38	0.12	0.47	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	332	349	284		334	272	48	1354	514	208	1661	
v/s Ratio Prot	c0.22	0.04			0.04		0.02	0.23		c0.08	c0.46	
v/s Ratio Perm			0.02			c0.17		0.00				
v/c Ratio	1.17	0.19	0.10		0.25	0.96	0.65	0.59	0.00	0.72	0.97	
Uniform Delay, d1	59.7	50.3	49.5		51.8	59.8	70.8	36.2	28.0	62.5	37.6	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	103.5	0.3	0.2		0.4	43.5	26.1	1.9	0.0	11.1	15.5	
Delay (s)	163.2	50.6	49.7		52.1	103.3	96.9	38.1	28.0	73.7	53.1	
Level of Service	F	D	D		D	F	F	D	C	E	D	
Approach Delay (s)		121.8			95.5			40.3			54.9	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay		68.5								E		
HCM 2000 Volume to Capacity ratio		1.01										
Actuated Cycle Length (s)		147.1				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		81.7%				ICU Level of Service		D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	321	499	3	53	181	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	357	554	4	75	206	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	456	42			79	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	456	42			79	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	27	46			86	
cM capacity (veh/h)	486	1029			1519	
Direction, Lane #						
Volume Total	911	79	209			
Volume Left	357	0	206			
Volume Right	554	75	0			
cSH	979	1700	1519			
Volume to Capacity	0.93	0.05	0.14			
Queue Length 95th (ft)	368	0	12			
Control Delay (s)	35.3	0.0	7.6			
Lane LOS	E		A			
Approach Delay (s)	35.3	0.0	7.6			
Approach LOS	E					
Intersection Summary						
Average Delay		28.2				
Intersection Capacity Utilization		41.3%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	324	6	765	57	0	1575
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	410	8	850	63	0	1770
RTOR Reduction (vph)	1	0	0	36	0	0
Lane Group Flow (vph)	417	0	850	27	0	1770
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.24		0.24			c0.50
v/s Ratio Perm				0.02		
v/c Ratio	0.50		0.56	0.04		1.16
Uniform Delay, d1	18.9		22.5	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.5		0.4	0.0		81.6
Delay (s)	19.3		22.9	17.4		111.6
Level of Service	B		C	B		F
Approach Delay (s)	19.3		22.6			111.6
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay		72.9		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		0.81				
Actuated Cycle Length (s)		105.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		93.5%		ICU Level of Service		F
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (veh/h)	4	6	624	3	15	1514
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	726	3	16	1664
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1592	365			729	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1592	365			729	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	98			98	
cM capacity (veh/h)	96	632			871	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	20	484	245	16	832	832
Volume Left	8	0	0	16	0	0
Volume Right	12	0	3	0	0	0
cSH	196	1700	1700	871	1700	1700
Volume to Capacity	0.10	0.28	0.14	0.02	0.49	0.49
Queue Length 95th (ft)	8	0	0	1	0	0
Control Delay (s)	25.5	0.0	0.0	9.2	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	25.5	0.0		0.1		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			51.9%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↕	↖	↗	↕
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	30	57	569	12	103	1416
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	33	62	647	14	113	1556
RTOR Reduction (vph)	0	46	0	8	0	0
Lane Group Flow (vph)	33	16	647	6	113	1556
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	18	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.3	21.6	27.9	27.9	7.2	43.9
Effective Green, g (s)	9.3	16.5	27.9	27.9	7.2	43.9
Actuated g/C Ratio	0.15	0.26	0.45	0.45	0.12	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	263	417	1579	706	203	2485
v/s Ratio Prot	c0.02	0.01	0.18		0.06	c0.44
v/s Ratio Perm				0.00		
v/c Ratio	0.13	0.04	0.41	0.01	0.56	0.63
Uniform Delay, d1	23.1	17.1	11.7	9.6	26.1	4.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.2	0.0	3.3	0.5
Delay (s)	23.3	17.1	11.9	9.6	29.4	5.4
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.3		11.8			7.1
Approach LOS	B		B			A

Intersection Summary

HCM 2000 Control Delay	8.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	62.5	Sum of lost time (s)	18.1
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↕	↖	↗	↕
Lane Configurations		↖	↕	↖		↕
Volume (veh/h)	0	23	560	18	0	1446
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	31	644	21	0	1572
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1440	332			664	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1440	332			664	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	124	664			921	







Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	31	429	235	786	786
Volume Left	0	0	0	0	0
Volume Right	31	0	21	0	0
cSH	664	1700	1700	1700	1700
Volume to Capacity	0.05	0.25	0.14	0.46	0.46
Queue Length 95th (ft)	4	0	0	0	0
Control Delay (s)	10.7	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.7	0.0		0.0	
Approach LOS	B				

Intersection Summary

Average Delay	0.1				
Intersection Capacity Utilization	43.3%		ICU Level of Service	A	
Analysis Period (min)	15				





NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	30	26	553	18	23	1421
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	42	36	588	19	25	1562
RTOR Reduction (vph)	0	33	0	8	0	0
Lane Group Flow (vph)	42	3	588	11	25	1562
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	28.0	28.0	1.7	37.2
Effective Green, g (s)	2.6	4.3	28.0	28.0	1.7	37.2
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	99	146	2135	955	64	2837
v/s Ratio Prot	c0.02	0.00	0.17		0.01	c0.44
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.42	0.02	0.28	0.01	0.39	0.55
Uniform Delay, d1	21.2	19.1	4.4	3.7	21.8	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.9	0.1	0.1	0.0	3.9	0.2
Delay (s)	24.1	19.2	4.4	3.7	25.8	1.9
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.8		4.4			2.2
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.5		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.67			
Actuated Cycle Length (s)			46.4		Sum of lost time (s)	14.1
Intersection Capacity Utilization			50.2%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	11	14	85	8	0	179	13	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	11	15	110	10	0	201	15	0	0
Direction, Lane #										
Volume Total (vph)	11	15	121	216						
Volume Left (vph)	0	0	110	0						
Volume Right (vph)	0	15	0	15						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.19						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑		↰	↑	↰	↰	↑	↰			
Volume (vph)	10	185	0	0	81	138	12	474	69	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1298	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	11	210	0	0	93	159	13	521	76	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	126	0	41	0	0	0	0
Lane Group Flow (vph)	11	210	0	0	93	33	13	521	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.3	18.3	18.3			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.3	18.3	18.3			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	271	390			390	331	807	1615	722			
v/s Ratio Prot		c0.11			0.05		0.01	c0.15				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.54			0.24	0.10	0.02	0.32	0.05			
Uniform Delay, d1	12.6	14.1			13.2	12.8	6.0	6.9	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.4			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.7	15.6			13.5	12.9	6.0	7.1	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.1		6.9			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.1			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.39										
Actuated Cycle Length (s)		40.1			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		41.2%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd





















MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰		↰	↑	↰	↑	↰
Volume (veh/h)	152	731	70	467	0	1551	38
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	608	2924	80	531	0	1723	42
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2169	883	1766		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2169	883	1766		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	0	77		0		
cM capacity (veh/h)	31	289	349		0		
Direction, Lane #							
Volume Total	3532	80	265	265	1149	617	0
Volume Left	608	80	0	0	0	0	0
Volume Right	2924	0	0	0	0	42	0
cSH	119	349	1700	1700	1700	1700	1700
Volume to Capacity	29.80	0.23	0.16	0.16	0.68	0.36	0.00
Queue Length 95th (ft)	Err	22	0	0	0	0	0
Control Delay (s)	Err	18.3	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C					
Approach Delay (s)	Err	2.4			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			5978.2				
Intersection Capacity Utilization			111.5%		ICU Level of Service		
Analysis Period (min)			15				H



















NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	88	0	68	1	1	0	73	391	12	1	1834	197
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.85		1.00	1.00		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3524		1770	3488	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3524		1770	3488	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	117	0	91	2	2	0	80	430	13	1	2038	219
RTOR Reduction (vph)	0	73	0	0	0	0	0	1	0	0	6	0
Lane Group Flow (vph)	117	18	0	2	2	0	80	442	0	1	2251	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	17.9	17.9		0.8	0.8		5.8	52.1		0.8	47.1	
Effective Green, g (s)	17.9	17.9		0.8	0.8		5.8	52.1		0.8	47.1	
Actuated g/C Ratio	0.20	0.20		0.01	0.01		0.06	0.58		0.01	0.52	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	350	313		15	16		113	2028		15	1815	
v/s Ratio Prot	c0.07	0.01		c0.00	0.00		c0.05	0.13		0.00	c0.65	
v/s Ratio Perm												
v/c Ratio	0.33	0.06		0.13	0.12		0.71	0.22		0.07	1.24	
Uniform Delay, d1	31.2	29.5		44.5	44.5		41.5	9.3		44.5	21.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.1		4.0	3.5		18.3	0.1		1.9	113.1	
Delay (s)	31.7	29.5		48.5	48.0		59.8	9.4		46.4	134.8	
Level of Service	C	C		D	D		E	A		D	F	
Approach Delay (s)		30.8			48.3			17.1			134.7	
Approach LOS		C			D			B			F	
Intersection Summary												
HCM 2000 Control Delay	106.8			HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio	0.96											
Actuated Cycle Length (s)	90.5			Sum of lost time (s)				18.9				
Intersection Capacity Utilization	80.6%			ICU Level of Service				D				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	57	1785	62	0	427	34	14	40	4	24	26	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.99			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5060			5029		1770	1836			1760	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.16	
Satd. Flow (perm)	1770	5060			5029		1310	1836			284	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	65	2028	70	0	454	36	20	57	6	28	31	24
RTOR Reduction (vph)	0	2	0	0	5	0	0	2	0	0	8	0
Lane Group Flow (vph)	65	2096	0	0	485	0	20	61	0	0	75	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1914			2042		254	357			47	
v/s Ratio Prot	c0.04	c0.41			c0.10			c0.03				
v/s Ratio Perm							0.02				c0.26	
v/c Ratio	0.33	1.10			0.24		0.08	0.17			1.59	
Uniform Delay, d1	73.8	56.0			35.1		59.3	60.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	51.8			0.3		0.1	0.2			344.4	
Delay (s)	74.8	107.7			35.4		59.4	60.6			419.4	
Level of Service	E	F			D		E	E			F	
Approach Delay (s)		106.7			35.4			60.3			419.4	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay	102.2			HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio	0.86											
Actuated Cycle Length (s)	180.0			Sum of lost time (s)				22.3				
Intersection Capacity Utilization	74.3%			ICU Level of Service				D				
Analysis Period (min)	15											
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑↑			↑↑	↑↑							↑
Volume (vph)	0	1815	0	500	465	38	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3500							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3500							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	2039	0	532	495	40	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	2039	0	532	535	0	0	0	0	0	0	3
Turn Type	NA			Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3181							609
v/s Ratio Prot		c0.40		c0.15	c0.15							
v/s Ratio Perm												0.00
v/c Ratio		1.06		0.28	0.17							0.00
Uniform Delay, d1		56.0		20.6	0.9							34.8
Progression Factor		0.34		1.00	1.00							1.00
Incremental Delay, d2		28.6		0.1	0.0							0.0
Delay (s)		47.8		20.7	0.9							34.9
Level of Service		D		C	A							C
Approach Delay (s)		47.8			10.8		0.0				34.9	
Approach LOS		D			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		35.1				HCM 2000 Level of Service		D				
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		58.5%				ICU Level of Service		B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave



















MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑				↑↑
Volume (veh/h)	3	214	0	0	310	40	0	0	0	104	0	8
Sign Control		Free			Free			Stop				Stop
Grade		0%			0%			0%				0%
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	249	0	0	352	45	0	0	0	158	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	398			249			643	654	249	631	631	375
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	398			249			643	654	249	631	631	375
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	60	100	98
cM capacity (veh/h)	1161			1317			379	385	790	393	397	671
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	252	398	0	170								
Volume Left	3	0	0	158								
Volume Right	0	45	0	12								
cSH	1161	1317	1700	405								
Volume to Capacity	0.00	0.00	0.00	0.42								
Queue Length 95th (ft)	0	0	0	51								
Control Delay (s)	0.1	0.0	0.0	20.2								
Lane LOS	A		A	C								
Approach Delay (s)	0.1	0.0	0.0	20.2								
Approach LOS		A		C								
Intersection Summary												
Average Delay		4.2										
Intersection Capacity Utilization		31.7%				ICU Level of Service		A				
Analysis Period (min)		15										













NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	296	12	85	324	24	14	38	68	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	379	15	96	364	27	25	67	119	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	395	96	391	211	161						
Volume Left (vph)	9	0	96	0	25	61						
Volume Right (vph)	0	15	0	27	119	28						
Hadj (s)	0.53	0.01	0.53	-0.01	-0.28	0.00						
Departure Headway (s)	7.2	6.7	7.1	6.6	6.7	7.1						
Degree Utilization, x	0.02	0.73	0.19	0.71	0.39	0.32						
Capacity (veh/h)	470	518	483	527	476	433						
Control Delay (s)	9.2	24.7	10.6	23.0	13.8	13.3						
Approach Delay (s)	24.4		20.6		13.8	13.3						
Approach LOS	C		C		B	B						
Intersection Summary												
Delay			19.8									
Level of Service			C									
Intersection Capacity Utilization			41.6%		ICU Level of Service				A			
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	74	423	456	39	52	144
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	76	436	530	45	61	169
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)	908					
pX, platoon unblocked						
vC, conflicting volume	576				1142	288
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	576				1142	288
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	92				66	76
cM capacity (veh/h)	994				179	709
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	76	436	353	222	231	
Volume Left	76	0	0	0	61	
Volume Right	0	0	0	45	169	
cSH	994	1700	1700	1700	397	
Volume to Capacity	0.08	0.26	0.21	0.13	0.58	
Queue Length 95th (ft)	6	0	0	0	89	
Control Delay (s)	8.9	0.0	0.0	0.0	25.9	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		25.9	
Approach LOS					D	
Intersection Summary						
Average Delay			5.0			
Intersection Capacity Utilization			40.7%	ICU Level of Service		A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	28	432	29	31	458	3	55	20	22	12	44	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3536			1755			1843	1583
Flt Permitted	0.47	1.00		0.45	1.00			0.78			0.90	1.00
Satd. Flow (perm)	868	3505		832	3536			1413			1679	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	514	35	34	503	3	67	24	27	16	58	39
RTOR Reduction (vph)	0	7	0	0	1	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	542	0	34	505	0	0	97	0	0	74	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Effective Green, g (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	413	1671		396	1686			308			366	345
v/s Ratio Prot		c0.15			0.14							
v/s Ratio Perm	0.04			0.04			c0.07			0.04		0.01
v/c Ratio	0.08	0.32		0.09	0.30		0.31			0.20		0.02
Uniform Delay, d1	4.3	4.9		4.3	4.8		9.9			9.6		9.3
Progression Factor	1.00	1.00		1.00	1.00		1.00			1.00		1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1		0.6			0.3		0.0
Delay (s)	4.4	5.0		4.4	4.9		10.5			9.9		9.3
Level of Service	A	A		A	A		B			A		A
Approach Delay (s)		5.0			4.9		10.5			9.7		
Approach LOS		A			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		30.2			Sum of lost time (s)		9.2					
Intersection Capacity Utilization		44.8%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↰			↰	↰
Volume (veh/h)	930	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1134	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			1144		1134	1134
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1144		1134	1134
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		96	99
cM capacity (veh/h)			611		224	246
Direction, Lane #						
Volume Total	1134	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	229			
Volume to Capacity	0.67	0.01	0.05			
Queue Length 95th (ft)	0	0	4			
Control Delay (s)	0.0	0.0	21.6			
Lane LOS			C			
Approach Delay (s)	0.0		21.6			
Approach LOS			C			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			58.9%		ICU Level of Service	B
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	41	2107	128	58	850	131	99	90	63	174	80	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Flt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5042		1770	4984			3341			3386	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5042		1770	4984			3341			3386	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	44	2241	136	59	859	132	109	99	69	196	90	28
RTOR Reduction (vph)	0	3	0	0	11	0	0	18	0	0	4	0
Lane Group Flow (vph)	44	2374	0	59	980	0	0	259	0	0	310	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2120		157	1985			649			658	
v/s Ratio Prot	0.02	c0.47		c0.03	0.20			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.22	1.12		0.38	0.49			0.40			0.47	
Uniform Delay, d1	72.9	52.1		77.3	40.6			63.3			64.3	
Progression Factor	1.00	1.00		1.23	0.79			1.00			1.00	
Incremental Delay, d2	0.6	60.8		1.4	0.8			0.4			0.5	
Delay (s)	73.5	113.0		96.8	32.8			63.7			64.8	
Level of Service	E	F		F	C			E			E	
Approach Delay (s)		112.3			36.4			63.7			64.8	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		85.7			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		118.3%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	20	2391	57	49	1258	55	21	11	35	64	13	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	0.99			0.93			1.00	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.95	
Satd. Flow (prot)	1770	5068		1770	5053			1704			1770	
Flt Permitted	0.95	1.00		0.95	1.00			0.90			0.62	
Satd. Flow (perm)	1770	5068		1770	5053			1554			1156	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2440	58	51	1297	57	25	13	42	75	15	16
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	14	0
Lane Group Flow (vph)	20	2497	0	51	1352	0	0	57	0	75	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3564		157	3666			191		142	212	
v/s Ratio Prot	0.01	c0.49		c0.03	c0.27						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.70		0.32	0.37			0.30		0.53	0.08	
Uniform Delay, d1	79.3	15.6		76.9	9.3			71.8		74.0	69.9	
Progression Factor	1.46	0.28		1.56	0.29			1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		1.0	0.2			0.9		3.5	0.2	
Delay (s)	115.6	4.4		120.7	2.9			72.7		77.5	70.0	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		5.3			7.2			72.7			75.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		9.0			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		67.2%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	2142	202	158	1333	82	130	40	128	155	45	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5020		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5020		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	29	2279	215	163	1374	85	141	43	139	209	61	27
RTOR Reduction (vph)	0	6	0	0	0	37	0	0	115	0	4	0
Lane Group Flow (vph)	29	2488	0	163	1374	48	0	184	24	0	293	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2222		192	2364	736		305	269		575	
v/s Ratio Prot	0.02	c0.50		c0.09	c0.27			c0.10			c0.09	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.18	1.12		0.85	0.58	0.07		0.60	0.09		0.51	
Uniform Delay, d1	76.0	50.1		78.7	35.3	26.6		69.0	62.9		67.8	
Progression Factor	0.96	0.99		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.4	58.9		27.8	1.1	0.2		8.6	0.6		3.2	
Delay (s)	73.6	108.5		106.6	36.4	26.7		77.6	63.5		71.0	
Level of Service	E	F		F	D	C		E	E		E	
Approach Delay (s)		108.1			42.9			71.5			71.0	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		81.1			HCM 2000 Level of Service					F		
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)					19.3		
Intersection Capacity Utilization		109.8%			ICU Level of Service					H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	2400	50	172	1634	16	39	8	82	23	11	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1770	5070		1770	5078			1677			1756	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.84	
Satd. Flow (perm)	1770	5070		1770	5078			1511			1515	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.95	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	11	2667	56	181	1720	17	46	9	96	28	14	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	76	0	0	11	0
Lane Group Flow (vph)	11	2721	0	181	1736	0	0	75	0	0	45	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.4		11.2	50.8			17.3			17.3	
Effective Green, g (s)	0.8	40.4		11.2	50.8			17.3			17.3	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2421		234	3049			308			309	
v/s Ratio Prot	0.01	c0.54		c0.10	0.34							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.69	1.12		0.77	0.57			0.24			0.15	
Uniform Delay, d1	41.8	22.1		35.5	10.3			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	80.1	61.9		14.7	0.2			0.4			0.2	
Delay (s)	121.9	84.0		50.1	10.5			28.6			27.8	
Level of Service	F	F		D	B			C			C	
Approach Delay (s)		84.2			14.2			28.6			27.8	
Approach LOS		F			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		54.2			HCM 2000 Level of Service					D		
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		84.6			Sum of lost time (s)					15.7		
Intersection Capacity Utilization		78.4%			ICU Level of Service					D		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	191	2338	28	332	1641	562	67	179	540	595	242	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	201	2461	29	357	1765	604	71	190	574	647	263	250
RTOR Reduction (vph)	0	1	0	0	0	86	0	26	276	0	2	128
Lane Group Flow (vph)	201	2489	0	357	1765	518	71	371	91	647	286	97
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.4	36.4		45.0	70.0	70.0	8.7	37.8	37.8	11.8	40.9	40.9
Effective Green, g (s)	11.4	36.4		45.0	70.0	70.0	8.7	37.8	37.8	11.8	40.9	40.9
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1208		520	2327	724	100	403	371	264	467	402
v/s Ratio Prot	0.06	c0.49		c0.20	c0.35		0.04	c0.23		c0.19	c0.16	
v/s Ratio Perm					0.33			0.06				0.06
v/c Ratio	0.79	2.06		0.69	0.76	0.72	0.71	0.92	0.24	2.45	0.61	0.24
Uniform Delay, d1	69.6	58.3		47.7	34.4	33.4	70.9	56.1	46.1	70.5	49.1	43.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.8	480.2		3.8	1.5	3.4	20.6	26.3	0.3	664.2	2.4	0.3
Delay (s)	84.4	538.4		51.5	35.9	36.8	91.4	82.4	46.5	734.7	51.4	44.2
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		504.5			38.1			67.3			431.1	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		272.2			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.31										
Actuated Cycle Length (s)		152.9			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		133.7%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2021 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↑↑↑	↑↑↑
Volume (vph)	0	517	873	0	445	1668
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	581	929	0	489	1833
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	581	929	0	489	1830
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.16	c0.26		0.28	c0.66
v/s Ratio Perm						
v/c Ratio		0.33	1.08		0.74	1.03
Uniform Delay, d1		11.7	30.3		21.6	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	55.6		4.3	29.5
Delay (s)		11.8	85.9		25.9	44.0
Level of Service		B	F		C	D
Approach Delay (s)		11.8	85.9		40.2	
Approach LOS		B	F		D	
Intersection Summary						
HCM 2000 Control Delay		47.0		HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio		1.12				
Actuated Cycle Length (s)		80.0		Sum of lost time (s)		14.2
Intersection Capacity Utilization		87.3%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	956	0	0	534	253	448	2	108	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3369		1681	1616				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3369		1681	1616				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	996	0	0	600	284	482	2	116	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	33	0	0	0	0
Lane Group Flow (vph)	0	996	0	0	786	0	308	259	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.4			19.4		14.6	14.6				
Effective Green, g (s)		19.4			19.4		14.6	14.6				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1634			1556		584	561				
v/s Ratio Prot		0.28			0.23							
v/s Ratio Perm							0.18	0.16				
v/c Ratio		0.61			0.51		0.53	0.46				
Uniform Delay, d1		8.5			7.9		10.9	10.6				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.7			0.3		0.9	0.6				
Delay (s)		9.1			8.2		11.8	11.2				
Level of Service		A			A		B	B				
Approach Delay (s)		9.1			8.2		11.5				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		9.4			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		42.0			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		48.8%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												





















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2021 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	3	36	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	3	52	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	73	52	52			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	73	52	52			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	926	1015	1554			
Direction, Lane #						
Volume Total	16	12	52			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	1015	1554	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.3	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.3	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.5				
Intersection Capacity Utilization		17.2%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St









MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		  			  								
Volume (veh/h)	0	1417	34	0	3945	553	0	0	477	0	0	9	
Sign Control		Free			Free			Stop			Stop		
Grade		0%			0%			0%			0%		
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75	
Hourly flow rate (vph)	0	1707	41	0	4288	601	0	0	596	0	0	12	
Pedestrians		20			20			20			20		
Lane Width (ft)		12.0			12.0			12.0			12.0		
Walking Speed (ft/s)		4.0			4.0			4.0			4.0		
Percent Blockage		2			2			2			2		
Right turn flare (veh)													
Median type	None			None									
Median storage (veh)													
Upstream signal (ft)													
pX, platoon unblocked													
vC, conflicting volume	4909			1768				3209	6657	630	5198	6377	1770
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
vCu, unblocked vol	4909			1768				3209	6657	630	5198	6377	1770
tC, single (s)	4.1			4.1				7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)													
tF (s)	2.2			2.2				3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100				100	100	56	100	100	83
cM capacity (veh/h)	18			343				3	0	1358	0	0	70
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1					
Volume Total	683	683	382	1715	1715	1459	596	12					
Volume Left	0	0	0	0	0	0	0	0					
Volume Right	0	0	41	0	0	601	596	12					
cSH	1700	1700	1700	1700	1700	1700	1358	70					
Volume to Capacity	0.40	0.40	0.22	1.01	1.01	0.86	0.44	0.17					
Queue Length 95th (ft)	0	0	0	0	0	0	57	14					
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	66.6					
Lane LOS							A	F					
Approach Delay (s)	0.0			0.0				9.7	66.6				
Approach LOS								A	F				
Intersection Summary													
Average Delay			0.9										
Intersection Capacity Utilization			103.6%	ICU Level of Service				G					
Analysis Period (min)			15										

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1277	202	0	3844	0	232	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1451	230	0	4271	0	252	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1701			3030	638
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1701			3030	638
tC, single (s)			4.1			6.8	6.9
tC, 2 stage (s)							
tF (s)			2.2			3.5	3.3
p0 queue free %			100			100	38
cM capacity (veh/h)			364			10	405
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	580	580	520	1424	1424	1424	252
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	230	0	0	0	252
cSH	1700	1700	1700	1700	1700	1700	405
Volume to Capacity	0.34	0.34	0.31	0.84	0.84	0.84	0.62
Queue Length 95th (ft)	0	0	0	0	0	0	102
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.5
Lane LOS	D						
Approach Delay (s)	0.0	0.0			27.5		
Approach LOS	D						
Intersection Summary							
Average Delay	1.1						
Intersection Capacity Utilization	89.1%			ICU Level of Service			E
Analysis Period (min)	15						

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1705	1946	343	108	102	0	0	278	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4638		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4638		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1833	2092	369	146	138	0	0	320	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1063	3223	0	146	138	0	0	332	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3211		186	872			397	
v/s Ratio Prot				c0.70	0.69		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				1.01	1.00		0.78	0.16			0.84	
Uniform Delay, d1				29.2	29.2		82.7	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				30.1	16.8		19.2	0.1			14.2	
Delay (s)				59.2	45.9		101.9	56.1			96.5	
Level of Service				E	D		F	E			F	
Approach Delay (s)		0.0			49.2			79.6			96.5	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay				54.2			HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio				0.96								
Actuated Cycle Length (s)				189.5			Sum of lost time (s)			16.8		
Intersection Capacity Utilization				201.0%			ICU Level of Service			H		
Analysis Period (min)				15								
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	584	94	0	0	0	0	200	215	452	1588	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3250	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3250	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	635	102	0	0	0	0	233	234	491	1654	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	21	48	0	0	0
Lane Group Flow (vph)	0	636	73	0	0	0	0	301	97	491	1654	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.6	62.6	35.2	100.6	
Effective Green, g (s)		60.0	60.0					62.6	62.6	35.2	100.6	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.20	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1771	551					1181	523	701	2067	
v/s Ratio Prot								0.09		0.14	c0.47	
v/s Ratio Perm		0.13	0.05						0.07			
v/c Ratio		0.36	0.13					0.25	0.18	0.70	0.80	
Uniform Delay, d1		41.8	38.3					38.4	37.4	63.6	28.0	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.2	2.3	
Delay (s)		41.9	38.4					38.6	37.6	66.8	30.3	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.4			0.0			38.2			38.6	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay			39.2				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.65									
Actuated Cycle Length (s)			172.2				Sum of lost time (s)			14.4		
Intersection Capacity Utilization			201.0%				ICU Level of Service			H		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	220	6	1183	612	0	1313
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Flt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3317			3362
Flt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3317			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	256	7	1272	658	0	1382
RTOR Reduction (vph)	1	0	52	0	0	0
Lane Group Flow (vph)	262	0	1878	0	0	1382
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	18.8		45.0			45.0
Effective Green, g (s)	18.8		45.0			45.0
Actuated g/C Ratio	0.26		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	410		2047			2075
v/s Ratio Prot	c0.16		c0.57			0.41
v/s Ratio Perm						
v/c Ratio	0.64		0.92			0.67
Uniform Delay, d1	24.0		12.3			9.1
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	3.2		7.0			0.8
Delay (s)	27.3		19.3			9.9
Level of Service	C		B			A
Approach Delay (s)	27.3		19.3			9.9
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			16.3		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.88			
Actuated Cycle Length (s)			72.9		Sum of lost time (s)	12.1
Intersection Capacity Utilization			78.8%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↕	↕	↕	↔	↔	↔
Volume (vph)	48	2	10	8	0	5	19	1401	26	40	1456	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	1.00	
Flt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1713		1770	3530		1770	3526	
Flt Permitted	0.74	0.78	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1310	1373	1583		1512		1770	3530		1770	3526	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	56	2	12	16	0	10	23	1668	31	43	1583	40
RTOR Reduction (vph)	0	0	10	0	22	0	0	1	0	0	1	0
Lane Group Flow (vph)	29	29	2	0	4	0	23	1698	0	43	1622	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.5	15.5	15.5		15.5		2.7	65.3		4.0	66.6	
Effective Green, g (s)	15.5	15.5	15.5		15.5		2.7	65.3		4.0	66.6	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	205	215	248		236		48	2330		71	2374	
v/s Ratio Prot							0.01	c0.48		c0.02	0.46	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.14	0.13	0.01		0.02		0.48	0.73		0.61	0.68	
Uniform Delay, d1	36.0	35.9	35.2		35.3		47.4	11.0		46.7	9.8	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		7.4	1.2		13.7	0.8	
Delay (s)	36.3	36.2	35.2		35.3		54.8	12.2		60.4	10.6	
Level of Service	D	D	D		D		D	B		E	B	
Approach Delay (s)		36.1			35.3			12.7			11.9	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			13.0							B		
HCM 2000 Volume to Capacity ratio			0.62									
Actuated Cycle Length (s)			98.9							14.1		
Intersection Capacity Utilization			61.8%							B		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	23	0	1345	8	434	1014	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	35	0	1478	9	443	1035	0
RTOR Reduction (vph)	0	0	0	0	32	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1478	4	443	1035	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.42		c0.25	0.29	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.89	0.01	0.73	0.35	
Uniform Delay, d1					60.6			35.0	20.4	41.5	2.5	
Progression Factor					1.00			0.36	1.00	1.00	1.00	
Incremental Delay, d2					0.1			4.8	0.0	4.3	0.3	
Delay (s)					60.6			17.5	20.5	45.8	2.8	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			17.5			15.7	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.1			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		84.0%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	31	51	14	1	66	131	139	1181	5	296	441	316
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3276	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3276	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	48	78	22	1	75	149	154	1312	6	340	507	363
RTOR Reduction (vph)	0	0	20	0	0	125	0	0	3	0	89	0
Lane Group Flow (vph)	48	78	2	0	76	24	154	1312	3	340	781	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1075	
v/s Ratio Prot	0.03	c0.04			c0.04		0.09	c0.37		c0.19	0.24	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.39	0.61	0.02		0.26	0.10	0.28	0.83	0.00	1.00	0.73	
Uniform Delay, d1	64.6	65.6	62.9		53.5	52.1	37.8	35.4	22.3	58.5	43.0	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.93	
Incremental Delay, d2	2.1	8.0	0.1		0.5	0.2	0.3	5.3	0.0	46.9	4.2	
Delay (s)	66.7	73.6	63.0		54.0	52.3	38.1	40.7	22.3	102.9	44.1	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		69.8			52.9			40.4			60.6	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		50.7			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		89.6%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰	↱	↰	↱
Volume (veh/h)	47	202	4	92	332	9
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	55	238	5	115	361	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	794	62			120	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	794	62			120	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	79	76			75	
cM capacity (veh/h)	269	1002			1468	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	293	120	371			
Volume Left	55	0	361			
Volume Right	238	115	0			
cSH	1235	1700	1468			
Volume to Capacity	0.24	0.07	0.25			
Queue Length 95th (ft)	23	0	24			
Control Delay (s)	12.0	0.0	8.1			
Lane LOS	B		A			
Approach Delay (s)	12.0	0.0	8.1			
Approach LOS	B					
Intersection Summary						
Average Delay			8.3			
Intersection Capacity Utilization			35.5%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰	↱	↰	↱
Volume (vph)	50	3	1338	419	0	417
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1756		3539	1520		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1756		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	67	4	1408	441	0	652
RTOR Reduction (vph)	4	0	0	132	0	0
Lane Group Flow (vph)	67	0	1408	309	0	652
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		30.1	30.1		30.1
Effective Green, g (s)	3.0		30.1	30.1		30.1
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	122		2477	1064		2477
v/s Ratio Prot	c0.04		c0.40			0.18
v/s Ratio Perm				0.20		
v/c Ratio	0.55		0.57	0.29		0.26
Uniform Delay, d1	19.3		3.2	2.4		2.4
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	5.3		0.3	0.2		0.1
Delay (s)	24.7		3.5	2.6		2.4
Level of Service	C		A	A		A
Approach Delay (s)	24.7		3.3			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.7		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.57			
Actuated Cycle Length (s)			43.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			49.4%		ICU Level of Service	A
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↖↗		↖	↖↗
Volume (veh/h)	0	15	2174	5	5	469
Sign Control	Stop		Free		Free	
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2338	5	7	690
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2700	1172			2343	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2700	1172			2343	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			96	
cM capacity (veh/h)	17	185			207	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1558	785	7	345	345
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	185	1700	1700	207	1700	1700
Volume to Capacity	0.14	0.92	0.46	0.04	0.20	0.20
Queue Length 95th (ft)	12	0	0	3	0	0
Control Delay (s)	27.5	0.0	0.0	23.0	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	27.5	0.0		0.2		
Approach LOS	D					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		70.3%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↖↗	↖	↖	↖↗
Volume (vph)	17	87	2087	12	38	430
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	107	2244	13	55	623
RTOR Reduction (vph)	0	3	0	1	0	0
Lane Group Flow (vph)	21	104	2244	12	55	623
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.8	25.9	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.8	20.8	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	261	307	2253	1008	82	2709
v/s Ratio Prot	0.01	c0.07	c0.63		c0.03	0.18
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.34	1.00	0.01	0.67	0.23
Uniform Delay, d1	39.4	37.2	19.3	7.1	50.2	3.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	17.9	0.0	19.4	0.0
Delay (s)	39.5	37.9	37.2	7.1	69.7	3.6
Level of Service	D	D	D	A	E	A
Approach Delay (s)	38.1		37.0			9.0
Approach LOS	D		D			A
Intersection Summary						
HCM 2000 Control Delay		30.9		HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio		0.86				
Actuated Cycle Length (s)		107.1		Sum of lost time (s)	18.1	
Intersection Capacity Utilization		73.9%		ICU Level of Service	D	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↑↑			↑↑
Volume (veh/h)	0	32	2064	26	0	446
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	52	2173	27	0	603
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2488	1100			2200	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2488	1100			2200	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	75			100	
cM capacity (veh/h)	24	207			236	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	52	1448	752	301	301	
Volume Left	0	0	0	0	0	
Volume Right	52	0	27	0	0	
cSH	207	1700	1700	1700	1700	
Volume to Capacity	0.25	0.85	0.44	0.18	0.18	
Queue Length 95th (ft)	24	0	0	0	0	
Control Delay (s)	28.1	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	28.1	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		67.9%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	10	6	2090	32	15	422
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	16	10	2177	33	19	521
RTOR Reduction (vph)	0	4	0	7	0	0
Lane Group Flow (vph)	16	6	2177	26	19	521
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.7	59.7	2.0	69.2
Effective Green, g (s)	1.4	3.4	59.7	59.7	2.0	69.2
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2736	1224	45	3172
v/s Ratio Prot	c0.01	0.00	c0.62		c0.01	0.15
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.50	0.09	0.80	0.02	0.42	0.16
Uniform Delay, d1	37.6	35.4	5.2	2.0	37.0	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.8	0.6	1.7	0.0	6.3	0.0
Delay (s)	49.3	36.0	6.8	2.0	43.3	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	44.2		6.8			2.0
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		6.2		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.78				
Actuated Cycle Length (s)		77.2		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		70.6%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	45	1	0	44	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	83	2	0	70	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	85	70	3					
Volume Left (vph)	0	0	83	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	833	1121	815	841	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.2%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: AM PEAK















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	37	0	0	32	228	3	1893	51	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1357	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	49	0	0	44	317	3	2014	54	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	0	22	0	0	0
Lane Group Flow (vph)	3	49	0	0	44	261	3	2014	32	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.6	16.6			16.6	16.6	47.7	43.6	43.6			
Effective Green, g (s)	16.6	16.6			16.6	16.6	47.7	43.6	43.6			
Actuated g/C Ratio	0.23	0.23			0.23	0.23	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	306	420			420	357	1147	2096	937			
v/s Ratio Prot		0.03			0.02		0.00	c0.57				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.12			0.10	0.73	0.00	0.96	0.03			
Uniform Delay, d1	22.1	22.7			22.6	26.4	4.6	14.2	6.2			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	7.5	0.0	11.8	0.0			
Delay (s)	22.1	22.8			22.7	34.0	4.6	26.0	6.3			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.8			32.6			25.5			0.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay		26.4						HCM 2000 Level of Service			C	
HCM 2000 Volume to Capacity ratio		0.90										
Actuated Cycle Length (s)		73.6				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		86.0%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

























							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	23	44	523	1668	0	181	210
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	92	176	545	1738	0	229	266
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None			None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2320	247	495		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2320	247	495		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	77	49		0		
cM capacity (veh/h)	15	753	1065		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	268	545	869	869	153	342	0
Volume Left	92	545	0	0	0	0	0
Volume Right	176	0	0	0	0	266	0
cSH	43	1065	1700	1700	1700	1700	1700
Volume to Capacity	6.21	0.51	0.51	0.51	0.09	0.20	0.00
Queue Length 95th (ft)	Err	75	0	0	0	0	0
Control Delay (s)	Err	11.9	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B					
Approach Delay (s)	Err	2.8			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay		882.1					
Intersection Capacity Utilization		63.4%		ICU Level of Service		B	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	402	0	39	2	1	2	26	2064	0	0	177	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3432	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3432	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	457	0	44	6	3	6	27	2173	0	0	257	65
RTOR Reduction (vph)	0	31	0	0	6	0	0	0	0	0	19	0
Lane Group Flow (vph)	457	13	0	6	3	0	27	2173	0	0	303	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	26.1	26.1		1.7	1.7		1.9	43.4			37.3	
Effective Green, g (s)	26.1	26.1		1.7	1.7		1.9	43.4			37.3	
Actuated g/C Ratio	0.30	0.30		0.02	0.02		0.02	0.51			0.43	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	537	480		35	33		39	1788			1490	
v/s Ratio Prot	c0.26	0.01		c0.00	0.00		0.02	c0.61			0.09	
v/s Ratio Perm												
v/c Ratio	0.85	0.03		0.17	0.09		0.69	1.22			0.20	
Uniform Delay, d1	28.1	21.0		41.4	41.3		41.7	21.3			15.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	12.3	0.0		2.3	1.2		41.8	102.3			0.1	
Delay (s)	40.4	21.0		43.7	42.6		83.5	123.5			15.1	
Level of Service	D	C		D	D		F	F			B	
Approach Delay (s)		38.7			43.0			123.0			15.1	
Approach LOS		D			D			F			B	
Intersection Summary												
HCM 2000 Control Delay		97.3						HCM 2000 Level of Service		F		
HCM 2000 Volume to Capacity ratio		1.12										
Actuated Cycle Length (s)		85.9						Sum of lost time (s)		18.9		
Intersection Capacity Utilization		94.4%						ICU Level of Service		F		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	8	226	15	0	1914	17	44	23	1	19	41	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5037			5078		1770	1853			1731	
Flt Permitted	0.95	1.00			1.00		0.66	1.00			0.19	
Satd. Flow (perm)	1770	5037			5078		1237	1853			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	0.77
Adj. Flow (vph)	9	254	17	0	2103	19	52	27	1	25	53	68
RTOR Reduction (vph)	0	4	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	9	267	0	0	2121	0	52	27	0	0	129	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1905			2062		240	360			53	
v/s Ratio Prot	c0.01	0.05			c0.42			0.01				
v/s Ratio Perm							c0.04				c0.40	
v/c Ratio	0.05	0.14			1.03		0.22	0.08			2.42	
Uniform Delay, d1	71.5	36.7			53.5		61.0	59.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.2			26.0		0.5	0.1			694.4	
Delay (s)	71.6	36.9			79.4		61.4	59.4			769.4	
Level of Service	E	D			E		E	E			F	
Approach Delay (s)		38.0			79.4			60.7			769.4	
Approach LOS		D			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		112.8			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.98										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		75.8%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	244	0	397	1923	9	0	0	0	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3537							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3537							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	298	0	422	2046	10	0	0	0	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	298	0	422	2056	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3214							609
v/s Ratio Prot		0.06		0.12	c0.58							
v/s Ratio Perm												0.00
v/c Ratio		0.15		0.25	0.64							0.01
Uniform Delay, d1		36.9		25.7	1.8							34.9
Progression Factor		0.39		1.00	1.00							1.00
Incremental Delay, d2		0.2		0.1	0.4							0.0
Delay (s)		14.6		25.7	2.2							35.0
Level of Service		B		C	A							C
Approach Delay (s)		14.6			6.2		0.0					35.0
Approach LOS		B			A		A					C
Intersection Summary												
HCM 2000 Control Delay		7.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		75.1%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	9	239	0	0	129	104	0	0	0	47	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	11	285	0	0	139	112	0	0	0	52	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	251			285			505	556	285	501	501	195
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	251			285			505	556	285	501	501	195
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1315			1278			472	435	754	478	468	847

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	295	251	0	56
Volume Left	11	0	0	52
Volume Right	0	112	0	4
cSH	1315	1278	1700	495
Volume to Capacity	0.01	0.00	0.00	0.11
Queue Length 95th (ft)	1	0	0	10
Control Delay (s)	0.4	0.0	0.0	13.2
Lane LOS	A		A	B
Approach Delay (s)	0.4	0.0	0.0	13.2
Approach LOS			A	B

Intersection Summary

Average Delay	1.4			
Intersection Capacity Utilization	29.9%		ICU Level of Service	A
Analysis Period (min)	15			

NBC Coastal Campus

22: 3rd St & Palm Ave

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	278	4	26	210	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	323	5	28	226	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	328	28	252	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.1	5.5	5.1	5.7						
Degree Utilization, x	0.01	0.50	0.05	0.38	0.26	0.07						
Capacity (veh/h)	578	635	565	629	633	545						
Control Delay (s)	7.9	12.7	8.2	10.7	9.9	9.1						
Approach Delay (s)	12.5		10.4		9.9	9.1						
Approach LOS	B		B		A	A						

Intersection Summary

Delay	11.1			
Level of Service	B			
Intersection Capacity Utilization	37.7%		ICU Level of Service	A
Analysis Period (min)	15			




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱	↰↱		↰	↱
Volume (veh/h)	231	426	334	153	17	70
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	292	539	407	187	24	99
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	594				1625	297
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	594				1625	297
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	70				63	86
cM capacity (veh/h)	978				65	699
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	292	539	272	322	123	
Volume Left	292	0	0	0	24	
Volume Right	0	0	0	187	99	
cSH	978	1700	1700	1700	241	
Volume to Capacity	0.30	0.32	0.16	0.19	0.51	
Queue Length 95th (ft)	32	0	0	0	66	
Control Delay (s)	10.2	0.0	0.0	0.0	34.3	
Lane LOS	B				D	
Approach Delay (s)	3.6		0.0		34.3	
Approach LOS					D	
Intersection Summary						
Average Delay			4.7			
Intersection Capacity Utilization			42.2%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	419	15	26	335	0	66	41	81	1	22	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1724			1858	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.88			0.98	1.00
Satd. Flow (perm)	930	3521		821	3539			1540			1831	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	544	19	34	435	0	100	62	123	2	38	47
RTOR Reduction (vph)	0	3	0	0	0	0	0	32	0	0	0	29
Lane Group Flow (vph)	21	560	0	34	435	0	0	253	0	0	40	18
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.2	13.2		13.2	13.2			13.3			13.3	13.3
Effective Green, g (s)	13.2	13.2		13.2	13.2			13.3			13.3	13.3
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	343	1301		303	1308			573			682	589
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.16			0.02	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.44			0.06	0.03
Uniform Delay, d1	7.3	8.4		7.4	8.1			8.4			7.2	7.1
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.2			0.5			0.0	0.0
Delay (s)	7.3	8.7		7.6	8.2			9.0			7.2	7.1
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.6			8.2			9.0			7.2	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.5			HCM 2000 Level of Service				A		
HCM 2000 Volume to Capacity ratio		0.44										
Actuated Cycle Length (s)		35.7			Sum of lost time (s)				9.2			
Intersection Capacity Utilization		46.7%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	504	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	548	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			552		548	548
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			552		548	548
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1018		498	536
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	548	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	525			
Volume to Capacity	0.32	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.0			
Lane LOS			B			
Approach Delay (s)	0.0		12.0			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.5%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑	↘	↗	↑↑↑		↗	↑↑	↘	↗	↑↑	↘
Volume (vph)	21	700	36	23	2062	44	170	37	51	91	46	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5048		1770	5069			3325			3364	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5048		1770	5069			3325			3364	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	833	43	25	2266	48	205	45	61	111	56	30
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	873	0	25	2313	0	0	299	0	0	189	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2235		118	2159			646			654	
v/s Ratio Prot	0.01	c0.17		c0.01	c0.46			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.17	0.39		0.21	1.07			0.46			0.29	
Uniform Delay, d1	76.7	33.8		79.5	51.6			64.2			61.9	
Progression Factor	1.00	1.00		1.20	0.84			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.7	39.6			0.5			0.2	
Delay (s)	77.3	34.3		96.2	83.3			64.7			62.1	
Level of Service	E	C		F	F			E			E	
Approach Delay (s)		35.5			83.4			64.7			62.1	
Approach LOS		D			F			E			E	
Intersection Summary												
HCM 2000 Control Delay		69.2			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		77.9%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	
Volume (vph)	2	934	35	20	2238	12	18	4	31	55	11	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5058		1770	5081			1687		1770	1704	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5058		1770	5081			1542		1231	1704	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	1049	39	23	2543	14	25	5	42	79	16	21
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	18	0
Lane Group Flow (vph)	2	1086	0	23	2557	0	0	44	0	79	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			257		205	284	
v/s Ratio Prot	0.00	0.21		c0.01	c0.50						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.31		0.19	0.69			0.17		0.39	0.07	
Uniform Delay, d1	86.1	11.2		79.4	13.0			64.3		66.8	63.2	
Progression Factor	1.69	0.26		1.42	0.36			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.4	0.5			0.3		1.2	0.1	
Delay (s)	146.4	3.1		113.0	5.2			64.6		68.0	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.4			6.1			64.6			66.5	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		76.9%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰	↰↰	
Volume (vph)	3	1004	65	97	2086	52	152	19	92	171	36	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1783	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1783	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1128	73	117	2513	63	171	21	103	228	48	20
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	85	0	3	0
Lane Group Flow (vph)	3	1197	0	117	2513	33	0	192	18	0	293	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.24		c0.07	c0.49			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.54		0.60	0.93	0.04		0.63	0.07		0.50	
Uniform Delay, d1	86.2	36.7		76.2	39.0	20.2		69.1	62.4		67.5	
Progression Factor	1.23	0.62		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.9		4.8	7.2	0.1		3.9	0.1		0.7	
Delay (s)	106.7	23.5		81.0	46.2	20.3		73.1	62.5		68.2	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.7			47.1			69.4			68.2	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		43.7			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		94.2%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰	↰	↰	↰	↰
Volume (vph)	14	1274	26	44	2217	12	16	6	49	38	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1670			1723	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.78	
Satd. Flow (perm)	1770	5070		1770	5081			1562			1377	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	15	1385	28	51	2578	14	19	7	58	50	3	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	46	0	0	22	0
Lane Group Flow (vph)	15	1412	0	51	2592	0	0	38	0	0	59	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.8		2.8	39.9			15.1			15.1	
Effective Green, g (s)	0.7	37.8		2.8	39.9			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2684		69	2839			330			291	
v/s Ratio Prot	0.01	0.28		c0.03	c0.51							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.88	0.53		0.74	0.91			0.12			0.20	
Uniform Delay, d1	35.3	11.0		33.9	14.2			22.8			23.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	159.7	0.2		33.5	5.0			0.2			0.3	
Delay (s)	195.0	11.1		67.4	19.2			22.9			23.5	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		13.1			20.2			22.9			23.5	
Approach LOS		B			C			C			C	
Intersection Summary												
HCM 2000 Control Delay		17.9			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		71.4			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		60.0%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	93	1287	31	249	2151	219	81	74	786	239	94	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1750	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1750	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	108	1497	36	265	2288	233	90	82	873	285	112	93
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	181	0	2	60
Lane Group Flow (vph)	108	1531	0	265	2288	166	90	331	290	285	119	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.4	30.6	30.6	10.4	32.6	32.6
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.4	30.6	30.6	10.4	32.6	32.6
Actuated g/C Ratio	0.05	0.30		0.15	0.41	0.41	0.07	0.26	0.26	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	177	1537		273	2064	642	128	408	396	307	491	422
v/s Ratio Prot	0.03	0.30		c0.15	c0.45		0.05	c0.21		c0.08	0.07	
v/s Ratio Perm						0.10			0.19			0.02
v/c Ratio	0.61	1.00		0.97	1.11	0.26	0.70	0.81	0.73	0.93	0.24	0.06
Uniform Delay, d1	53.9	40.3		48.8	34.5	22.9	52.6	40.0	39.0	52.4	32.2	30.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.1	21.9		46.2	56.5	0.2	16.1	11.6	6.8	32.8	0.3	0.1
Delay (s)	59.9	62.2		95.0	91.0	23.1	68.6	51.6	45.8	85.3	32.4	30.5
Level of Service	E	E		F	F	C	E	D	D	F	C	C
Approach Delay (s)		62.0			85.7			50.4			62.8	
Approach LOS		E			F			D			E	
Intersection Summary												
HCM 2000 Control Delay		71.1			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		1.01										
Actuated Cycle Length (s)		116.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		90.8%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↔	↔
Volume (vph)	0	290	1214	0	158	1408
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	326	1305	0	176	1564
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	0	326	1305	0	176	1560
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.37		0.10	c0.56
v/s Ratio Perm						
v/c Ratio		0.12	1.12		0.85	1.02
Uniform Delay, d1		2.5	26.8		34.6	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	65.1		26.8	27.7
Delay (s)		2.5	91.9		61.4	45.7
Level of Service		A	F		E	D
Approach Delay (s)		2.5	91.9		47.3	
Approach LOS		A	F		D	
Intersection Summary						
HCM 2000 Control Delay			60.3		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			1.13			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			71.9%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↔	↔				
Volume (vph)	0	449	0	0	441	534	876	1	146	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.96				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3248		1681	1635				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3248		1681	1635				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	516	0	0	479	580	952	1	159	0	0	0
RTOR Reduction (vph)	0	0	0	0	365	0	0	27	0	0	0	0
Lane Group Flow (vph)	0	516	0	0	694	0	562	523	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		17.2			17.2		21.3	21.3				
Effective Green, g (s)		17.2			17.2		21.3	21.3				
Actuated g/C Ratio		0.37			0.37		0.46	0.46				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1309			1201		770	748				
v/s Ratio Prot		0.15			c0.21							
v/s Ratio Perm							c0.33	0.32				
v/c Ratio		0.39			0.58		0.73	0.70				
Uniform Delay, d1		10.8			11.7		10.3	10.0				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		3.5	2.9				
Delay (s)		11.0			12.4		13.7	12.9				
Level of Service		B			B		B	B				
Approach Delay (s)		11.0			12.4		13.3				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					12.5		HCM 2000 Level of Service	B				
HCM 2000 Volume to Capacity ratio					0.66							
Actuated Cycle Length (s)					46.5		Sum of lost time (s)	8.0				
Intersection Capacity Utilization					71.4%		ICU Level of Service	C				
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰		↰	↰	↰	↰
Volume (veh/h)	0	3	4	66	13	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	92	32	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	134	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	134	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	856	1042	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	97	32			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	1042	1581	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			16.7%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰
Volume (veh/h)	0	4195	17	0	1838	244	0	0	909	0	0	55
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%			0%			0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4370	18	0	1895	252	0	0	1010	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2166			4408			5134	6565	1505	3517	6448	797
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2166			4408			5134	6565	1505	3517	6448	797
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	46	100	100	74
cM capacity (veh/h)	239			29			0	0	1860	1	0	318
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1748	1748	892	758	758	631	1010	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	252	1010	83				
cSH	1700	1700	1700	1700	1700	1700	1860	318				
Volume to Capacity	1.03	1.03	0.52	0.45	0.45	0.37	0.54	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	86	26				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.2	20.3				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.2	20.3				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.4								
Intersection Capacity Utilization				146.3%	ICU Level of Service		H					
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3960	130	0	1875	0	201	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	4082	134	0	1953	0	245	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4236		4841	1468	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4236		4841	1468	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			34		0	113	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1633	1633	951	651	651	651	245
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	245
cSH	1700	1700	1700	1700	1700	1700	113
Volume to Capacity	0.96	0.96	0.56	0.38	0.38	0.38	2.17
Queue Length 95th (ft)	0	0	0	0	0	0	523
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	617.0
Lane LOS							F
Approach Delay (s)	0.0			0.0			617.0
Approach LOS							F
Intersection Summary							
Average Delay			23.6				
Intersection Capacity Utilization			100.5%		ICU Level of Service		G
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑			↑↑	↗
Volume (vph)	0	0	0	1001	635	109	116	252		0	0	862
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4636		1770	3539				3528
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4636		1770	3539				3528
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1054	668	115	120	260	0	0	0	889
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	0	2
Lane Group Flow (vph)	0	0	0	527	1298	0	120	260	0	0	0	903
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA				NA
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1432		98	1989				1568
v/s Ratio Prot				c0.35	0.28		c0.07	0.07				c0.26
v/s Ratio Perm												
v/c Ratio				1.12	1.00dl		1.22	0.13				0.58
Uniform Delay, d1				31.1	29.9		42.5	9.3				18.7
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				79.0	8.5		163.1	0.0				0.5
Delay (s)				110.1	38.4		205.6	9.3				19.2
Level of Service				F	D		F	A				B
Approach Delay (s)		0.0			59.0			71.3				19.2
Approach LOS		A			E			E				B
Intersection Summary												
HCM 2000 Control Delay			48.9				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.83									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)				17.2		
Intersection Capacity Utilization		136.1%				ICU Level of Service				H		
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔↔	
Volume (vph)	7	2112	113	0	0	0	0	368	576	761	1125	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.97	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.93	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3082	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3082	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2321	124	0	0	0	0	428	670	793	1172	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2329	95	0	0	0	0	750	313	793	1172	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					935	409	865	2022	
v/s Ratio Prot		c0.46						c0.24		c0.23	0.33	
v/s Ratio Perm			0.06						0.23			
v/c Ratio		1.27	0.17					0.80	0.76	0.92	0.58	
Uniform Delay, d1		55.8	37.9					56.1	55.3	63.7	24.0	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		123.8	0.1					5.0	8.3	14.2	0.4	
Delay (s)		179.6	38.0					61.2	63.6	77.9	24.4	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		172.4			0.0			61.9			46.0	
Approach LOS		F			A			E			D	
Intersection Summary												
HCM 2000 Control Delay			105.4								F	
HCM 2000 Volume to Capacity ratio			1.02									
Actuated Cycle Length (s)			175.0							14.4		
Intersection Capacity Utilization			136.1%							H		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave













MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔
Volume (vph)	176	12	1069	700	0	1281
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1584		3286			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1584		3286			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	226	15	1201	787	0	1377
RTOR Reduction (vph)	2	0	52	0	0	0
Lane Group Flow (vph)	239	0	1936	0	0	1377
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	297		2482			2540
v/s Ratio Prot	c0.15		c0.59			0.41
v/s Ratio Perm						
v/c Ratio	0.81		0.78			0.54
Uniform Delay, d1	62.2		11.6			8.1
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	14.7		2.5			0.8
Delay (s)	76.9		14.1			8.9
Level of Service	E		B			A
Approach Delay (s)	76.9		14.1			8.9
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay			16.3			B
HCM 2000 Volume to Capacity ratio			0.80			
Actuated Cycle Length (s)			160.0			12.1
Intersection Capacity Utilization			85.3%			E
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2022 Alt 1/2/3









Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	146	10	29	26	10	25	23	1685	50	68	1509	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1724		1770	3524		1770	3490	
Flt Permitted	0.68	0.68	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1201	1202	1583		1459		1770	3524		1770	3490	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	187	13	37	41	16	39	25	1812	54	74	1640	167
RTOR Reduction (vph)	0	0	31	0	22	0	0	1	0	0	2	0
Lane Group Flow (vph)	99	101	6	0	74	0	25	1865	0	74	1805	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	19.1	19.1	19.1		19.1		3.1	71.9		8.1	76.9	
Effective Green, g (s)	19.1	19.1	19.1		19.1		3.1	71.9		8.1	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	201	201	265		244		48	2224		125	2356	
v/s Ratio Prot							0.01	c0.53		c0.04	0.52	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.49	0.50	0.02		0.30		0.52	0.84		0.59	0.77	
Uniform Delay, d1	43.0	43.1	39.6		41.6		54.7	16.5		51.3	12.4	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.9	2.0	0.0		0.7		9.8	2.9		7.3	1.5	
Delay (s)	44.9	45.1	39.6		42.2		64.5	19.4		58.6	14.0	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		44.1			42.2			20.0			15.7	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		20.0			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		113.9			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		76.5%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	8	0	147	0	1488	0	32	1650	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	12	0	213	0	1583	0	34	1774	0
RTOR Reduction (vph)	0	0	0	0	173	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	52	0	0	1583	0	34	1774	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.0			45.1		1.7	51.0	
Effective Green, g (s)					14.0			45.1		1.7	51.0	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					301			2125		40	2403	
v/s Ratio Prot					c0.03			0.45		0.02	c0.50	
v/s Ratio Perm												
v/c Ratio					0.17			0.74		0.85	0.74	
Uniform Delay, d1					25.7			10.8		36.6	7.8	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			1.5		84.3	1.2	
Delay (s)					25.9			12.3		120.9	9.0	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			25.9			12.3			11.1	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					12.5			HCM 2000 Level of Service			B	
HCM 2000 Volume to Capacity ratio					0.71							
Actuated Cycle Length (s)					75.1			Sum of lost time (s)			18.9	
Intersection Capacity Utilization					63.6%			ICU Level of Service			B	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	297	51	121	6	70	429	28	785	2	141	1470	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1514		1855	1509	1770	3539	1343	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1514		1855	1509	1770	3539	1343	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	391	67	159	7	76	466	31	863	2	150	1564	71
RTOR Reduction (vph)	0	0	129	0	0	195	0	0	1	0	2	0
Lane Group Flow (vph)	391	67	30	0	83	271	31	863	1	150	1633	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.6	27.6	27.6		27.6	27.6	4.0	56.0	56.0	17.5	69.5	
Effective Green, g (s)	27.6	27.6	27.6		27.6	27.6	4.0	56.0	56.0	17.5	69.5	
Actuated g/C Ratio	0.19	0.19	0.19		0.19	0.19	0.03	0.38	0.38	0.12	0.47	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	329	347	282		345	281	47	1338	507	209	1648	
v/s Ratio Prot	c0.22	0.04			0.04		0.02	0.24		c0.08	c0.46	
v/s Ratio Perm			0.02			c0.18		0.00				
v/c Ratio	1.19	0.19	0.11		0.24	0.96	0.66	0.64	0.00	0.72	0.99	
Uniform Delay, d1	60.2	50.9	50.0		51.3	59.7	71.4	37.9	28.7	62.9	39.0	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	111.1	0.3	0.2		0.4	43.4	28.7	2.4	0.0	11.2	20.1	
Delay (s)	171.4	51.1	50.2		51.7	103.2	100.1	40.3	28.7	74.1	59.1	
Level of Service	F	D	D		D	F	F	D	C	E	E	
Approach Delay (s)		127.1			95.4			42.3			60.3	
Approach LOS		F			F			D			E	
Intersection Summary												
HCM 2000 Control Delay			71.9			HCM 2000 Level of Service				E		
HCM 2000 Volume to Capacity ratio			1.03									
Actuated Cycle Length (s)			148.1			Sum of lost time (s)				19.4		
Intersection Capacity Utilization			82.5%			ICU Level of Service				E		
Analysis Period (min)			15									







c Critical Lane Group

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	326	503	3	61	182	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	362	559	4	86	207	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	464	47			90	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	464	47			90	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	25	45			86	
cM capacity (veh/h)	480	1022			1505	
Direction, Lane #						
Volume Total	921	90	210			
Volume Left	362	0	207			
Volume Right	559	86	0			
cSH	964	1700	1505			
Volume to Capacity	0.96	0.05	0.14			
Queue Length 95th (ft)	403	0	12			
Control Delay (s)	40.1	0.0	7.7			
Lane LOS	E		A			
Approach Delay (s)	40.1	0.0	7.7			
Approach LOS	E					
Intersection Summary						
Average Delay			31.5			
Intersection Capacity Utilization			41.7%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕		↕
Volume (vph)	329	6	822	64	0	1599
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	416	8	913	71	0	1797
RTOR Reduction (vph)	1	0	0	41	0	0
Lane Group Flow (vph)	423	0	913	30	0	1797
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.24		0.26			c0.51
v/s Ratio Perm				0.02		
v/c Ratio	0.50		0.60	0.05		1.18
Uniform Delay, d1	18.9		23.0	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.5		0.7	0.0		89.1
Delay (s)	19.4		23.7	17.5		119.0
Level of Service	B		C	B		F
Approach Delay (s)	19.4		23.3			119.0
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay		76.4		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		0.82				
Actuated Cycle Length (s)		105.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		94.1%		ICU Level of Service		F
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕	↔	↕
Volume (veh/h)	4	6	682	3	15	1539
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	793	3	16	1691
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1673	398			797	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1673	398			797	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	98			98	
cM capacity (veh/h)	85	601			821	
Direction, Lane #						
Volume Total	20	529	268	16	846	846
Volume Left	8	0	0	16	0	0
Volume Right	12	0	3	0	0	0
cSH	175	1700	1700	821	1700	1700
Volume to Capacity	0.11	0.31	0.16	0.02	0.50	0.50
Queue Length 95th (ft)	9	0	0	2	0	0
Control Delay (s)	28.2	0.0	0.0	9.5	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	28.2	0.0		0.1		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			52.5%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	30	57	627	12	104	1440
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	33	62	712	14	114	1582
RTOR Reduction (vph)	0	46	0	7	0	0
Lane Group Flow (vph)	33	16	712	7	114	1582
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.3	21.6	28.0	28.0	7.2	44.0
Effective Green, g (s)	9.3	16.5	28.0	28.0	7.2	44.0
Actuated g/C Ratio	0.15	0.26	0.45	0.45	0.12	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	262	417	1582	708	203	2487
v/s Ratio Prot	c0.02	0.01	0.20		0.06	c0.45
v/s Ratio Perm				0.00		
v/c Ratio	0.13	0.04	0.45	0.01	0.56	0.64
Uniform Delay, d1	23.1	17.2	12.0	9.6	26.2	5.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.2	0.0	3.5	0.5
Delay (s)	23.3	17.2	12.2	9.6	29.7	5.5
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.3		12.1			7.2
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			9.1		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.66			
Actuated Cycle Length (s)			62.6		Sum of lost time (s)	18.1
Intersection Capacity Utilization			51.7%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave







MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↕	↕			↕
Volume (veh/h)	0	23	618	18	0	1470
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	31	710	21	0	1598
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1520	366			731	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1520	366			731	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	109	631			869	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	31	474	257	799	799	
Volume Left	0	0	0	0	0	
Volume Right	31	0	21	0	0	
cSH	631	1700	1700	1700	1700	
Volume to Capacity	0.05	0.28	0.15	0.47	0.47	
Queue Length 95th (ft)	4	0	0	0	0	
Control Delay (s)	11.0	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	11.0	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			44.0%		ICU Level of Service	A
Analysis Period (min)			15			





NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	30	26	611	18	23	1446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	42	36	650	19	25	1589
RTOR Reduction (vph)	0	33	0	8	0	0
Lane Group Flow (vph)	42	3	650	11	25	1589
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	28.1	28.1	1.7	37.3
Effective Green, g (s)	2.6	4.3	28.1	28.1	1.7	37.3
Actuated g/C Ratio	0.06	0.09	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	98	146	2138	956	64	2838
v/s Ratio Prot	c0.02	0.00	0.18		0.01	c0.45
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.43	0.02	0.30	0.01	0.39	0.56
Uniform Delay, d1	21.2	19.2	4.5	3.7	21.9	1.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.1	0.1	0.0	3.9	0.2
Delay (s)	24.2	19.3	4.5	3.7	25.8	1.9
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.9		4.5			2.3
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.6		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.68			
Actuated Cycle Length (s)			46.5		Sum of lost time (s)	14.1
Intersection Capacity Utilization			50.9%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	11	14	85	8	0	180	13	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	11	15	110	10	0	202	15	0	0
Direction, Lane #										
Volume Total (vph)	11	15	121	217						
Volume Left (vph)	0	0	110	0						
Volume Right (vph)	0	15	0	15						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.19						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑			↑	↱	↰	↑	↱			
Volume (vph)	10	187	0	0	82	139	12	531	69	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1297	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	11	212	0	0	94	160	13	584	76	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	120	0	41	0	0	0	0
Lane Group Flow (vph)	11	212	0	0	94	40	13	584	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.5	8.5			8.5	8.5	18.3	18.3	18.3			
Effective Green, g (s)	8.5	8.5			8.5	8.5	18.3	18.3	18.3			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	274	393			393	334	805	1611	720			
v/s Ratio Prot		c0.11			0.05		0.01	c0.17				
v/s Ratio Perm	0.01					0.03			0.02			
v/c Ratio	0.04	0.54			0.24	0.12	0.02	0.36	0.05			
Uniform Delay, d1	12.6	14.1			13.2	12.8	6.0	7.1	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.4			0.3	0.2	0.0	0.1	0.0			
Delay (s)	12.7	15.5			13.5	13.0	6.0	7.3	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.2		7.1			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.1			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.42										
Actuated Cycle Length (s)		40.2			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		42.9%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd









MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↑	↱	↑	↱
Volume (veh/h)	207	518	96	470	0	1563	52
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	828	2072	109	534	0	1737	58
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2251	897	1794		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2251	897	1794		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	0	68		0		
cM capacity (veh/h)	24	283	340		0		
Direction, Lane #							
Volume Total	2900	109	267	267	1158	637	0
Volume Left	828	109	0	0	0	0	0
Volume Right	2072	0	0	0	0	58	0
cSH	69	340	1700	1700	1700	1700	1700
Volume to Capacity	41.98	0.32	0.16	0.16	0.68	0.37	0.00
Queue Length 95th (ft)	Err	34	0	0	0	0	0
Control Delay (s)	Err	20.5	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C					
Approach Delay (s)	Err	3.5			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			5433.0				
Intersection Capacity Utilization			103.5%		ICU Level of Service		
Analysis Period (min)			15				G









NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	88	0	68	1	1	0	73	419	12	1	1627	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3525		1770	3481	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3525		1770	3481	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	117	0	91	2	2	0	80	460	13	1	1808	222
RTOR Reduction (vph)	0	73	0	0	0	0	0	1	0	0	7	0
Lane Group Flow (vph)	117	18	0	2	2	0	80	472	0	1	2023	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	17.9	17.9		0.8	0.8		5.8	52.1		0.8	47.1	
Effective Green, g (s)	17.9	17.9		0.8	0.8		5.8	52.1		0.8	47.1	
Actuated g/C Ratio	0.20	0.20		0.01	0.01		0.06	0.58		0.01	0.52	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	350	313		15	16		113	2029		15	1811	
v/s Ratio Prot	c0.07	0.01		c0.00	0.00		c0.05	0.13		0.00	c0.58	
v/s Ratio Perm												
v/c Ratio	0.33	0.06		0.13	0.12		0.71	0.23		0.07	1.12	
Uniform Delay, d1	31.2	29.5		44.5	44.5		41.5	9.4		44.5	21.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.1		4.0	3.5		18.3	0.1		1.9	60.9	
Delay (s)	31.7	29.5		48.5	48.0		59.8	9.5		46.4	82.6	
Level of Service	C	C		D	D		E	A		D	F	
Approach Delay (s)		30.8			48.3			16.7			82.6	
Approach LOS		C			D			B			F	
Intersection Summary												
HCM 2000 Control Delay		65.7										
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		90.5										
Intersection Capacity Utilization		79.0%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	57	1576	64	0	455	35	14	40		4	24	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6				5.6
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00				1.00
Flt	1.00	0.99			0.99		1.00	0.99				0.96
Flt Protected	0.95	1.00			1.00		0.95	1.00				0.98
Satd. Flow (prot)	1770	5055			5031		1770	1836				1759
Flt Permitted	0.95	1.00			1.00		0.70	1.00				0.16
Satd. Flow (perm)	1770	5055			5031		1308	1836				284
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	65	1791	73	0	484	37	20	57	6	28	31	25
RTOR Reduction (vph)	0	2	0	0	5	0	0	2	0	0	8	0
Lane Group Flow (vph)	65	1862	0	0	516	0	20	61	0	0	76	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1912			2043		254	357			47	
v/s Ratio Prot	c0.04	c0.37			c0.10			c0.03				
v/s Ratio Perm							0.02				c0.27	
v/c Ratio	0.33	0.97			0.25		0.08	0.17			1.61	
Uniform Delay, d1	73.8	55.1			35.4		59.3	60.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	15.2			0.3		0.1	0.2			353.1	
Delay (s)	74.8	70.3			35.7		59.4	60.6			428.1	
Level of Service	E	E			D		E	E			F	
Approach Delay (s)		70.4			35.7			60.3			428.1	
Approach LOS		E			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		74.7										
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		70.3%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←
Volume (vph)	0	1606	0	504	493	38	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3502							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3502							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1804	0	536	524	40	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1804	0	536	564	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3182							609
v/s Ratio Prot		c0.35		c0.16	c0.16							
v/s Ratio Perm												0.00
v/c Ratio		0.94		0.28	0.18							0.00
Uniform Delay, d1		53.9		20.6	0.9							34.8
Progression Factor		0.29		1.00	1.00							1.00
Incremental Delay, d2		3.4		0.1	0.0							0.0
Delay (s)		19.3		20.7	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		19.3			10.6		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		16.0										B
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		180.0							22.3			
Intersection Capacity Utilization		55.0%										B
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave



















MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		←←			←←			←←			←←	
Volume (veh/h)	3	214	0	0	312	40	0	0	0	104	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	249	0	0	355	45	0	0	0	158	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	400			249			645	656	249	633	633	377
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	400			249			645	656	249	633	633	377
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	60	100	98
cM capacity (veh/h)	1159			1317			377	384	790	391	396	669
Direction, Lane #												
Volume Total	252	400	0	170								
Volume Left	3	0	0	158								
Volume Right	0	45	0	12								
cSH	1159	1317	1700	403								
Volume to Capacity	0.00	0.00	0.00	0.42								
Queue Length 95th (ft)	0	0	0	51								
Control Delay (s)	0.1	0.0	0.0	20.3								
Lane LOS	A			A								
Approach Delay (s)	0.1	0.0	0.0	20.3								
Approach LOS				A								
Intersection Summary												
Average Delay		4.2										
Intersection Capacity Utilization		31.8%								A		
Analysis Period (min)		15										













NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	296	12	85	326	24	14	38	68	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	379	15	96	366	27	25	67	119	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	395	96	393	211	161						
Volume Left (vph)	9	0	96	0	25	61						
Volume Right (vph)	0	15	0	27	119	28						
Hadj (s)	0.53	0.01	0.53	-0.01	-0.28	0.00						
Departure Headway (s)	7.2	6.7	7.1	6.6	6.7	7.1						
Degree Utilization, x	0.02	0.73	0.19	0.72	0.39	0.32						
Capacity (veh/h)	470	517	483	527	475	433						
Control Delay (s)	9.2	24.8	10.6	23.3	13.8	13.4						
Approach Delay (s)	24.5		20.8		13.8	13.4						
Approach LOS	C		C		B	B						
Intersection Summary												
Delay			19.9									
Level of Service			C									
Intersection Capacity Utilization			41.7%		ICU Level of Service		A					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

									
Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Lane Configurations									
Volume (veh/h)	74	423	457	39	53	146			
Sign Control		Free	Free		Stop				
Grade		0%	0%		0%				
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85			
Hourly flow rate (vph)	76	436	531	45	62	172			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type	None		None						
Median storage (veh)									
Upstream signal (ft)	908								
pX, platoon unblocked									
vC, conflicting volume	577				1143	288			
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	577				1143	288			
tC, single (s)	4.1				6.8	6.9			
tC, 2 stage (s)									
tF (s)	2.2				3.5	3.3			
p0 queue free %	92				65	76			
cM capacity (veh/h)	993				179	708			
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1				
Volume Total	76	436	354	222	234				
Volume Left	76	0	0	0	62				
Volume Right	0	0	0	45	172				
cSH	993	1700	1700	1700	396				
Volume to Capacity	0.08	0.26	0.21	0.13	0.59				
Queue Length 95th (ft)	6	0	0	0	92				
Control Delay (s)	8.9	0.0	0.0	0.0	26.4				
Lane LOS	A				D				
Approach Delay (s)	1.3	0.0			26.4				
Approach LOS					D				
Intersection Summary									
Average Delay			5.2						
Intersection Capacity Utilization			40.9%	ICU Level of Service		A			
Analysis Period (min)			15						

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↱		↰	↰↱			↱		↰	↰↱	↱
Volume (vph)	28	433	29	31	459	3	55	20	22	12	46	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3536			1755			1844	1583
Flt Permitted	0.47	1.00		0.45	1.00			0.78			0.90	1.00
Satd. Flow (perm)	867	3505		831	3536			1410			1686	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	515	35	34	504	3	67	24	27	16	61	39
RTOR Reduction (vph)	0	7	0	0	1	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	543	0	34	506	0	0	97	0	0	77	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Effective Green, g (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	413	1671		396	1686			308			368	345
v/s Ratio Prot		c0.15			0.14							
v/s Ratio Perm	0.04			0.04				c0.07			0.05	0.01
v/c Ratio	0.08	0.32		0.09	0.30			0.31			0.21	0.02
Uniform Delay, d1	4.3	4.9		4.3	4.8			9.9			9.7	9.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.6			0.3	0.0
Delay (s)	4.4	5.0		4.4	4.9			10.5			9.9	9.3
Level of Service	A	A		A	A			B			A	A
Approach Delay (s)		5.0			4.9			10.5			9.7	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		30.2			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		44.8%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↰			↰	↰
Volume (veh/h)	614	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	749	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			759		749	749
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			759		749	749
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			853		380	412
Direction, Lane #						
Volume Total	749	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	387			
Volume to Capacity	0.44	0.01	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	14.6			
Lane LOS			B			
Approach Delay (s)	0.0		14.6			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			42.3%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	42	1898	131	59	880	132	99	91	63	175	80	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Flt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5036		1770	4986			3342			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5036		1770	4986			3342			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	45	2019	139	60	889	133	109	100	69	197	90	29
RTOR Reduction (vph)	0	4	0	0	11	0	0	18	0	0	4	0
Lane Group Flow (vph)	45	2154	0	60	1011	0	0	260	0	0	312	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2006		196	1986			649			658	
v/s Ratio Prot	0.03	c0.43		c0.03	0.20			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.23	1.07		0.31	0.51			0.40			0.47	
Uniform Delay, d1	73.0	54.1		73.6	40.9			63.3			64.3	
Progression Factor	1.00	1.00		1.23	0.81			1.00			1.00	
Incremental Delay, d2	0.6	43.2		0.8	0.9			0.4			0.5	
Delay (s)	73.6	97.3		91.3	34.1			63.8			64.9	
Level of Service	E	F		F	C			E			E	
Approach Delay (s)		96.9			37.3			63.8			64.9	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		75.3			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		119.1%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	20	2184	58	49	1291	55	21	11	35	64	13	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5066		1770	5054			1704		1770	1719	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.62	1.00	
Satd. Flow (perm)	1770	5066		1770	5054			1554		1156	1719	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2229	59	51	1331	57	25	13	42	75	15	16
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	14	0
Lane Group Flow (vph)	20	2287	0	51	1386	0	0	57	0	75	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3563		157	3666			191		142	212	
v/s Ratio Prot	0.01	c0.45		c0.03	c0.27						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.64		0.32	0.38			0.30		0.53	0.08	
Uniform Delay, d1	79.3	14.4		76.9	9.3			71.8		74.0	69.9	
Progression Factor	1.45	0.15		1.55	0.28			1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.2		1.0	0.2			0.9		3.5	0.2	
Delay (s)	115.4	2.3		120.6	2.8			72.7		77.5	70.0	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.3			7.0			72.7			75.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.0			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		63.2%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	2024	206	159	1365	82	131	41	129	156	45	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5015		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5015		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	29	2153	219	164	1407	85	142	45	140	211	61	27
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	116	0	4	0
Lane Group Flow (vph)	29	2365	0	164	1407	48	0	187	24	0	295	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2			4				
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2220		192	2364	736		306	269		575	
v/s Ratio Prot	0.02	c0.47		c0.09	c0.28			c0.10			c0.09	
v/s Ratio Perm					0.03			0.02				
v/c Ratio	0.18	1.07		0.85	0.60	0.07		0.61	0.09		0.51	
Uniform Delay, d1	76.0	50.1		78.8	35.6	26.6		69.1	62.9		67.9	
Progression Factor	1.00	1.04		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	37.7		29.0	1.1	0.2		8.8	0.7		3.2	
Delay (s)	76.4	89.7		107.8	36.7	26.7		77.9	63.5		71.1	
Level of Service	E	F		F	D	C		E	E		E	
Approach Delay (s)		89.6			43.3			71.8			71.1	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		70.8			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.84										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		107.6%			ICU Level of Service				G			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	2192	50	173	1668	16	39	9	82	23	11	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1770	5068		1770	5078			1680			1756	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.84	
Satd. Flow (perm)	1770	5068		1770	5078			1515			1514	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.95	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	11	2436	56	182	1756	17	46	11	96	28	14	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	76	0	0	11	0
Lane Group Flow (vph)	11	2490	0	182	1772	0	0	77	0	0	45	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.3			17.3	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.3			17.3	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2417		234	3046			310			309	
v/s Ratio Prot	0.01	c0.49		c0.10	0.35							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.69	1.03		0.78	0.58			0.25			0.15	
Uniform Delay, d1	41.7	22.1		35.4	10.4			28.1			27.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	80.1	26.6		14.9	0.3			0.4			0.2	
Delay (s)	121.8	48.7		50.4	10.7			28.6			27.8	
Level of Service	F	D		D	B			C			C	
Approach Delay (s)		49.0			14.4			28.6			27.8	
Approach LOS		D			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		33.6			HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		84.5			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		74.5%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	192	2127	31	334	1675	566	67	180	543	599	243	232
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5074		1770	5085	1583	1770	1631	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5074		1770	5085	1583	1770	1631	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	202	2239	33	359	1801	609	71	191	578	651	264	252
RTOR Reduction (vph)	0	1	0	0	0	85	0	26	278	0	2	128
Lane Group Flow (vph)	202	2271	0	359	1801	524	71	373	92	651	287	99
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.4	36.4		45.0	70.0	70.0	8.7	37.9	37.9	11.8	41.0	41.0
Effective Green, g (s)	11.4	36.4		45.0	70.0	70.0	8.7	37.9	37.9	11.8	41.0	41.0
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1207		520	2326	724	100	404	372	264	468	403
v/s Ratio Prot	0.06	c0.45		c0.20	c0.35		0.04	c0.23		c0.19	c0.16	
v/s Ratio Perm					0.33			0.06				0.07
v/c Ratio	0.79	1.88		0.69	0.77	0.72	0.71	0.92	0.25	2.47	0.61	0.25
Uniform Delay, d1	69.6	58.3		47.8	34.9	33.7	70.9	56.2	46.1	70.6	49.0	43.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.4	399.9		3.9	1.7	3.6	20.6	26.6	0.3	670.9	2.4	0.3
Delay (s)	85.0	458.2		51.8	36.5	37.3	91.5	82.8	46.5	741.5	51.4	44.2
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		427.8			38.7			67.5			435.0	
Approach LOS		F			D			E			F	

Intersection Summary

HCM 2000 Control Delay	238.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.26		
Actuated Cycle Length (s)	153.0	Sum of lost time (s)	21.9
Intersection Capacity Utilization	130.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2022 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	↔
Volume (vph)	0	523	885	0	448	1697
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	588	941	0	492	1865
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	588	941	0	492	1862
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.17	c0.27		0.28	c0.67
v/s Ratio Perm						
v/c Ratio		0.33	1.10		0.74	1.05
Uniform Delay, d1		11.8	30.3		21.6	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	60.6		4.5	35.3
Delay (s)		11.9	90.9		26.1	49.8
Level of Service		B	F		C	D
Approach Delay (s)		11.9	90.9		44.8	
Approach LOS		B	F		D	

Intersection Summary

HCM 2000 Control Delay	51.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	88.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	965	0	0	539	255	456	2	109	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3369		1681	1616				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3369		1681	1616				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1005	0	0	606	287	490	2	117	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	32	0	0	0	0
Lane Group Flow (vph)	0	1005	0	0	795	0	314	263	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.4			19.4		14.8	14.8				
Effective Green, g (s)		19.4			19.4		14.8	14.8				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1626			1548		589	566				
v/s Ratio Prot		0.28			0.24							
v/s Ratio Perm							0.19	0.16				
v/c Ratio		0.62			0.51		0.53	0.46				
Uniform Delay, d1		8.6			8.1		10.9	10.6				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.7			0.3		0.9	0.6				
Delay (s)		9.3			8.4		11.9	11.2				
Level of Service		A			A		B	B				
Approach Delay (s)		9.3			8.4		11.6				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		9.5			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		42.2			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		49.3%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												





















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2022 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	3	36	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	3	52	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	73	52	52			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	73	52	52			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	926	1015	1554			
Direction, Lane #						
Volume Total	16	12	52			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	1015	1554	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.3	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.3	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.5				
Intersection Capacity Utilization		17.2%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St















MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Volume (veh/h)	0	1419	34	0	3966	553	0	0	477	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1710	41	0	4311	601	0	0	596	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4932			1771			3219	6682	630	5221	6402	1777
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4932			1771			3219	6682	630	5221	6402	1777
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	83
cM capacity (veh/h)	18			342			3	0	1359	0	0	69
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	684	684	383	1724	1724	1463	596	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	601	596	12				
cSH	1700	1700	1700	1700	1700	1700	1359	69				
Volume to Capacity	0.40	0.40	0.23	1.01	1.01	0.86	0.44	0.17				
Queue Length 95th (ft)	0	0	0	0	0	0	57	15				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	67.5				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	67.5				
Approach LOS							A	F				
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			104.0%	ICU Level of Service				G				
Analysis Period (min)			15									

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	  			  		  	
Volume (veh/h)	1280	202	0	3865	0	232	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1455	230	0	4294	0	252	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1704		3041	640	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1704		3041	640	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	38	
cM capacity (veh/h)			363		10	404	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	582	582	520	1431	1431	1431	252
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	230	0	0	0	252
cSH	1700	1700	1700	1700	1700	1700	404
Volume to Capacity	0.34	0.34	0.31	0.84	0.84	0.84	0.62
Queue Length 95th (ft)	0	0	0	0	0	0	102
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.5
Lane LOS							D
Approach Delay (s)	0.0			0.0			27.5
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			89.5%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1726	1947	343	109	102	0	0	278	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flt Protected				1.00	0.98		1.00	1.00			0.99	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4637		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4637		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1856	2094	369	147	138	0	0	320	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1058	3253	0	147	138	0	0	332	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3210		186	872			397	
v/s Ratio Prot				0.70	c0.70		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				1.00	1.01		0.79	0.16			0.84	
Uniform Delay, d1				29.2	29.2		82.7	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				28.9	19.3		20.0	0.1			14.2	
Delay (s)				58.0	48.5		102.7	56.1			96.5	
Level of Service				E	D		F	E			F	
Approach Delay (s)		0.0			50.8			80.1			96.5	
Approach LOS		A			D			F			F	
Intersection Summary												
HCM 2000 Control Delay				55.6			HCM 2000 Level of Service			E		
HCM 2000 Volume to Capacity ratio				0.96								
Actuated Cycle Length (s)				189.5			Sum of lost time (s)			16.8		
Intersection Capacity Utilization				201.0%			ICU Level of Service			H		
Analysis Period (min)				15								
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	584	98	0	0	0	0	201	217	452	1609	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Flt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3247	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3247	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	635	107	0	0	0	0	234	236	491	1676	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	22	48	0	0	0
Lane Group Flow (vph)	0	636	78	0	0	0	0	304	96	491	1676	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.6	62.6	35.2	100.6	
Effective Green, g (s)		60.0	60.0					62.6	62.6	35.2	100.6	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.20	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1771	551					1180	523	701	2067	
v/s Ratio Prot								0.09		0.14	c0.47	
v/s Ratio Perm		0.13	0.05						0.07			
v/c Ratio		0.36	0.14					0.26	0.18	0.70	0.81	
Uniform Delay, d1		41.8	38.4					38.5	37.4	63.6	28.3	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.2	2.5	
Delay (s)		41.9	38.6					38.6	37.5	66.8	30.8	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.4			0.0			38.3			39.0	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay			39.4				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.65									
Actuated Cycle Length (s)			172.2				Sum of lost time (s)			14.4		
Intersection Capacity Utilization			201.0%				ICU Level of Service			H		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖↗		↖↗		↖↗	↖↗
Volume (vph)	222	7	1195	617	0	1346
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Flt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3318			3362
Flt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3318			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	258	8	1285	663	0	1417
RTOR Reduction (vph)	1	0	52	0	0	0
Lane Group Flow (vph)	265	0	1896	0	0	1417
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	18.9		45.5			45.5
Effective Green, g (s)	18.9		45.5			45.5
Actuated g/C Ratio	0.26		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	409		2054			2081
v/s Ratio Prot	c0.17		c0.57			0.42
v/s Ratio Perm						
v/c Ratio	0.65		0.92			0.68
Uniform Delay, d1	24.3		12.4			9.2
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	3.5		7.5			0.9
Delay (s)	27.8		20.0			10.2
Level of Service	C		B			B
Approach Delay (s)	27.8		20.0			10.2
Approach LOS	C		B			B
Intersection Summary						
HCM 2000 Control Delay			16.7		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.88			
Actuated Cycle Length (s)			73.5		Sum of lost time (s)	12.1
Intersection Capacity Utilization			79.3%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↖↗	↖↗	↖↗	↖↗	↖↗	↖↗	↖↗	↖↗	↖↗	↖↗	↖↗
Volume (vph)	48	2	10	8	0	5	20	1415	26	40	1491	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	1.00	
Flt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1713		1770	3530		1770	3526	
Flt Permitted	0.74	0.78	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1310	1372	1583		1512		1770	3530		1770	3526	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	56	2	12	16	0	10	24	1685	31	43	1621	40
RTOR Reduction (vph)	0	0	10	0	22	0	0	1	0	0	1	0
Lane Group Flow (vph)	29	29	2	0	4	0	24	1715	0	43	1660	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.5	15.5	15.5		15.5		2.8	66.2		3.9	67.3	
Effective Green, g (s)	15.5	15.5	15.5		15.5		2.8	66.2		3.9	67.3	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.68	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	203	213	246		235		49	2343		69	2380	
v/s Ratio Prot							0.01	c0.49		c0.02	0.47	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.14	0.14	0.01		0.02		0.49	0.73		0.62	0.70	
Uniform Delay, d1	36.4	36.3	35.6		35.7		47.7	11.0		47.2	10.0	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		7.5	1.2		16.2	0.9	
Delay (s)	36.7	36.6	35.6		35.7		55.3	12.2		63.4	10.9	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		36.5			35.7			12.8			12.2	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			13.1		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.62									
Actuated Cycle Length (s)			99.7		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			62.8%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	23	0	1358	8	437	1045	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	35	0	1492	9	446	1066	0
RTOR Reduction (vph)	0	0	0	0	32	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1492	4	446	1066	0
Turn Type	Split			Split	NA		NA	Perm		Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.42		c0.25	0.30	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.90	0.01	0.73	0.36	
Uniform Delay, d1					60.6			35.3	20.4	41.6	2.5	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			5.1	0.0	4.5	0.3	
Delay (s)					60.6			18.0	20.5	46.1	2.9	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			18.1			15.6	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.3			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		85.3%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	51	14	1	66	132	140	1193	5	298	468	319
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3284	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3284	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	49	78	22	1	75	150	156	1326	6	343	538	367
RTOR Reduction (vph)	0	0	20	0	0	126	0	0	3	0	83	0
Lane Group Flow (vph)	49	78	2	0	76	24	156	1326	3	343	822	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1078	
v/s Ratio Prot	0.03	c0.04			c0.04		0.09	c0.37		c0.19	0.25	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.40	0.61	0.02		0.26	0.10	0.28	0.84	0.00	1.01	0.76	
Uniform Delay, d1	64.6	65.6	62.9		53.5	52.1	37.8	35.7	22.3	58.5	43.6	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.93	
Incremental Delay, d2	2.2	8.0	0.1		0.5	0.2	0.3	5.6	0.0	49.5	5.0	
Delay (s)	66.8	73.6	63.0		54.0	52.3	38.1	41.3	22.3	105.4	45.6	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		69.8			52.9			40.9			62.0	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		51.6			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		90.7%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement						
Lane Configurations	↰	↱	↰	↱	↰	↱
Volume (veh/h)	50	203	4	92	334	9
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	59	239	5	115	363	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	798	62			120	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	798	62			120	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	78	76			75	
cM capacity (veh/h)	267	1002			1468	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	298	120	373			
Volume Left	59	0	363			
Volume Right	239	115	0			
cSH	1249	1700	1468			
Volume to Capacity	0.24	0.07	0.25			
Queue Length 95th (ft)	23	0	24			
Control Delay (s)	12.2	0.0	8.1			
Lane LOS	B		A			
Approach Delay (s)	12.2	0.0	8.1			
Approach LOS	B					
Intersection Summary						
Average Delay			8.4			
Intersection Capacity Utilization			35.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement						
Lane Configurations	↰	↱	↰	↱	↰	↱
Volume (vph)	53	3	1350	422	0	443
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1757		3539	1520		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1757		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	71	4	1421	444	0	692
RTOR Reduction (vph)	4	0	0	134	0	0
Lane Group Flow (vph)	71	0	1421	310	0	692
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		29.7	29.7		29.7
Effective Green, g (s)	3.0		29.7	29.7		29.7
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	123		2467	1059		2467
v/s Ratio Prot	c0.04		c0.40			0.20
v/s Ratio Perm				0.20		
v/c Ratio	0.58		0.58	0.29		0.28
Uniform Delay, d1	19.2		3.3	2.5		2.4
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	6.5		0.3	0.2		0.1
Delay (s)	25.7		3.6	2.6		2.5
Level of Service	C		A	A		A
Approach Delay (s)	25.7		3.4			2.5
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.8		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.58			
Actuated Cycle Length (s)			42.6		Sum of lost time (s)	9.9
Intersection Capacity Utilization			49.7%		ICU Level of Service	A
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↑↑
Volume (veh/h)	0	15	2195	5	5	500
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2360	5	7	735
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2745	1183			2366	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2745	1183			2366	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			96	
cM capacity (veh/h)	15	182			203	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1573	792	7	368	368
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	182	1700	1700	203	1700	1700
Volume to Capacity	0.14	0.93	0.47	0.04	0.22	0.22
Queue Length 95th (ft)	12	0	0	3	0	0
Control Delay (s)	28.0	0.0	0.0	23.4	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	28.0	0.0		0.2		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			70.8%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	17	88	2107	12	38	460
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	109	2266	13	55	667
RTOR Reduction (vph)	0	3	0	1	0	0
Lane Group Flow (vph)	21	106	2266	12	55	667
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.9	26.0	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.9	20.9	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	262	308	2251	1007	82	2707
v/s Ratio Prot	0.01	c0.07	c0.64		c0.03	0.19
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.34	1.01	0.01	0.67	0.25
Uniform Delay, d1	39.3	37.2	19.5	7.1	50.3	3.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	20.6	0.0	19.4	0.0
Delay (s)	39.5	37.9	40.1	7.2	69.7	3.7
Level of Service	D	D	D	A	E	A
Approach Delay (s)	38.2		39.9			8.7
Approach LOS	D		D			A
Intersection Summary						
HCM 2000 Control Delay			32.6		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.87			
Actuated Cycle Length (s)			107.2		Sum of lost time (s)	18.1
Intersection Capacity Utilization			74.5%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↑↑			↑↑
Volume (veh/h)	0	33	2084	26	0	477
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	53	2194	27	0	645
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2530	1111			2221	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2530	1111			2221	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	74			100	
cM capacity (veh/h)	23	204			232	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	53	1462	759	322	322	
Volume Left	0	0	0	0	0	
Volume Right	53	0	27	0	0	
cSH	204	1700	1700	1700	1700	
Volume to Capacity	0.26	0.86	0.45	0.19	0.19	
Queue Length 95th (ft)	25	0	0	0	0	
Control Delay (s)	28.8	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	28.8	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		68.4%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	10	7	2110	33	15	453
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	16	11	2198	34	19	559
RTOR Reduction (vph)	0	4	0	8	0	0
Lane Group Flow (vph)	16	7	2198	26	19	559
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.5	59.5	59.5	2.1	69.1
Effective Green, g (s)	1.4	3.5	59.5	59.5	2.1	69.1
Actuated g/C Ratio	0.02	0.05	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	71	2731	1221	48	3171
v/s Ratio Prot	c0.01	0.00	c0.62		c0.01	0.16
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.50	0.10	0.80	0.02	0.40	0.18
Uniform Delay, d1	37.5	35.3	5.3	2.0	36.9	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.8	0.6	1.8	0.0	5.3	0.0
Delay (s)	49.3	35.9	7.1	2.0	42.2	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	43.8		7.0			1.9
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		6.3		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.78				
Actuated Cycle Length (s)		77.1		Sum of lost time (s)		14.1
Intersection Capacity Utilization		71.2%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	46	1	0	45	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	85	2	0	71	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	87	71	3					
Volume Left (vph)	0	0	85	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	831	1121	815	839	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.3%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	37	0	0	33	230	3	1911	51	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1354	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	49	0	0	46	319	3	2033	54	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	2	22	0	0	0
Lane Group Flow (vph)	3	49	0	0	46	263	3	2033	32	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.7	16.7			16.7	16.7	47.7	43.6	43.6			
Effective Green, g (s)	16.7	16.7			16.7	16.7	47.7	43.6	43.6			
Actuated g/C Ratio	0.23	0.23			0.23	0.23	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	306	422			422	358	1145	2093	936			
v/s Ratio Prot		0.03			0.02		0.00	c0.57				
v/s Ratio Perm	0.00					c0.17			0.02			
v/c Ratio	0.01	0.12			0.11	0.74	0.00	0.97	0.03			
Uniform Delay, d1	22.1	22.6			22.6	26.5	4.6	14.4	6.3			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	7.6	0.0	13.5	0.0			
Delay (s)	22.1	22.8			22.7	34.1	4.6	28.0	6.3			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.7			32.7			27.4			0.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay		28.1						HCM 2000 Level of Service		C		
HCM 2000 Volume to Capacity ratio		0.91										
Actuated Cycle Length (s)		73.7				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		86.6%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: AM PEAK






















Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰		↰	↰	↰	↰	↰
Volume (veh/h)	27	49	443	1680	0	182	239
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	108	196	461	1750	0	230	303
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2180	266	533		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2180	266	533		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	73	55		0		
cM capacity (veh/h)	22	732	1031		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	304	461	875	875	154	379	0
Volume Left	108	461	0	0	0	0	0
Volume Right	196	0	0	0	0	303	0
cSH	58	1031	1700	1700	1700	1700	1700
Volume to Capacity	5.24	0.45	0.51	0.51	0.09	0.22	0.00
Queue Length 95th (ft)	Err	59	0	0	0	0	0
Control Delay (s)	Err	11.3	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B					
Approach Delay (s)	Err	2.4			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay		998.9					
Intersection Capacity Utilization		64.3%		ICU Level of Service		C	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	406	0	39	2	1	2	26	1994	0	0	184	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3433	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3433	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	461	0	44	6	3	6	27	2099	0	0	267	67
RTOR Reduction (vph)	0	31	0	0	6	0	0	0	0	0	19	0
Lane Group Flow (vph)	461	13	0	6	3	0	27	2099	0	0	315	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	26.3	26.3		1.7	1.7		1.9	43.4			37.3	
Effective Green, g (s)	26.3	26.3		1.7	1.7		1.9	43.4			37.3	
Actuated g/C Ratio	0.31	0.31		0.02	0.02		0.02	0.50			0.43	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	540	483		34	33		39	1783			1487	
v/s Ratio Prot	c0.26	0.01		c0.00	0.00		0.02	c0.59			0.09	
v/s Ratio Perm												
v/c Ratio	0.85	0.03		0.18	0.09		0.69	1.18			0.21	
Uniform Delay, d1	28.1	20.9		41.5	41.4		41.8	21.3			15.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	12.4	0.0		2.5	1.2		41.8	86.0			0.1	
Delay (s)	40.5	21.0		44.0	42.7		83.6	107.3			15.3	
Level of Service	D	C		D	D		F	F			B	
Approach Delay (s)		38.8			43.2			107.0			15.3	
Approach LOS		D			D			F			B	
Intersection Summary												
HCM 2000 Control Delay			84.9			HCM 2000 Level of Service				F		
HCM 2000 Volume to Capacity ratio			1.10									
Actuated Cycle Length (s)			86.1			Sum of lost time (s)			18.9			
Intersection Capacity Utilization			92.7%			ICU Level of Service				F		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	8	233	15	0	1844	17	45	23	1	20	41	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5039			5078		1770	1853			1731	
Flt Permitted	0.95	1.00			1.00		0.66	1.00			0.18	
Satd. Flow (perm)	1770	5039			5078		1236	1853			307	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	9	262	17	0	2026	19	54	27	1	26	53	68
RTOR Reduction (vph)	0	4	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	9	275	0	0	2044	0	54	27	0	0	130	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1906			2062		240	360			51	
v/s Ratio Prot	c0.01	0.05			c0.40			0.01				
v/s Ratio Perm							c0.04				c0.42	
v/c Ratio	0.05	0.14			0.99		0.23	0.08			2.54	
Uniform Delay, d1	71.5	36.8			53.1		61.1	59.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.2			16.4		0.5	0.1			746.7	
Delay (s)	71.6	37.0			69.5		61.6	59.4			821.7	
Level of Service	E	D			E		E	E			F	
Approach Delay (s)		38.0			69.5			60.8			821.7	
Approach LOS		D			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		108.9			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.99										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		74.4%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	252	0	400	1852	9	0	0	0	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3537							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3537							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	307	0	426	1970	10	0	0	0	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	307	0	426	1980	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3214							609
v/s Ratio Prot		0.06		0.12	c0.56							
v/s Ratio Perm												0.00
v/c Ratio		0.16		0.25	0.62							0.01
Uniform Delay, d1		37.0		25.7	1.7							34.9
Progression Factor		0.39		1.00	1.00							1.00
Incremental Delay, d2		0.2		0.1	0.4							0.0
Delay (s)		14.4		25.8	2.1							35.0
Level of Service		B		C	A							C
Approach Delay (s)		14.4			6.3		0.0				35.0	
Approach LOS		B			A		A				C	
Intersection Summary												
HCM 2000 Control Delay		7.4			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		73.1%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	9	241	0	0	129	104	0	0	0	48	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	11	287	0	0	139	112	0	0	0	53	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	251			287			507	559	287	503	503	195
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	251			287			507	559	287	503	503	195
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1315			1275			470	434	752	476	467	847
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	298	251	0	57								
Volume Left	11	0	0	53								
Volume Right	0	112	0	4								
cSH	1315	1275	1700	493								
Volume to Capacity	0.01	0.00	0.00	0.12								
Queue Length 95th (ft)	1	0	0	10								
Control Delay (s)	0.4	0.0	0.0	13.3								
Lane LOS	A			A	B							
Approach Delay (s)	0.4	0.0	0.0	13.3								
Approach LOS				A	B							
Intersection Summary												
Average Delay				1.4								
Intersection Capacity Utilization				30.0%								A
Analysis Period (min)				15								

NBC Coastal Campus

22: 3rd St & Palm Ave







MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	279	4	26	210	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	324	5	28	226	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	329	28	252	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.1	5.5	5.1	5.7						
Degree Utilization, x	0.01	0.50	0.05	0.38	0.26	0.07						
Capacity (veh/h)	578	635	564	629	633	544						
Control Delay (s)	7.9	12.7	8.2	10.7	9.9	9.1						
Approach Delay (s)	12.6		10.4		9.9	9.1						
Approach LOS	B		B		A	A						
Intersection Summary												
Delay				11.1								
Level of Service				B								
Intersection Capacity Utilization				37.8%								A
Analysis Period (min)				15								




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	233	427	334	153	17	70
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	295	541	407	187	24	99
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	594				1631	297
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	594				1631	297
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	70				63	86
cM capacity (veh/h)	978				64	699
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	295	541	272	322	123	
Volume Left	295	0	0	0	24	
Volume Right	0	0	0	187	99	
cSH	978	1700	1700	1700	239	
Volume to Capacity	0.30	0.32	0.16	0.19	0.51	
Queue Length 95th (ft)	32	0	0	0	67	
Control Delay (s)	10.3	0.0	0.0	0.0	34.9	
Lane LOS	B				D	
Approach Delay (s)	3.6		0.0		34.9	
Approach LOS					D	
Intersection Summary						
Average Delay			4.7			
Intersection Capacity Utilization			42.3%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	420	15	26	335	0	66	42	81	1	22	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1725			1858	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.88			0.98	1.00
Satd. Flow (perm)	930	3521		820	3539			1543			1831	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	545	19	34	435	0	100	64	123	2	38	47
RTOR Reduction (vph)	0	3	0	0	0	0	0	31	0	0	0	29
Lane Group Flow (vph)	21	561	0	34	435	0	0	256	0	0	40	18
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.2	13.2		13.2	13.2			13.4			13.4	13.4
Effective Green, g (s)	13.2	13.2		13.2	13.2			13.4			13.4	13.4
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	342	1298		302	1304			577			685	592
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.17			0.02	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.44			0.06	0.03
Uniform Delay, d1	7.3	8.5		7.4	8.1			8.4			7.2	7.1
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.2			0.5			0.0	0.0
Delay (s)	7.4	8.7		7.6	8.3			8.9			7.2	7.1
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.7			8.2			8.9			7.1	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.5	HCM 2000 Level of Service				A				
HCM 2000 Volume to Capacity ratio			0.44									
Actuated Cycle Length (s)			35.8	Sum of lost time (s)				9.2				
Intersection Capacity Utilization			46.8%	ICU Level of Service				A				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

	→	↗	↖	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	505	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	549	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			553		549	549
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			553		549	549
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1017		497	536
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	549	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	524			
Volume to Capacity	0.32	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.0			
Lane LOS			B			
Approach Delay (s)	0.0		12.0			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑	↘	↗	↑↑↑		↗	↑↑	↘	↗	↑↑	↘
Volume (vph)	21	709	36	24	1990	44	172	38	52	91	46	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5048		1770	5069			3324			3364	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5048		1770	5069			3324			3364	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	844	43	26	2187	48	207	46	63	111	56	30
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	884	0	26	2234	0	0	304	0	0	189	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2235		118	2159			646			654	
v/s Ratio Prot	0.01	c0.18		c0.01	c0.44			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.17	0.40		0.22	1.03			0.47			0.29	
Uniform Delay, d1	76.7	33.9		79.6	51.6			64.3			61.9	
Progression Factor	1.00	1.00		1.22	0.81			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.7	26.7			0.5			0.2	
Delay (s)	77.3	34.4		98.0	68.4			64.8			62.1	
Level of Service	E	C		F	E			E			E	
Approach Delay (s)		35.6			68.8			64.8			62.1	
Approach LOS		D			E			E			E	
Intersection Summary												
HCM 2000 Control Delay		59.9			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		76.5%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	
Volume (vph)	2	945	35	20	2167	12	18	4	31	56	11	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5058		1770	5081			1687		1770	1704	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5058		1770	5081			1542		1231	1704	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.70	0.70	0.70	0.70
Adj. Flow (vph)	2	1062	39	23	2462	14	25	5	42	80	16	21
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	18	0
Lane Group Flow (vph)	2	1099	0	23	2476	0	0	44	0	80	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			257		205	284	
v/s Ratio Prot	0.00	0.22		c0.01	c0.49						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.32		0.19	0.67			0.17		0.39	0.07	
Uniform Delay, d1	86.1	11.3		79.4	12.6			64.3		66.8	63.2	
Progression Factor	1.70	0.26		1.42	0.36			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.4	0.5			0.3		1.2	0.1	
Delay (s)	146.9	3.1		113.2	5.0			64.6		68.1	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.4			6.0			64.6			66.6	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		75.6%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰		↰	↰	
Volume (vph)	3	1016	65	98	2013	53	154	19	92	172	37	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.91	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1783	1583		3374	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1783	1583		3374	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1142	73	118	2425	64	173	21	103	229	49	20
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	85	0	3	0
Lane Group Flow (vph)	3	1211	0	118	2425	34	0	194	18	0	295	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		581	
v/s Ratio Prot	0.00	0.24		c0.07	c0.48			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.54		0.60	0.90	0.04		0.63	0.07		0.51	
Uniform Delay, d1	86.2	36.8		76.2	37.7	20.2		69.2	62.4		67.6	
Progression Factor	1.22	0.61		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.9		5.1	5.2	0.1		4.2	0.1		0.7	
Delay (s)	105.7	23.5		81.3	43.0	20.3		73.4	62.5		68.3	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.7			44.1			69.6			68.3	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		41.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		92.8%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	↰
Volume (vph)	14	1287	26	44	2145	12	16	6	49	39	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1670			1723	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.77	
Satd. Flow (perm)	1770	5070		1770	5081			1561			1374	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	15	1399	28	51	2494	14	19	7	58	51	3	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	46	0	0	22	0
Lane Group Flow (vph)	15	1426	0	51	2508	0	0	38	0	0	60	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.9		2.8	40.0			15.1			15.1	
Effective Green, g (s)	0.7	37.9		2.8	40.0			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2687		69	2842			329			290	
v/s Ratio Prot	0.01	0.28		c0.03	c0.49							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.88	0.53		0.74	0.88			0.12			0.21	
Uniform Delay, d1	35.4	11.0		34.0	13.7			22.8			23.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	159.7	0.2		33.5	3.6			0.2			0.4	
Delay (s)	195.1	11.2		67.5	17.3			23.0			23.6	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		13.1			18.3			23.0			23.6	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		16.7			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		71.5			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		58.8%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰	↰	↰	↰	↰↰	↰	↰
Volume (vph)	93	1301	31	250	2078	220	82	74	791	241	95	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.90	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	108	1513	36	266	2211	234	91	82	879	287	113	93
RTOR Reduction (vph)	0	2	0	0	0	67	0	154	181	0	2	60
Lane Group Flow (vph)	108	1547	0	266	2211	167	91	332	294	287	120	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.4	30.7	30.7	10.4	32.7	32.7
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.4	30.7	30.7	10.4	32.7	32.7
Actuated g/C Ratio	0.05	0.30		0.15	0.41	0.41	0.07	0.26	0.26	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	177	1536		272	2062	642	128	409	397	307	492	423
v/s Ratio Prot	0.03	0.31		c0.15	c0.43		0.05	c0.21		c0.08	0.07	
v/s Ratio Perm						0.11			0.20			0.02
v/c Ratio	0.61	1.01		0.98	1.07	0.26	0.71	0.81	0.74	0.93	0.24	0.06
Uniform Delay, d1	53.9	40.4		48.9	34.5	22.9	52.7	40.0	39.1	52.5	32.2	30.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.1	24.7		47.9	42.4	0.2	17.0	11.7	7.3	34.4	0.3	0.1
Delay (s)	60.0	65.1		96.8	76.9	23.1	69.6	51.7	46.3	86.9	32.4	30.5
Level of Service	E	E		F	E	C	E	D	D	F	C	C
Approach Delay (s)		64.8			74.2			50.8			63.8	
Approach LOS		E			E			D			E	
Intersection Summary												
HCM 2000 Control Delay		66.6			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.99										
Actuated Cycle Length (s)		116.1			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		89.6%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↗	↗↗
Volume (vph)	0	293	1208	0	159	1343
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	329	1299	0	177	1492
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	0	329	1299	0	177	1488
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.37		0.10	c0.53
v/s Ratio Perm						
v/c Ratio		0.12	1.11		0.86	0.97
Uniform Delay, d1		2.5	26.8		34.6	17.4
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	63.1		27.4	16.6
Delay (s)		2.5	89.9		62.1	34.0
Level of Service		A	F		E	C
Approach Delay (s)		2.5	89.9		37.0	
Approach LOS		A	F		D	
Intersection Summary						
HCM 2000 Control Delay			54.4		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			1.10			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			69.7%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕		↗	↗				
Volume (vph)	0	453	0	0	446	537	867	1	147	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.96				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3249		1681	1633				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3249		1681	1633				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	521	0	0	485	584	942	1	160	0	0	0
RTOR Reduction (vph)	0	0	0	0	366	0	0	28	0	0	0	0
Lane Group Flow (vph)	0	521	0	0	703	0	565	510	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		17.5			17.5		21.4	21.4				
Effective Green, g (s)		17.5			17.5		21.4	21.4				
Actuated g/C Ratio		0.37			0.37		0.46	0.46				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1320			1212		767	745				
v/s Ratio Prot		0.15			c0.22							
v/s Ratio Perm							c0.34	0.31				
v/c Ratio		0.39			0.58		0.74	0.68				
Uniform Delay, d1		10.8			11.8		10.4	10.1				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		3.7	2.6				
Delay (s)		11.0			12.4		14.1	12.7				
Level of Service		B			B		B					
Approach Delay (s)		11.0			12.4		13.4				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					12.6		HCM 2000 Level of Service	B				
HCM 2000 Volume to Capacity ratio					0.67							
Actuated Cycle Length (s)					46.9		Sum of lost time (s)	8.0				
Intersection Capacity Utilization					71.5%		ICU Level of Service	C				
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰			↱	↰	↱
Volume (veh/h)	0	3	4	66	13	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	92	32	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	134	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	134	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	856	1042	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	97	32			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	1042	1581	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			16.7%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↱			↰↱				↰			↱
Volume (veh/h)	0	4216	17	0	1843	244	0	0	910	0	0	55
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4392	18	0	1900	252	0	0	1011	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2172			4429			5157	6592	1513	3530	6475	799
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2172			4429			5157	6592	1513	3530	6475	799
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	46	100	100	74
cM capacity (veh/h)	238			29			0	0	1865	1	0	318
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1757	1757	896	760	760	632	1011	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	252	1011	83				
cSH	1700	1700	1700	1700	1700	1700	1865	318				
Volume to Capacity	1.03	1.03	0.53	0.45	0.45	0.37	0.54	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	86	26				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.2	20.3				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.2	20.3				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.4								
Intersection Capacity Utilization			146.8%	ICU Level of Service			H					
Analysis Period (min)			15									

* User Entered Value



















NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3981	131	0	1880	0	201	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	4104	135	0	1958	0	245	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4259		4864	1476	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4259		4864	1476	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			34		0	112	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1642	1642	956	653	653	653	245
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	135	0	0	0	245
cSH	1700	1700	1700	1700	1700	1700	112
Volume to Capacity	0.97	0.97	0.56	0.38	0.38	0.38	2.20
Queue Length 95th (ft)	0	0	0	0	0	0	526
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	629.5
Lane LOS							F
Approach Delay (s)	0.0			0.0			629.5
Approach LOS							F
Intersection Summary							
Average Delay			23.9				
Intersection Capacity Utilization			100.9%		ICU Level of Service		G
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1006	635	109	120	252	0	0	862	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4635		1770	3539			3528	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4635		1770	3539			3528	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1059	668	115	124	260	0	0	889	16
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	529	1301	0	124	260	0	0	903	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1431		98	1989			1568	
v/s Ratio Prot				c0.35	0.28		c0.07	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.13	1.00dl		1.27	0.13			0.58	
Uniform Delay, d1				31.1	29.9		42.5	9.3			18.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				80.6	8.7		178.1	0.0			0.5	
Delay (s)				111.7	38.6		220.6	9.3			19.2	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			59.6			77.6			19.2	
Approach LOS		A			E			E			B	
Intersection Summary												
HCM 2000 Control Delay			50.1	HCM 2000 Level of Service					D			
HCM 2000 Volume to Capacity ratio			0.83									
Actuated Cycle Length (s)			90.0	Sum of lost time (s)					17.2			
Intersection Capacity Utilization			136.1%	ICU Level of Service					H			
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔↔	
Volume (vph)	7	2113	114	0	0	0	0	372	597	762	1129	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.97	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.93	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3078	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3078	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2322	125	0	0	0	0	433	694	794	1176	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2330	96	0	0	0	0	767	325	794	1176	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					933	409	865	2022	
v/s Ratio Prot		c0.46						c0.25		c0.23	0.33	
v/s Ratio Perm			0.06						0.24			
v/c Ratio		1.27	0.17					0.82	0.79	0.92	0.58	
Uniform Delay, d1		55.8	37.9					56.6	55.9	63.7	24.1	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		124.0	0.1					5.9	10.2	14.3	0.4	
Delay (s)		179.8	38.0					62.5	66.1	78.0	24.5	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		172.6		0.0				63.6			46.1	
Approach LOS		F		A				E			D	
Intersection Summary												
HCM 2000 Control Delay		105.6		HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio		1.02										
Actuated Cycle Length (s)		175.0		Sum of lost time (s)				14.4				
Intersection Capacity Utilization		136.1%		ICU Level of Service				H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave













MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔
Volume (vph)	177	12	1102	705	0	1296
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1584		3289			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1584		3289			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	227	15	1238	792	0	1394
RTOR Reduction (vph)	2	0	49	0	0	0
Lane Group Flow (vph)	240	0	1981	0	0	1394
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	297		2485			2540
v/s Ratio Prot	c0.15		c0.60			0.41
v/s Ratio Perm						
v/c Ratio	0.81		0.80			0.55
Uniform Delay, d1	62.3		12.0			8.2
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	14.9		2.8			0.9
Delay (s)	77.2		14.8			9.0
Level of Service	E		B			A
Approach Delay (s)	77.2		14.8			9.0
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay		16.7		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.82				
Actuated Cycle Length (s)		160.0		Sum of lost time (s)		12.1
Intersection Capacity Utilization		86.4%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2023 Alt 1/2/3







Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	147	10	29	26	10	25	23	1723	50	69	1526	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1724		1770	3524		1770	3490	
Flt Permitted	0.68	0.68	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1201	1202	1583		1459		1770	3524		1770	3490	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	188	13	37	41	16	39	25	1853	54	75	1659	170
RTOR Reduction (vph)	0	0	31	0	22	0	0	1	0	0	2	0
Lane Group Flow (vph)	100	101	6	0	74	0	25	1906	0	75	1827	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	19.1	19.1	19.1		19.1		3.1	71.9		8.1	76.9	
Effective Green, g (s)	19.1	19.1	19.1		19.1		3.1	71.9		8.1	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	201	201	265		244		48	2224		125	2356	
v/s Ratio Prot							0.01	c0.54		c0.04	0.52	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.50	0.50	0.02		0.30		0.52	0.86		0.60	0.78	
Uniform Delay, d1	43.0	43.1	39.6		41.6		54.7	16.9		51.3	12.6	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.9	2.0	0.0		0.7		9.8	3.5		7.5	1.7	
Delay (s)	45.0	45.1	39.6		42.2		64.5	20.4		58.9	14.3	
Level of Service	D	D	D		D		E	C		E	B	
Approach Delay (s)		44.2			42.2			20.9			16.0	
Approach LOS		D			D			C			B	
Intersection Summary												
HCM 2000 Control Delay		20.5			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		113.9			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		77.1%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	8	0	148	0	1524	0	33	1668	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	12	0	214	0	1621	0	35	1794	0
RTOR Reduction (vph)	0	0	0	0	174	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	52	0	0	1621	0	35	1794	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.0			45.1		1.7	51.0	
Effective Green, g (s)					14.0			45.1		1.7	51.0	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					301			2125		40	2403	
v/s Ratio Prot					c0.03			0.46		0.02	c0.51	
v/s Ratio Perm												
v/c Ratio					0.17			0.76		0.88	0.75	
Uniform Delay, d1					25.7			11.1		36.6	7.8	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			1.7		93.6	1.3	
Delay (s)					26.0			12.7		130.2	9.1	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			26.0			12.7			11.5	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					12.9			HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio					0.72							
Actuated Cycle Length (s)					75.1			Sum of lost time (s)		18.9		
Intersection Capacity Utilization					64.1%			ICU Level of Service		C		
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	299	51	122	7	71	432	28	816	2	143	1486	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1514		1854	1509	1770	3539	1343	1770	3513	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1514		1854	1509	1770	3539	1343	1770	3513	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	393	67	161	8	77	470	31	897	2	152	1581	71
RTOR Reduction (vph)	0	0	131	0	0	193	0	0	1	0	2	0
Lane Group Flow (vph)	393	67	30	0	85	277	31	897	1	152	1650	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.6	27.6	27.6		27.6	27.6	4.0	55.9	55.9	17.6	69.5	
Effective Green, g (s)	27.6	27.6	27.6		27.6	27.6	4.0	55.9	55.9	17.6	69.5	
Actuated g/C Ratio	0.19	0.19	0.19		0.19	0.19	0.03	0.38	0.38	0.12	0.47	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	329	347	282		345	281	47	1335	506	210	1648	
v/s Ratio Prot	c0.22	0.04			0.05		0.02	0.25		c0.09	c0.47	
v/s Ratio Perm			0.02			c0.18			0.00			
v/c Ratio	1.19	0.19	0.11		0.25	0.99	0.66	0.67	0.00	0.72	1.00	
Uniform Delay, d1	60.2	50.9	50.0		51.4	60.1	71.4	38.5	28.7	62.9	39.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	113.5	0.3	0.2		0.4	49.5	28.7	2.7	0.0	11.7	22.4	
Delay (s)	173.7	51.1	50.2		51.8	109.5	100.1	41.2	28.7	74.6	61.7	
Level of Service	F	D	D		D	F	F	D	C	E	E	
Approach Delay (s)		128.5			100.7			43.1			62.8	
Approach LOS		F			F			D			E	
Intersection Summary												
HCM 2000 Control Delay			73.9			HCM 2000 Level of Service				E		
HCM 2000 Volume to Capacity ratio			1.04									
Actuated Cycle Length (s)			148.1			Sum of lost time (s)				19.4		
Intersection Capacity Utilization			83.0%			ICU Level of Service				E		
Analysis Period (min)			15									

c Critical Lane Group

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	329	507	3	64	184	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	366	563	4	90	209	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	471	49			94	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	471	49			94	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	23	45			86	
cM capacity (veh/h)	474	1019			1500	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	929	94	212			
Volume Left	366	0	209			
Volume Right	563	90	0			
cSH	954	1700	1500			
Volume to Capacity	0.97	0.06	0.14			
Queue Length 95th (ft)	429	0	12			
Control Delay (s)	44.0	0.0	7.7			
Lane LOS	E		A			
Approach Delay (s)	44.0	0.0	7.7			
Approach LOS	E					
Intersection Summary						
Average Delay			34.4			
Intersection Capacity Utilization			42.2%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕		↕
Volume (vph)	332	7	853	67	0	1617
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	420	9	948	74	0	1817
RTOR Reduction (vph)	1	0	0	42	0	0
Lane Group Flow (vph)	428	0	948	32	0	1817
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.24		0.27			c0.51
v/s Ratio Perm				0.02		
v/c Ratio	0.51		0.62	0.05		1.20
Uniform Delay, d1	19.0		23.3	17.5		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.5		0.8	0.0		94.7
Delay (s)	19.5		24.1	17.5		124.6
Level of Service	B		C	B		F
Approach Delay (s)	19.5		23.7			124.6
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay		79.2		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		0.83				
Actuated Cycle Length (s)		105.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		94.6%		ICU Level of Service		F
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕	↕	↕	↕
Volume (veh/h)	4	7	715	3	15	1558
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	14	831	3	16	1712
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1722	417			835	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1722	417			835	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	90	98			98	
cM capacity (veh/h)	79	584			794	
Direction, Lane #						
Volume Total	22	554	281	16	856	856
Volume Left	8	0	0	16	0	0
Volume Right	14	0	3	0	0	0
cSH	175	1700	1700	794	1700	1700
Volume to Capacity	0.13	0.33	0.17	0.02	0.50	0.50
Queue Length 95th (ft)	11	0	0	2	0	0
Control Delay (s)	28.5	0.0	0.0	9.6	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	28.5	0.0		0.1		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			53.1%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	30	58	660	12	104	1458
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	33	63	750	14	114	1602
RTOR Reduction (vph)	0	45	0	7	0	0
Lane Group Flow (vph)	33	18	750	7	114	1602
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	18	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	11.3	23.1	28.3	28.3	6.7	43.8
Effective Green, g (s)	11.3	18.0	28.3	28.3	6.7	43.8
Actuated g/C Ratio	0.18	0.28	0.44	0.44	0.10	0.68
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	310	442	1555	695	184	2406
v/s Ratio Prot	c0.02	0.01	0.21		0.06	c0.45
v/s Ratio Perm				0.00		
v/c Ratio	0.11	0.04	0.48	0.01	0.62	0.67
Uniform Delay, d1	22.3	16.9	12.8	10.2	27.6	6.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.2	0.0	6.1	0.7
Delay (s)	22.5	16.9	13.1	10.2	33.7	6.7
Level of Service	C	B	B	B	C	A
Approach Delay (s)	18.8		13.0			8.5
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			10.2		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.66			
Actuated Cycle Length (s)			64.4		Sum of lost time (s)	18.1
Intersection Capacity Utilization			52.2%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave







MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↕	↕			↕
Volume (veh/h)	0	23	650	18	0	1488
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	31	747	21	0	1617
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1566	384			768	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1566	384			768	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	102	614			842	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	31	498	270	809	809	
Volume Left	0	0	0	0	0	
Volume Right	31	0	21	0	0	
cSH	614	1700	1700	1700	1700	
Volume to Capacity	0.05	0.29	0.16	0.48	0.48	
Queue Length 95th (ft)	4	0	0	0	0	
Control Delay (s)	11.2	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	11.2	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			44.5%		ICU Level of Service	A
Analysis Period (min)			15			





NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	30	26	643	18	23	1463
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	42	36	684	19	25	1608
RTOR Reduction (vph)	0	32	0	8	0	0
Lane Group Flow (vph)	42	4	684	11	25	1608
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	5.7	26.4	26.4	3.1	37.0
Effective Green, g (s)	2.6	5.7	26.4	26.4	3.1	37.0
Actuated g/C Ratio	0.06	0.12	0.57	0.57	0.07	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	99	195	2022	904	118	2834
v/s Ratio Prot	c0.02	0.00	0.19		0.01	c0.45
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.42	0.02	0.34	0.01	0.21	0.57
Uniform Delay, d1	21.1	17.8	5.3	4.3	20.4	1.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.9	0.0	0.1	0.0	0.9	0.3
Delay (s)	24.0	17.8	5.4	4.3	21.3	1.9
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.2		5.3			2.2
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.7		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.69			
Actuated Cycle Length (s)			46.2		Sum of lost time (s)	14.1
Intersection Capacity Utilization			51.4%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	11	14	86	8	0	182	13	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	11	15	112	10	0	204	15	0	0
Direction, Lane #										
Volume Total (vph)	11	15	122	219						
Volume Left (vph)	0	0	112	0						
Volume Right (vph)	0	15	0	15						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.19						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑		↰	↑	↰	↰	↑	↰			
Volume (vph)	10	188	0	0	83	140	12	563	70	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1295	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	11	214	0	0	95	161	13	619	77	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	106	0	42	0	0	0	0
Lane Group Flow (vph)	11	214	0	0	95	55	13	619	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.5	8.5			8.5	8.5	18.1	18.1	18.1			
Effective Green, g (s)	8.5	8.5			8.5	8.5	18.1	18.1	18.1			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.45	0.45	0.45			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	275	395			395	336	800	1601	716			
v/s Ratio Prot		c0.11			0.05		0.01	c0.17				
v/s Ratio Perm	0.01					0.03		0.02				
v/c Ratio	0.04	0.54			0.24	0.16	0.02	0.39	0.05			
Uniform Delay, d1	12.5	14.0			13.1	12.8	6.0	7.3	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.5			0.3	0.2	0.0	0.2	0.0			
Delay (s)	12.6	15.5			13.4	13.1	6.0	7.4	6.2			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.2		7.3			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.1			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.44										
Actuated Cycle Length (s)		40.0			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		43.8%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd









MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↰	↰	↑	↰	↰	↰
Volume (veh/h)	236	438	109	474	0	1575	59
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	944	1752	124	539	0	1750	66
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2300	908	1816		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2300	908	1816		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	0	63		0		
cM capacity (veh/h)	20	278	334		0		
Direction, Lane #							
Volume Total	2696	124	269	269	1167	649	0
Volume Left	944	124	0	0	0	0	0
Volume Right	1752	0	0	0	0	66	0
cSH	51	334	1700	1700	1700	1700	1700
Volume to Capacity	52.40	0.37	0.16	0.16	0.69	0.38	0.00
Queue Length 95th (ft)	Err	42	0	0	0	0	0
Control Delay (s)	Err	22.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C					
Approach Delay (s)	Err	4.1			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			5210.6				
Intersection Capacity Utilization			101.5%		ICU Level of Service		
Analysis Period (min)			15				G









NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	0	69	1	1	0	74	435	12	1	1554	203
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3525		1770	3478	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3525		1770	3478	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	120	0	92	2	2	0	81	478	13	1	1727	226
RTOR Reduction (vph)	0	74	0	0	0	0	0	1	0	0	7	0
Lane Group Flow (vph)	120	18	0	2	2	0	81	490	0	1	1946	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	18.0	18.0		0.8	0.8		5.8	51.8		0.8	46.8	
Effective Green, g (s)	18.0	18.0		0.8	0.8		5.8	51.8		0.8	46.8	
Actuated g/C Ratio	0.20	0.20		0.01	0.01		0.06	0.57		0.01	0.52	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	352	315		15	16		113	2022		15	1802	
v/s Ratio Prot	c0.07	0.01		c0.00	0.00		c0.05	0.14		0.00	c0.56	
v/s Ratio Perm												
v/c Ratio	0.34	0.06		0.13	0.12		0.72	0.24		0.07	1.08	
Uniform Delay, d1	31.1	29.3		44.4	44.4		41.4	9.5		44.4	21.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.1		4.0	3.5		19.4	0.1		1.9	46.4	
Delay (s)	31.6	29.4		48.4	47.9		60.8	9.6		46.3	68.1	
Level of Service	C	C		D	D		E	A		D	E	
Approach Delay (s)		30.6			48.2			16.8			68.1	
Approach LOS		C			D			B			E	
Intersection Summary												
HCM 2000 Control Delay		54.5										
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		90.3										
Intersection Capacity Utilization		77.2%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	58	1503	66	0	471	35	15	40	4	24	26	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.99			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5053			5033		1770	1836			1759	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.16	
Satd. Flow (perm)	1770	5053			5033		1308	1836			284	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	66	1708	75	0	501	37	21	57	6	28	31	25
RTOR Reduction (vph)	0	2	0	0	5	0	0	2	0	0	8	0
Lane Group Flow (vph)	66	1781	0	0	533	0	21	61	0	0	76	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1911			2043		254	357			47	
v/s Ratio Prot	c0.04	c0.35			c0.11			c0.03				
v/s Ratio Perm							0.02				c0.27	
v/c Ratio	0.34	0.93			0.26		0.08	0.17			1.61	
Uniform Delay, d1	73.9	53.7			35.5		59.4	60.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	9.8			0.3		0.1	0.2			353.1	
Delay (s)	74.9	63.5			35.8		59.5	60.6			428.1	
Level of Service	E	E			D		E	E			F	
Approach Delay (s)		63.9			35.8			60.3			428.1	
Approach LOS		E			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		69.8										
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		69.3%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←
Volume (vph)	0	1533	0	508	509	38	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3503							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3503							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1722	0	540	541	40	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1722	0	540	581	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3183							609
v/s Ratio Prot		c0.34		c0.16	c0.17							
v/s Ratio Perm												0.00
v/c Ratio		0.90		0.28	0.18							0.00
Uniform Delay, d1		52.6		20.7	0.9							34.8
Progression Factor		0.26		1.00	1.00							1.00
Incremental Delay, d2		2.6		0.1	0.0							0.0
Delay (s)		16.6		20.8	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		16.6			10.5		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		14.2										B
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		180.0							22.3			
Intersection Capacity Utilization		54.1%							A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave




















MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		←←			←←			←←			←←	
Volume (veh/h)	3	215	0	0	314	40	0	0	0	104	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	250	0	0	357	45	0	0	0	158	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	402			250			649	659	250	637	637	380
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	402			250			649	659	250	637	637	380
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	60	100	98
cM capacity (veh/h)	1156			1316			375	382	789	389	394	667
Direction, Lane #												
Volume Total	253	402	0	170								
Volume Left	3	0	0	158								
Volume Right	0	45	0	12								
cSH	1156	1316	1700	401								
Volume to Capacity	0.00	0.00	0.00	0.42								
Queue Length 95th (ft)	0	0	0	51								
Control Delay (s)	0.1	0.0	0.0	20.4								
Lane LOS	A			A			C					
Approach Delay (s)	0.1	0.0	0.0	20.4								
Approach LOS				A			C					
Intersection Summary												
Average Delay		4.2										
Intersection Capacity Utilization		31.9%								A		
Analysis Period (min)		15										











NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop			Stop				Stop			Stop	
Volume (vph)	7	297	12	85	328	24	14	38	68	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	381	15	96	369	27	25	67	119	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	396	96	396	211	161						
Volume Left (vph)	9	0	96	0	25	61						
Volume Right (vph)	0	15	0	27	119	28						
Hadj (s)	0.53	0.01	0.53	-0.01	-0.28	0.00						
Departure Headway (s)	7.2	6.7	7.1	6.6	6.7	7.1						
Degree Utilization, x	0.02	0.74	0.19	0.72	0.39	0.32						
Capacity (veh/h)	469	517	483	527	474	432						
Control Delay (s)	9.2	25.1	10.6	23.6	13.9	13.4						
Approach Delay (s)	24.7		21.1		13.9	13.4						
Approach LOS	C		C		B	B						
Intersection Summary												
Delay			20.1									
Level of Service			C									
Intersection Capacity Utilization			41.8%		ICU Level of Service		A					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	75	424	457	39	53	148
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	77	437	531	45	62	174
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)	908					
pX, platoon unblocked						
vC, conflicting volume	577			1146	288	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	577			1146	288	
tC, single (s)	4.1			6.8	6.9	
tC, 2 stage (s)						
tF (s)	2.2			3.5	3.3	
p0 queue free %	92			65	75	
cM capacity (veh/h)	993			178	708	
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	77	437	354	222	236	
Volume Left	77	0	0	0	62	
Volume Right	0	0	0	45	174	
cSH	993	1700	1700	1700	396	
Volume to Capacity	0.08	0.26	0.21	0.13	0.60	
Queue Length 95th (ft)	6	0	0	0	93	
Control Delay (s)	8.9	0.0	0.0	0.0	26.6	
Lane LOS	A					D
Approach Delay (s)	1.3	0.0		26.6		
Approach LOS					D	
Intersection Summary						
Average Delay			5.3			
Intersection Capacity Utilization			41.0%		ICU Level of Service	
Analysis Period (min)			15		A	

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↱		↰	↰↱			↱		↰	↰↱	↱
Volume (vph)	28	433	29	31	459	3	55	21	22	12	47	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3536			1757			1844	1583
Flt Permitted	0.47	1.00		0.45	1.00			0.78			0.91	1.00
Satd. Flow (perm)	867	3505		831	3536			1415			1687	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	515	35	34	504	3	67	26	27	16	62	39
RTOR Reduction (vph)	0	7	0	0	1	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	543	0	34	506	0	0	99	0	0	78	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Effective Green, g (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	413	1671		396	1686			309			368	345
v/s Ratio Prot		c0.15			0.14							
v/s Ratio Perm	0.04			0.04				c0.07			0.05	0.01
v/c Ratio	0.08	0.32		0.09	0.30			0.32			0.21	0.02
Uniform Delay, d1	4.3	4.9		4.3	4.8			9.9			9.7	9.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.6			0.3	0.0
Delay (s)	4.4	5.0		4.4	4.9			10.5			10.0	9.3
Level of Service	A	A		A	A			B			A	A
Approach Delay (s)		5.0			4.9			10.5			9.7	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		30.2			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		44.9%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												








NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↰			↰	↰
Volume (veh/h)	481	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	587	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			596		587	587
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			596		587	587
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			980		472	510
Direction, Lane #						
Volume Total	587	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	481			
Volume to Capacity	0.35	0.01	0.02			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.7			
Lane LOS			B			
Approach Delay (s)	0.0		12.7			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			35.3%		ICU Level of Service	A
Analysis Period (min)			15			








NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	1825	133	59	897	133	101	91	63	176	81	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5034		1770	4987			3342			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5034		1770	4987			3342			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	45	1941	141	60	906	134	111	100	69	198	91	29
RTOR Reduction (vph)	0	5	0	0	10	0	0	18	0	0	4	0
Lane Group Flow (vph)	45	2077	0	60	1030	0	0	262	0	0	314	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2005		196	1986			649			658	
v/s Ratio Prot	0.03	c0.41		c0.03	0.21			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.23	1.04		0.31	0.52			0.40			0.48	
Uniform Delay, d1	73.0	54.1		73.6	41.1			63.4			64.4	
Progression Factor	1.00	1.00		1.23	0.83			1.00			1.00	
Incremental Delay, d2	0.6	30.1		0.8	0.9			0.4			0.5	
Delay (s)	73.6	84.3		91.2	35.0			63.8			64.9	
Level of Service	E	F		F	C			E			E	
Approach Delay (s)		84.0			38.0			63.8			64.9	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		67.7			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		119.1%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	2113	58	49	1311	56	21	11	35	64	13	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5065		1770	5054			1704		1770	1719	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.62	1.00	
Satd. Flow (perm)	1770	5065		1770	5054			1554		1156	1719	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2156	59	51	1352	58	25	13	42	75	15	16
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	14	0
Lane Group Flow (vph)	20	2214	0	51	1408	0	0	57	0	75	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3562		157	3666			191		142	212	
v/s Ratio Prot	0.01	c0.44		c0.03	c0.28						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.62		0.32	0.38			0.30		0.53	0.08	
Uniform Delay, d1	79.3	14.1		76.9	9.4			71.8		74.0	69.9	
Progression Factor	1.44	0.12		1.54	0.28			1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.3		1.0	0.2			0.9		3.5	0.2	
Delay (s)	114.4	2.0		119.8	2.9			72.7		77.5	70.0	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.0			6.9			72.7			75.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		7.9			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		61.8%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												









NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	1989	208	160	1385	83	133	41	130	157	45	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5013		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5013		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	29	2116	221	165	1428	86	145	45	141	212	61	27
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	117	0	4	0
Lane Group Flow (vph)	29	2330	0	165	1428	49	0	190	24	0	296	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2			4				
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2219		192	2364	736		305	269		575	
v/s Ratio Prot	0.02	c0.46		c0.09	c0.28			c0.11			c0.09	
v/s Ratio Perm						0.03			0.02			
v/c Ratio	0.18	1.05		0.86	0.60	0.07		0.62	0.09		0.51	
Uniform Delay, d1	76.0	50.1		78.8	35.8	26.6		69.3	62.9		67.9	
Progression Factor	1.01	1.02		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	32.3		29.6	1.2	0.2		9.2	0.7		3.3	
Delay (s)	76.9	83.4		108.5	37.0	26.8		78.5	63.5		71.1	
Level of Service	E	F		F	D	C		E	E		E	
Approach Delay (s)		83.3			43.5			72.1			71.1	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		67.4			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.84										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		107.0%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	2119	50	174	1690	16	40	9	83	24	11	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5068		1770	5078			1679			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.83	
Satd. Flow (perm)	1770	5068		1770	5078			1512			1496	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	11	2354	56	183	1779	17	47	11	98	30	14	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	78	0	0	11	0
Lane Group Flow (vph)	11	2408	0	183	1795	0	0	78	0	0	47	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4				4	
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.3			17.3	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.3			17.3	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2417		234	3046			309			306	
v/s Ratio Prot	0.01	c0.48		c0.10	0.35							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.69	1.00		0.78	0.59			0.25			0.15	
Uniform Delay, d1	41.7	22.0		35.5	10.5			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	80.1	17.3		15.5	0.3			0.4			0.2	
Delay (s)	121.8	39.3		51.0	10.8			28.6			27.8	
Level of Service	F	D		D	B			C			C	
Approach Delay (s)		39.7			14.5			28.6			27.8	
Approach LOS		D			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		28.4			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		84.5			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		73.2%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	193	2053	32	336	1698	569	69	182	547	603	245	233
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5073		1770	5085	1583	1770	1632	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5073		1770	5085	1583	1770	1632	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	203	2161	34	361	1826	612	73	194	582	655	266	253
RTOR Reduction (vph)	0	1	0	0	0	84	0	26	279	0	2	127
Lane Group Flow (vph)	203	2194	0	361	1826	528	73	378	93	655	289	101
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.2	38.2	11.8	41.3	41.3
Effective Green, g (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.2	38.2	11.8	41.3	41.3
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1202		519	2320	722	100	406	375	264	470	405
v/s Ratio Prot	0.06	c0.43		c0.20	c0.36		0.04	c0.23		c0.19	c0.17	
v/s Ratio Perm					0.33			0.06				0.07
v/c Ratio	0.80	1.83		0.70	0.79	0.73	0.73	0.93	0.25	2.48	0.61	0.25
Uniform Delay, d1	69.8	58.4		48.0	35.3	34.0	71.1	56.2	46.0	70.7	49.0	43.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.7	374.8		4.0	1.8	3.8	23.2	28.2	0.3	677.7	2.4	0.3
Delay (s)	85.4	433.2		52.1	37.2	37.8	94.3	84.4	46.3	748.4	51.4	44.1
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		403.8			39.2			68.6			438.9	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		228.7			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.25										
Actuated Cycle Length (s)		153.2			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		130.0%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2023 Alt 1/2/3

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Volume (vph)	0	528	893	0	451	1716
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	593	950	0	496	1886
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	593	950	0	496	1883
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.17	c0.27		0.28	c0.68
v/s Ratio Perm						
v/c Ratio		0.33	1.11		0.75	1.06
Uniform Delay, d1		11.8	30.3		21.7	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	64.5		4.6	39.4
Delay (s)		11.9	94.8		26.3	53.9
Level of Service		B	F		C	D
Approach Delay (s)		11.9	94.8		48.2	
Approach LOS		B	F		D	
Intersection Summary						
HCM 2000 Control Delay		54.0			HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio		1.15				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		89.3%			ICU Level of Service	E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑↑				
Volume (vph)	0	972	0	0	542	257	462	2	110	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1618				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1618				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1012	0	0	609	289	497	2	118	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	31	0	0	0	0
Lane Group Flow (vph)	0	1012	0	0	800	0	313	273	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.7			19.7		14.8	14.8				
Effective Green, g (s)		19.7			19.7		14.8	14.8				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1640			1561		585	563				
v/s Ratio Prot		0.29			0.24							
v/s Ratio Perm							0.19	0.17				
v/c Ratio		0.62			0.51		0.54	0.48				
Uniform Delay, d1		8.6			8.0		11.1	10.9				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.7			0.3		0.9	0.7				
Delay (s)		9.3			8.3		12.0	11.5				
Level of Service		A			A		B	B				
Approach Delay (s)		9.3			8.3		11.8				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		9.5			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		42.5			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		49.7%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2023 Alt 1/2/3
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	3	36	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	3	52	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	73	52	52			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	73	52	52			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	926	1015	1554			
Direction, Lane #						
Volume Total	16	12	52			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	1015	1554	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.3	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.3	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.5				
Intersection Capacity Utilization		17.2%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus

1: 2015 AM SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON_NorthOp Int17 with Signal

Timing Plan:

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	0	155	1582	0	172	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0		4.0	
Lane Util. Factor			1.00	0.95		0.95	
Flt			1.00	1.00		1.00	
Flt Protected			0.95	1.00		1.00	
Satd. Flow (prot)			1770	3539		3539	
Flt Permitted			0.95	1.00		1.00	
Satd. Flow (perm)			1770	3539		3539	
Peak-hour factor, PHF	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Adj. Flow (vph)	0	0	161	1648	0	218	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	161	1648	0	218	0
Turn Type	Perm		Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)			4.1	36.9		28.8	
Effective Green, g (s)			4.1	36.9		28.8	
Actuated g/C Ratio			0.09	0.77		0.60	
Clearance Time (s)			4.0	4.0		4.0	
Vehicle Extension (s)			3.0	3.0		3.0	
Lane Grp Cap (vph)			150	2709		2114	
v/s Ratio Prot			c0.09	c0.47		0.06	
v/s Ratio Perm							
v/c Ratio			1.07	0.61		0.10	
Uniform Delay, d1			22.1	2.5		4.2	
Progression Factor			1.00	1.00		1.00	
Incremental Delay, d2			94.4	0.4		0.0	
Delay (s)			116.4	2.9		4.2	
Level of Service			F	A		A	
Approach Delay (s)	0.0			13.0		4.2	
Approach LOS	A			B		A	
Intersection Summary							
HCM 2000 Control Delay			12.0		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio			0.65				
Actuated Cycle Length (s)			48.2		Sum of lost time (s)		12.0
Intersection Capacity Utilization			53.7%		ICU Level of Service		A
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus

2: 2015 PM SR-75 (Silver Strand Blvd)

MILCON_NorthOp Int17 with Signal

Timing Plan:

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	155	0	446	0	1483	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0		4.0	
Lane Util. Factor		1.00		0.95		0.95	
Flt		0.85		1.00		1.00	
Flt Protected		1.00		1.00		1.00	
Satd. Flow (prot)		1583		3539		3539	
Flt Permitted		1.00		1.00		1.00	
Satd. Flow (perm)		1583		3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	168	0	485	0	1612	0
RTOR Reduction (vph)	0	110	0	0	0	0	0
Lane Group Flow (vph)	0	58	0	485	0	1612	0
Turn Type	Perm		Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)		9.5		45.6		45.6	
Effective Green, g (s)		9.5		45.6		45.6	
Actuated g/C Ratio		0.15		0.72		0.72	
Clearance Time (s)		4.0		4.0		4.0	
Vehicle Extension (s)		3.0		3.0		3.0	
Lane Grp Cap (vph)		238		2557		2557	
v/s Ratio Prot				0.14		c0.46	
v/s Ratio Perm		c0.04					
v/c Ratio		0.25		0.19		0.63	
Uniform Delay, d1		23.6		2.8		4.5	
Progression Factor		1.00		1.00		1.00	
Incremental Delay, d2		0.5		0.2		1.2	
Delay (s)		24.2		3.0		5.6	
Level of Service		C		A		A	
Approach Delay (s)	24.2			3.0		5.6	
Approach LOS	C			A		A	
Intersection Summary							
HCM 2000 Control Delay			6.5		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.61				
Actuated Cycle Length (s)			63.1		Sum of lost time (s)		12.0
Intersection Capacity Utilization			57.3%		ICU Level of Service		B
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus

3: 2016 AM SR-75 (Silver Strand Blvd)

MILCON_NorthOp Int17 with Signal

Timing Plan:

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	0	12	258	1594	0	173	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00	0.95		0.95	1.00
Flt		0.85	1.00	1.00		1.00	0.85
Flt Protected		1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)		1583	1770	3539		3539	1583
Flt Permitted		1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)		1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	13	280	1733	0	188	1
RTOR Reduction (vph)	0	11	0	0	0	0	1
Lane Group Flow (vph)	0	2	280	1733	0	188	0
Turn Type	Perm	Prot	NA	Perm	NA	Perm	
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)		8.8	15.2	48.2		29.0	29.0
Effective Green, g (s)		8.8	15.2	48.2		29.0	29.0
Actuated g/C Ratio		0.14	0.23	0.74		0.45	0.45
Clearance Time (s)		4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		214	413	2624		1578	706
v/s Ratio Prot			0.16	0.49		0.05	
v/s Ratio Perm		0.00					0.00
v/c Ratio		0.01	0.68	0.66		0.12	0.00
Uniform Delay, d1		24.3	22.7	4.3		10.5	10.0
Progression Factor		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	4.4	1.3		0.2	0.0
Delay (s)		24.3	27.1	5.6		10.7	10.0
Level of Service		C	C	A		B	A
Approach Delay (s)	24.3			8.6		10.7	
Approach LOS	C			A		B	

Intersection Summary

HCM 2000 Control Delay	8.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

4: 2016 PM SR-75 (Silver Strand Blvd)

MILCON_NorthOp Int17 with Signal

Timing Plan:

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	1	258	13	449	0	1494	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	
Flt	1.00	0.85	1.00	1.00		1.00	
Flt Protected	0.95	1.00	0.95	1.00		1.00	
Satd. Flow (prot)	1770	1583	1770	3539		3539	
Flt Permitted	0.95	1.00	0.95	1.00		1.00	
Satd. Flow (perm)	1770	1583	1770	3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	280	14	488	0	1624	0
RTOR Reduction (vph)	0	96	0	0	0	0	0
Lane Group Flow (vph)	1	184	14	488	0	1624	0
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	12.9	12.9	0.7	49.9		45.2	
Effective Green, g (s)	12.9	12.9	0.7	49.9		45.2	
Actuated g/C Ratio	0.18	0.18	0.01	0.70		0.64	
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	322	288	17	2494		2259	
v/s Ratio Prot	0.00		0.01	0.14		0.46	
v/s Ratio Perm		0.12					
v/c Ratio	0.00	0.64	0.82	0.20		0.72	
Uniform Delay, d1	23.7	26.8	35.0	3.6		8.6	
Progression Factor	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2	0.0	4.6	132.1	0.2		2.0	
Delay (s)	23.7	31.4	167.1	3.8		10.6	
Level of Service	C	C	F	A		B	
Approach Delay (s)	31.4			8.3		10.6	
Approach LOS	C			A		B	

Intersection Summary

HCM 2000 Control Delay	12.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	70.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
5: 2017 AM SR-75 (Silver Strand Blvd)

MILCON_NorthOp Int17 with Signal
Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↩	↩	↩	↩	↩	↩	↩
Volume (vph)	5	21	357	1606	0	174	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00
Flt	1.00	0.85	1.00	1.00	1.00	0.85	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583	1770
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539	3539	1583	1770
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	23	388	1746	0	189	48
RTOR Reduction (vph)	0	21	0	0	0	0	28
Lane Group Flow (vph)	5	2	388	1746	0	189	20
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	5.7	5.7	16.9	46.1		25.2	25.2
Effective Green, g (s)	5.7	5.7	16.9	46.1		25.2	25.2
Actuated g/C Ratio	0.10	0.10	0.28	0.77		0.42	0.42
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	168	150	500	2728		1491	667
v/s Ratio Prot	c0.00		c0.22	c0.49		0.05	
v/s Ratio Perm		0.00				0.01	
v/c Ratio	0.03	0.01	0.78	0.64		0.13	0.03
Uniform Delay, d1	24.5	24.5	19.7	3.1		10.6	10.1
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	0.0	7.4	1.2		0.2	0.1
Delay (s)	24.6	24.5	27.1	4.3		10.7	10.2
Level of Service	C	C	C	A		B	B
Approach Delay (s)	24.6			8.4		10.6	
Approach LOS	C			A		B	
Intersection Summary							
HCM 2000 Control Delay			8.8		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.65				
Actuated Cycle Length (s)			59.8		Sum of lost time (s)		12.0
Intersection Capacity Utilization			61.1%		ICU Level of Service		B
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus
6: 2017 PM SR-75 (Silver Strand Blvd)

MILCON_NorthOp Int17 with Signal
Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↩	↩	↩	↩	↩	↩	↩
Volume (vph)	44	355	32	453	0	1505	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00
Flt	1.00	0.85	1.00	1.00	1.00	0.85	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583	1770
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539	3539	1583	1770
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	48	386	35	492	0	1636	12
RTOR Reduction (vph)	0	90	0	0	0	0	5
Lane Group Flow (vph)	48	296	35	492	0	1636	7
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	16.9	16.9	1.5	47.8		42.3	42.3
Effective Green, g (s)	16.9	16.9	1.5	47.8		42.3	42.3
Actuated g/C Ratio	0.23	0.23	0.02	0.66		0.58	0.58
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	411	367	36	2326		2059	921
v/s Ratio Prot	0.03		c0.02	0.14		c0.46	
v/s Ratio Perm		c0.19				0.00	
v/c Ratio	0.12	0.81	0.97	0.21		0.79	0.01
Uniform Delay, d1	22.0	26.4	35.6	5.0		11.8	6.4
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	12.2	138.2	0.2		3.3	0.0
Delay (s)	22.1	38.6	173.8	5.2		15.1	6.4
Level of Service	C	D	F	A		B	A
Approach Delay (s)	36.8			16.4		15.0	
Approach LOS	D			B		B	
Intersection Summary							
HCM 2000 Control Delay			18.9		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio			0.80				
Actuated Cycle Length (s)			72.7		Sum of lost time (s)		12.0
Intersection Capacity Utilization			70.3%		ICU Level of Service		C
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus

7: 2018 AM SR-75 (Silver Strand Blvd)

MILCON_NorthOp Int17 with Signal

Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement							
Lane Configurations							
Volume (vph)	7	12	378	1618	0	176	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	8	13	411	1759	0	191	66
RTOR Reduction (vph)	0	12	0	0	0	0	38
Lane Group Flow (vph)	8	1	411	1759	0	191	28
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	4.4	4.4	17.8	46.3		24.5	24.5
Effective Green, g (s)	4.4	4.4	17.8	46.3		24.5	24.5
Actuated g/C Ratio	0.07	0.07	0.30	0.79		0.42	0.42
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	132	118	536	2791		1477	660
v/s Ratio Prot	c0.00		c0.23	c0.50		0.05	
v/s Ratio Perm		0.00					0.02
v/c Ratio	0.06	0.01	0.77	0.63		0.13	0.04
Uniform Delay, d1	25.2	25.1	18.6	2.6		10.5	10.1
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.2	0.0	6.5	1.1		0.2	0.1
Delay (s)	25.4	25.2	25.1	3.7		10.7	10.3
Level of Service	C	C	C	A		B	B
Approach Delay (s)	25.3			7.7		10.6	
Approach LOS	C			A		B	

Intersection Summary

HCM 2000 Control Delay	8.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	58.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

8: 2018 PM SR-75 (Silver Strand Blvd)

MILCON_NorthOp Int17 with Signal

Timing Plan:








	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement							
Lane Configurations							
Volume (vph)	61	376	28	456	0	1517	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	66	409	30	496	0	1649	16
RTOR Reduction (vph)	0	88	0	0	0	0	7
Lane Group Flow (vph)	66	321	30	496	0	1649	9
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	17.9	17.9	1.5	47.6		42.1	42.1
Effective Green, g (s)	17.9	17.9	1.5	47.6		42.1	42.1
Actuated g/C Ratio	0.24	0.24	0.02	0.65		0.57	0.57
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	431	385	36	2291		2027	906
v/s Ratio Prot	0.04		c0.02	0.14		c0.47	
v/s Ratio Perm		c0.20					0.01
v/c Ratio	0.15	0.83	0.83	0.22		0.81	0.01
Uniform Delay, d1	21.8	26.4	35.9	5.3		12.6	6.7
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.2	14.4	85.2	0.2		3.7	0.0
Delay (s)	22.0	40.8	121.1	5.5		16.3	6.8
Level of Service	C	D	F	A		B	A
Approach Delay (s)	38.2			12.1		16.2	
Approach LOS	D			B		B	

Intersection Summary

HCM 2000 Control Delay	19.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	73.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			








NBC Coastal Campus
9: 2019 AM SR-75 (Silver Strand Blvd)

MILCON_NorthOp Int17 with Signal
Timing Plan:

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	9	17	548	1630	0	177	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	18	596	1772	0	192	90
RTOR Reduction (vph)	0	16	0	0	0	0	56
Lane Group Flow (vph)	10	2	596	1772	0	192	34
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	8.7	8.7	28.0	61.4		29.4	29.4
Effective Green, g (s)	8.7	8.7	28.0	61.4		29.4	29.4
Actuated g/C Ratio	0.11	0.11	0.36	0.79		0.38	0.38
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	197	176	634	2782		1332	595
v/s Ratio Prot	c0.01		c0.34	c0.50		0.05	
v/s Ratio Perm		0.00					0.02
v/c Ratio	0.05	0.01	0.94	0.64		0.14	0.06
Uniform Delay, d1	31.0	30.9	24.2	3.6		16.1	15.5
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	0.0	22.1	1.1		0.2	0.2
Delay (s)	31.1	30.9	46.4	4.7		16.3	15.7
Level of Service	C	C	D	A		B	B
Approach Delay (s)	31.0			15.2		16.1	
Approach LOS	C			B		B	
Intersection Summary							
HCM 2000 Control Delay		15.4		HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio		0.71					
Actuated Cycle Length (s)		78.1		Sum of lost time (s)		12.0	
Intersection Capacity Utilization		61.7%		ICU Level of Service		B	
Analysis Period (min)		15					
c Critical Lane Group							

NBC Coastal Campus
10: 2019 PM SR-75 (Silver Strand Blvd)

MILCON_NorthOp Int17 with Signal
Timing Plan:

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	82	546	38	460	0	1528	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	89	593	41	500	0	1661	23
RTOR Reduction (vph)	0	68	0	0	0	0	11
Lane Group Flow (vph)	89	525	41	500	0	1661	12
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	29.0	29.0	2.4	54.6		48.2	48.2
Effective Green, g (s)	29.0	29.0	2.4	54.6		48.2	48.2
Actuated g/C Ratio	0.32	0.32	0.03	0.60		0.53	0.53
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	560	501	46	2109		1862	832
v/s Ratio Prot	0.05		c0.02	0.14		c0.47	
v/s Ratio Perm		c0.33					0.01
v/c Ratio	0.16	1.05	0.89	0.24		0.89	0.01
Uniform Delay, d1	22.5	31.3	44.5	8.7		19.4	10.4
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	53.1	91.9	0.3		7.0	0.0
Delay (s)	22.7	84.4	136.3	9.0		26.4	10.4
Level of Service	C	F	F	A		C	B
Approach Delay (s)	76.4			18.6		26.1	
Approach LOS	E			B		C	
Intersection Summary							
HCM 2000 Control Delay		36.5		HCM 2000 Level of Service		D	
HCM 2000 Volume to Capacity ratio		0.95					
Actuated Cycle Length (s)		91.6		Sum of lost time (s)		12.0	
Intersection Capacity Utilization		82.7%		ICU Level of Service		E	
Analysis Period (min)		15					
c Critical Lane Group							

NBC Coastal Campus

11: 2020 AM SR-75 (Silver Strand Blvd)

MILCON_NorthOp Int17 with Signal

Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement							
Lane Configurations							
Volume (vph)	13	23	773	1643	0	178	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	14	25	840	1786	0	193	122
RTOR Reduction (vph)	0	22	0	0	0	0	91
Lane Group Flow (vph)	14	3	840	1786	0	193	31
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	8.9	8.9	44.8	71.3		22.5	22.5
Effective Green, g (s)	8.9	8.9	44.8	71.3		22.5	22.5
Actuated g/C Ratio	0.10	0.10	0.51	0.81		0.26	0.26
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	178	159	899	2860		902	403
v/s Ratio Prot	c0.01		c0.47	c0.50		0.05	
v/s Ratio Perm		0.00					0.02
v/c Ratio	0.08	0.02	0.93	0.62		0.21	0.08
Uniform Delay, d1	35.9	35.7	20.3	3.3		25.9	25.0
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.2	0.0	16.3	1.0		0.5	0.4
Delay (s)	36.1	35.7	36.6	4.3		26.4	25.3
Level of Service	D	D	D	A		C	C
Approach Delay (s)	35.9			14.6		26.0	
Approach LOS	D			B		C	

Intersection Summary

HCM 2000 Control Delay	16.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	88.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

12: 2020 PM SR-75 (Silver Strand Blvd)

MILCON_NorthOp Int17 with Signal

Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement							
Lane Configurations							
Volume (vph)	111	770	51	463	0	1540	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	121	837	55	503	0	1674	30
RTOR Reduction (vph)	0	46	0	0	0	0	10
Lane Group Flow (vph)	121	791	55	503	0	1674	20
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	65.0	65.0	5.0	77.0		68.0	68.0
Effective Green, g (s)	65.0	65.0	5.0	77.0		68.0	68.0
Actuated g/C Ratio	0.43	0.43	0.03	0.51		0.45	0.45
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	767	685	59	1816		1604	717
v/s Ratio Prot	0.07		c0.03	0.14		c0.47	
v/s Ratio Perm		c0.50					0.01
v/c Ratio	0.16	1.15	0.93	0.28		1.04	0.03
Uniform Delay, d1	25.9	42.5	72.3	20.7		41.0	22.7
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	85.6	92.4	0.4		34.8	0.1
Delay (s)	25.9	128.1	164.8	21.1		75.8	22.8
Level of Service	C	F	F	C		E	C
Approach Delay (s)	115.2			35.2		74.9	
Approach LOS	F			D		E	

Intersection Summary

HCM 2000 Control Delay	80.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	96.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

13: 2021 AM SR-75 (Silver Strand Blvd)

MILCON_NorthOp Int17 with Signal

Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement							
Lane Configurations							
Volume (vph)	17	32	735	1655	0	180	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	18	35	799	1799	0	196	166
RTOR Reduction (vph)	0	31	0	0	0	0	138
Lane Group Flow (vph)	18	4	799	1799	0	196	28
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	8.0	8.0	44.3	61.4		13.1	13.1
Effective Green, g (s)	8.0	8.0	44.3	61.4		13.1	13.1
Actuated g/C Ratio	0.10	0.10	0.57	0.79		0.17	0.17
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	182	163	1013	2807		598	267
v/s Ratio Prot	c0.01		c0.45	c0.51		0.06	
v/s Ratio Perm		0.00					0.02
v/c Ratio	0.10	0.02	0.79	0.64		0.33	0.11
Uniform Delay, d1	31.4	31.2	12.9	3.4		28.3	27.2
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.2	0.1	4.1	0.5		0.3	0.2
Delay (s)	31.7	31.2	17.0	3.9		28.6	27.4
Level of Service	C	C	B	A		C	C
Approach Delay (s)	31.4			7.9		28.0	
Approach LOS	C			A		C	

Intersection Summary

HCM 2000 Control Delay	10.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	77.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

14: 2021 PM SR-75 (Silver Strand Blvd)

MILCON_NorthOp Int17 with Signal

Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement							
Lane Configurations							
Volume (vph)	152	731	70	467	0	1551	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	165	795	76	508	0	1686	41
RTOR Reduction (vph)	0	58	0	0	0	0	18
Lane Group Flow (vph)	165	737	76	508	0	1686	23
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	48.0	48.0	5.0	64.0		55.0	55.0
Effective Green, g (s)	48.0	48.0	5.0	64.0		55.0	55.0
Actuated g/C Ratio	0.40	0.40	0.04	0.53		0.46	0.46
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	708	633	73	1887		1622	725
v/s Ratio Prot	0.09		c0.04	0.14		c0.48	
v/s Ratio Perm		c0.47					0.01
v/c Ratio	0.23	1.16	1.04	0.27		1.04	0.03
Uniform Delay, d1	23.8	36.0	57.5	15.3		32.5	17.9
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.2	90.3	117.1	0.1		33.3	0.0
Delay (s)	24.0	126.3	174.6	15.3		65.8	17.9
Level of Service	C	F	F	B		E	B
Approach Delay (s)	108.7			36.1		64.7	
Approach LOS	F			D		E	

Intersection Summary

HCM 2000 Control Delay	72.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	94.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

15: 2022 AM SR-75 (Silver Strand Blvd)

MILCON_NorthOp Int17 with Signal

Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement	↖	↗	↖	↗	↖	↗	↖
Lane Configurations	↖	↗	↖	↗	↖	↗	↖
Volume (vph)	23	44	523	1668	0	181	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	48	568	1813	0	197	228
RTOR Reduction (vph)	0	42	0	0	0	0	172
Lane Group Flow (vph)	25	6	568	1813	0	197	56
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	7.8	7.8	26.7	45.9		15.2	15.2
Effective Green, g (s)	7.8	7.8	26.7	45.9		15.2	15.2
Actuated g/C Ratio	0.13	0.13	0.43	0.74		0.25	0.25
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	223	200	765	2632		871	389
v/s Ratio Prot	c0.01		c0.32	c0.51		0.06	
v/s Ratio Perm		0.00					0.04
v/c Ratio	0.11	0.03	0.74	0.69		0.23	0.14
Uniform Delay, d1	23.9	23.6	14.6	4.1		18.6	18.2
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.2	0.1	3.9	0.8		0.1	0.2
Delay (s)	24.1	23.7	18.5	4.9		18.7	18.3
Level of Service	C	C	B	A		B	B
Approach Delay (s)	23.8			8.2		18.5	
Approach LOS	C			A		B	

Intersection Summary

HCM 2000 Control Delay	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	61.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

16: 2022 PM SR-75 (Silver Strand Blvd)

MILCON_NorthOp Int17 with Signal

Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement	↖	↗	↖	↗	↖	↗	↖
Lane Configurations	↖	↗	↖	↗	↖	↗	↖
Volume (vph)	207	518	96	470	0	1563	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	225	563	104	511	0	1699	57
RTOR Reduction (vph)	0	97	0	0	0	0	28
Lane Group Flow (vph)	225	466	104	511	0	1699	29
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	26.0	26.0	6.0	56.0		46.0	46.0
Effective Green, g (s)	26.0	26.0	6.0	56.0		46.0	46.0
Actuated g/C Ratio	0.29	0.29	0.07	0.62		0.51	0.51
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	511	457	118	2202		1808	809
v/s Ratio Prot	0.13		c0.06	0.14		c0.48	
v/s Ratio Perm		c0.29					0.02
v/c Ratio	0.44	1.02	0.88	0.23		0.94	0.04
Uniform Delay, d1	26.1	32.0	41.6	7.5		20.7	11.0
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.6	47.3	48.1	0.1		10.1	0.0
Delay (s)	26.7	79.3	89.8	7.6		30.7	11.0
Level of Service	C	E	F	A		C	B
Approach Delay (s)	64.3			21.5		30.1	
Approach LOS	E			C		C	

Intersection Summary

HCM 2000 Control Delay	37.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	81.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

17: 2023 AM SR-75 (Silver Strand Blvd)

MILCON_NorthOp Int17 with Signal

Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement							
Lane Configurations							
Volume (vph)	27	49	443	1680	0	182	239
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	53	482	1826	0	198	260
RTOR Reduction (vph)	0	46	0	0	0	0	187
Lane Group Flow (vph)	29	7	482	1826	0	198	73
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	7.5	7.5	23.0	43.6		16.6	16.6
Effective Green, g (s)	7.5	7.5	23.0	43.6		16.6	16.6
Actuated g/C Ratio	0.13	0.13	0.39	0.74		0.28	0.28
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	224	200	688	2610		994	444
v/s Ratio Prot	c0.02		0.27	c0.52		0.06	
v/s Ratio Perm		0.00					0.05
v/c Ratio	0.13	0.03	0.70	0.70		0.20	0.16
Uniform Delay, d1	22.9	22.6	15.2	4.2		16.2	16.0
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.3	0.1	3.2	0.8		0.1	0.2
Delay (s)	23.2	22.7	18.4	5.0		16.3	16.2
Level of Service	C	C	B	A		B	B
Approach Delay (s)	22.9			7.8		16.2	
Approach LOS	C			A		B	

Intersection Summary

HCM 2000 Control Delay	9.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	59.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

18: 2023 PM SR-75 (Silver Strand Blvd)

MILCON_NorthOp Int17 with Signal

Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement							
Lane Configurations							
Volume (vph)	236	438	109	474	0	1575	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	257	476	118	515	0	1712	64
RTOR Reduction (vph)	0	114	0	0	0	0	30
Lane Group Flow (vph)	257	362	118	515	0	1712	34
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	21.9	21.9	7.0	58.3		47.3	47.3
Effective Green, g (s)	21.9	21.9	7.0	58.3		47.3	47.3
Actuated g/C Ratio	0.25	0.25	0.08	0.66		0.54	0.54
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	439	393	140	2339		1897	848
v/s Ratio Prot	0.15		c0.07	0.15		c0.48	
v/s Ratio Perm		c0.23					0.02
v/c Ratio	0.59	0.92	0.84	0.22		0.90	0.04
Uniform Delay, d1	29.2	32.3	40.1	5.9		18.4	9.7
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	2.0	26.8	34.5	0.0		6.4	0.0
Delay (s)	31.2	59.2	74.5	6.0		24.8	9.7
Level of Service	C	E	E	A		C	A
Approach Delay (s)	49.3			18.8		24.3	
Approach LOS	D			B		C	

Intersection Summary

HCM 2000 Control Delay	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	88.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

19: 2021 AM SR-75 (Silver Strand Blvd) Alt3noB

MILCON_NorthOp Int17 with Signal

Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↩	↩	↩	↩	↩	↩	↩
Volume (vph)	17	32	854	1685	0	180	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	18	35	928	1832	0	196	166
RTOR Reduction (vph)	0	32	0	0	0	0	141
Lane Group Flow (vph)	18	3	928	1832	0	196	25
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	8.4	8.4	56.3	73.7		13.4	13.4
Effective Green, g (s)	8.4	8.4	56.3	73.7		13.4	13.4
Actuated g/C Ratio	0.09	0.09	0.62	0.82		0.15	0.15
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	165	147	1106	2894		526	235
v/s Ratio Prot	c0.01		c0.52	c0.52		0.06	
v/s Ratio Perm		0.00					0.02
v/c Ratio	0.11	0.02	0.84	0.63		0.37	0.11
Uniform Delay, d1	37.4	37.1	13.3	3.1		34.6	33.2
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.3	0.1	5.7	0.5		0.4	0.2
Delay (s)	37.7	37.2	19.1	3.6		35.0	33.4
Level of Service	D	D	B	A		D	C
Approach Delay (s)	37.4			8.8		34.3	
Approach LOS	D			A		C	

Intersection Summary

HCM 2000 Control Delay	12.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	90.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

20: 2021 PM SR-75 (Silver Strand Blvd) Alt3noB

MILCON_NorthOp Int17 with Signal

Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↩	↩	↩	↩	↩	↩	↩
Volume (vph)	152	850	70	467	0	1581	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	165	924	76	508	0	1718	41
RTOR Reduction (vph)	0	42	0	0	0	0	13
Lane Group Flow (vph)	165	882	76	508	0	1718	28
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	72.0	72.0	5.0	80.0		71.0	71.0
Effective Green, g (s)	72.0	72.0	5.0	80.0		71.0	71.0
Actuated g/C Ratio	0.45	0.45	0.03	0.50		0.44	0.44
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	796	712	55	1769		1570	702
v/s Ratio Prot	0.09		c0.04	0.14		c0.49	
v/s Ratio Perm		c0.56					0.02
v/c Ratio	0.21	1.24	1.38	0.29		1.09	0.04
Uniform Delay, d1	26.7	44.0	77.5	23.4		44.5	25.2
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	119.4	252.4	0.1		53.1	0.0
Delay (s)	26.8	163.4	329.9	23.4		97.6	25.2
Level of Service	C	F	F	C		F	C
Approach Delay (s)	142.7			63.3		95.9	
Approach LOS	F			E		F	

Intersection Summary

HCM 2000 Control Delay	105.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	103.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

21: 2022 AM SR-75 (Silver Strand Blvd) Alt3noB

MILCON_NorthOp Int17 with Signal

Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↩	↩	↩	↩	↩	↩	↩
Volume (vph)	23	44	642	1698	0	181	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	48	698	1846	0	197	228
RTOR Reduction (vph)	0	42	0	0	0	0	184
Lane Group Flow (vph)	25	6	698	1846	0	197	44
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	8.1	8.1	36.6	54.3		13.7	13.7
Effective Green, g (s)	8.1	8.1	36.6	54.3		13.7	13.7
Actuated g/C Ratio	0.12	0.12	0.52	0.77		0.19	0.19
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	203	182	920	2729		688	308
v/s Ratio Prot	c0.01		c0.39	c0.52		0.06	
v/s Ratio Perm		0.00					0.03
v/c Ratio	0.12	0.03	0.76	0.68		0.29	0.14
Uniform Delay, d1	28.0	27.7	13.4	3.8		24.2	23.5
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.3	0.1	3.6	0.7		0.2	0.2
Delay (s)	28.2	27.7	17.0	4.5		24.4	23.7
Level of Service	C	C	B	A		C	C
Approach Delay (s)	27.9			8.0		24.0	
Approach LOS	C			A		C	

Intersection Summary

HCM 2000 Control Delay	10.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	70.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

22: 2022 PM SR-75 (Silver Strand Blvd) Alt3noB

MILCON_NorthOp Int17 with Signal

Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↩	↩	↩	↩	↩	↩	↩
Volume (vph)	207	637	96	470	0	1593	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	1.00
Flt	1.00	0.85	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539		3539	1583
Flt Permitted	0.95	1.00	0.95	1.00		1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	225	692	104	511	0	1732	57
RTOR Reduction (vph)	0	80	0	0	0	0	24
Lane Group Flow (vph)	225	612	104	511	0	1732	33
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	42.0	42.0	7.0	70.0		59.0	59.0
Effective Green, g (s)	42.0	42.0	7.0	70.0		59.0	59.0
Actuated g/C Ratio	0.35	0.35	0.06	0.58		0.49	0.49
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	619	554	103	2064		1740	778
v/s Ratio Prot	0.13		c0.06	0.14		c0.49	
v/s Ratio Perm		c0.39					0.02
v/c Ratio	0.36	1.10	1.01	0.25		1.00	0.04
Uniform Delay, d1	29.0	39.0	56.5	12.2		30.4	15.8
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.4	70.2	91.3	0.1		20.3	0.0
Delay (s)	29.4	109.2	147.8	12.2		50.7	15.9
Level of Service	C	F	F	B		D	B
Approach Delay (s)	89.6			35.2		49.6	
Approach LOS	F			D		D	

Intersection Summary

HCM 2000 Control Delay	58.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	90.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

23: 2023 AM SR-75 (Silver Strand Blvd) Alt3noB

MILCON_NorthOp Int17 with Signal

Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement	↖	↗	↖	↗	↖	↗	↖
Lane Configurations	↖	↗	↖	↗	↖	↗	↖
Volume (vph)	30	54	494	1700	0	184	267
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00
Flt	1.00	0.85	1.00	1.00	1.00	0.85	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583	1770
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539	3539	1583	1770
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	59	537	1848	0	200	290
RTOR Reduction (vph)	0	50	0	0	0	0	214
Lane Group Flow (vph)	33	9	537	1848	0	200	76
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	9.7	9.7	25.9	46.7		16.8	16.8
Effective Green, g (s)	9.7	9.7	25.9	46.7		16.8	16.8
Actuated g/C Ratio	0.15	0.15	0.40	0.73		0.26	0.26
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	266	238	711	2566		923	412
v/s Ratio Prot	c0.02		0.30	c0.52		0.06	
v/s Ratio Perm		0.01					0.05
v/c Ratio	0.12	0.04	0.76	0.72		0.22	0.18
Uniform Delay, d1	23.7	23.4	16.5	5.1		18.6	18.5
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.2	0.1	4.6	1.0		0.1	0.2
Delay (s)	23.9	23.4	21.1	6.1		18.8	18.7
Level of Service	C	C	C	A		B	B
Approach Delay (s)	23.6			9.5		18.7	
Approach LOS	C			A		B	

Intersection Summary

HCM 2000 Control Delay	11.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	64.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

24: 2023 PM SR-75 (Silver Strand Blvd) Alt3noB

MILCON_NorthOp Int17 with Signal

Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement	↖	↗	↖	↗	↖	↗	↖
Lane Configurations	↖	↗	↖	↗	↖	↗	↖
Volume (vph)	264	489	122	479	0	1595	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00
Flt	1.00	0.85	1.00	1.00	1.00	0.85	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583	1770
Flt Permitted	0.95	1.00	0.11	1.00	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583	213	3539	3539	1583	1770
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	287	532	133	521	0	1734	72
RTOR Reduction (vph)	0	9	0	0	0	0	33
Lane Group Flow (vph)	287	523	133	521	0	1734	39
Turn Type	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases	4			2		6	
Permitted Phases		4	2		6		6
Actuated Green, G (s)	22.0	22.0	35.0	35.0		35.0	35.0
Effective Green, g (s)	22.0	22.0	35.0	35.0		35.0	35.0
Actuated g/C Ratio	0.34	0.34	0.54	0.54		0.54	0.54
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	599	535	114	1905		1905	852
v/s Ratio Prot	0.16			0.15		0.49	
v/s Ratio Perm		c0.33	c0.62				0.02
v/c Ratio	0.48	0.98	1.17	0.27		0.91	0.05
Uniform Delay, d1	17.0	21.3	15.0	8.1		13.6	7.1
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.6	33.0	136.0	0.1		7.0	0.0
Delay (s)	17.6	54.3	151.0	8.2		20.6	7.1
Level of Service	B	D	F	A		C	A
Approach Delay (s)	41.4			37.2		20.0	
Approach LOS	D			D		C	

Intersection Summary

HCM 2000 Control Delay	28.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
25: 2016 AM SR-75 (Silver Strand Blvd) Alt2

MILCON_NorthOp Int17 with Signal
Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	0	0	246	1594	0	173	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0		4.0	4.0
Lane Util. Factor			1.00	0.95		0.95	1.00
Frt			1.00	1.00		1.00	0.85
Flt Protected			0.95	1.00		1.00	1.00
Satd. Flow (prot)			1770	3539		3539	1583
Flt Permitted			0.95	1.00		1.00	1.00
Satd. Flow (perm)			1770	3539		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	267	1733	0	188	1
RTOR Reduction (vph)	0	0	0	0	0	0	1
Lane Group Flow (vph)	0	0	267	1733	0	188	0
Turn Type	Perm	Prot	NA	Perm	NA	Perm	
Protected Phases	4	5	2		6		
Permitted Phases		4		6		6	
Actuated Green, G (s)			9.4	36.9		23.5	23.5
Effective Green, g (s)			9.4	36.9		23.5	23.5
Actuated g/C Ratio			0.20	0.77		0.49	0.49
Clearance Time (s)			4.0	4.0		4.0	4.0
Vehicle Extension (s)			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)			347	2726		1736	776
v/s Ratio Prot			c0.15	c0.49		0.05	
v/s Ratio Perm						0.00	
v/c Ratio			0.77	0.64		0.11	0.00
Uniform Delay, d1			18.2	2.5		6.6	6.2
Progression Factor			1.00	1.00		1.00	1.00
Incremental Delay, d2			9.9	0.5		0.0	0.0
Delay (s)			28.1	3.0		6.6	6.2
Level of Service			C	A		A	A
Approach Delay (s)	0.0			6.3		6.6	
Approach LOS	A			A		A	
Intersection Summary							
HCM 2000 Control Delay			6.3		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.66				
Actuated Cycle Length (s)			47.9		Sum of lost time (s)		12.0
Intersection Capacity Utilization			54.1%		ICU Level of Service		A
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus
26: 2016 PM SR-75 (Silver Strand Blvd) Alt2

MILCON_NorthOp Int17 with Signal
Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	1	246	1	449	0	1494	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	1.00	1.00	0.95		0.95	
Frt	1.00	0.85	1.00	1.00		1.00	
Flt Protected	0.95	1.00	0.95	1.00		1.00	
Satd. Flow (prot)	1770	1583	1770	3539		3539	
Flt Permitted	0.95	1.00	0.95	1.00		1.00	
Satd. Flow (perm)	1770	1583	1770	3539		3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	267	1	488	0	1624	0
RTOR Reduction (vph)	0	95	0	0	0	0	0
Lane Group Flow (vph)	1	172	1	488	0	1624	0
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	11.7	11.7	0.6	43.4		38.8	
Effective Green, g (s)	11.7	11.7	0.6	43.4		38.8	
Actuated g/C Ratio	0.19	0.19	0.01	0.69		0.61	
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	328	293	16	2434		2176	
v/s Ratio Prot	0.00		0.00	c0.14		c0.46	
v/s Ratio Perm		c0.11					
v/c Ratio	0.00	0.59	0.06	0.20		0.75	
Uniform Delay, d1	20.9	23.5	31.0	3.6		8.6	
Progression Factor	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2	0.0	3.0	1.6	0.0		1.4	
Delay (s)	21.0	26.5	32.6	3.6		10.1	
Level of Service	C	C	C	A		B	
Approach Delay (s)	26.4			3.7		10.1	
Approach LOS	C			A		B	
Intersection Summary							
HCM 2000 Control Delay			10.6		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio			0.71				
Actuated Cycle Length (s)			63.1		Sum of lost time (s)		12.0
Intersection Capacity Utilization			63.2%		ICU Level of Service		B
Analysis Period (min)			15				
c Critical Lane Group							

NBC Coastal Campus

27: 2017 AM SR-75 (Silver Strand Blvd) Alt2

MILCON_NorthOp Int17 with Signal

Timing Plan:

	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement	↖	↗	↖	↗	↖	↗	↖
Lane Configurations	↖	↗	↖	↗	↖	↗	↖
Volume (vph)	5	9	345	1606	0	174	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00
Flt	1.00	0.85	1.00	1.00	1.00	0.85	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583	1770
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539	3539	1583	1770
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	10	375	1746	0	189	48
RTOR Reduction (vph)	0	9	0	0	0	0	31
Lane Group Flow (vph)	5	1	375	1746	0	189	17
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	3.9	3.9	15.3	36.6		17.3	17.3
Effective Green, g (s)	3.9	3.9	15.3	36.6		17.3	17.3
Actuated g/C Ratio	0.08	0.08	0.32	0.75		0.36	0.36
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	142	127	558	2670		1262	564
v/s Ratio Prot	c0.00		0.21	c0.49		0.05	
v/s Ratio Perm		0.00					0.01
v/c Ratio	0.04	0.01	0.67	0.65		0.15	0.03
Uniform Delay, d1	20.6	20.5	14.4	2.9		10.6	10.1
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	0.0	3.2	0.6		0.1	0.0
Delay (s)	20.7	20.5	17.6	3.5		10.7	10.2
Level of Service	C	C	B	A		B	B
Approach Delay (s)	20.6			6.0		10.6	
Approach LOS	C			A		B	

Intersection Summary

HCM 2000 Control Delay	6.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	48.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

28: 2017 PM SR-75 (Silver Strand Blvd) Alt2

MILCON_NorthOp Int17 with Signal

Timing Plan:







	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Movement	↖	↗	↖	↗	↖	↗	↖
Lane Configurations	↖	↗	↖	↗	↖	↗	↖
Volume (vph)	44	343	20	453	0	1505	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00
Flt	1.00	0.85	1.00	1.00	1.00	0.85	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583	1770
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583	1770	3539	3539	1583	1770
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	48	373	22	492	0	1636	12
RTOR Reduction (vph)	0	89	0	0	0	0	5
Lane Group Flow (vph)	48	284	22	492	0	1636	7
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm
Protected Phases	4		5	2		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	15.5	15.5	1.4	42.4		37.0	37.0
Effective Green, g (s)	15.5	15.5	1.4	42.4		37.0	37.0
Actuated g/C Ratio	0.24	0.24	0.02	0.64		0.56	0.56
Clearance Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	416	372	37	2276		1986	888
v/s Ratio Prot	0.03		c0.01	0.14		c0.46	
v/s Ratio Perm		c0.18					0.00
v/c Ratio	0.12	0.76	0.59	0.22		0.82	0.01
Uniform Delay, d1	19.8	23.5	32.0	4.9		11.8	6.4
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	8.9	23.1	0.0		2.9	0.0
Delay (s)	19.9	32.4	55.0	4.9		14.7	6.4
Level of Service	B	C	E	A		B	A
Approach Delay (s)	31.0			7.1		14.6	
Approach LOS	C			A		B	

Intersection Summary

HCM 2000 Control Delay	15.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	65.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			







NBC Coastal Campus
29:

MILCON_NorthOp Int17 with Signal
Timing Plan:

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Flt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	
Intersection Summary						
HCM 2000 Control Delay			0.0	HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.00			
Actuated Cycle Length (s)			3.0	Sum of lost time (s)		0.0
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						







NBC Coastal Campus
30:

MILCON_NorthOp Int17 with Signal
Timing Plan:

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Flt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	
Intersection Summary						
HCM 2000 Control Delay			0.0	HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.00			
Actuated Cycle Length (s)			3.0	Sum of lost time (s)		0.0
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						







NBC Coastal Campus
31:

MILCON_NorthOp Int17 with Signal
Timing Plan:

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Flt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	
Intersection Summary						
HCM 2000 Control Delay			0.0	HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.00			
Actuated Cycle Length (s)			3.0	Sum of lost time (s)		0.0
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						







NBC Coastal Campus
32:

MILCON_NorthOp Int17 with Signal
Timing Plan:

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Flt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	
Intersection Summary						
HCM 2000 Control Delay			0.0	HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.00			
Actuated Cycle Length (s)			3.0	Sum of lost time (s)		0.0
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						







NBC Coastal Campus
33:

MILCON_NorthOp Int17 with Signal
Timing Plan:

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Flt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	
Intersection Summary						
HCM 2000 Control Delay			0.0	HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.00			
Actuated Cycle Length (s)			3.0	Sum of lost time (s)		0.0
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
34:

MILCON_NorthOp Int17 with Signal
Timing Plan:

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Flt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	
Intersection Summary						
HCM 2000 Control Delay			0.0	HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.00			
Actuated Cycle Length (s)			3.0	Sum of lost time (s)		0.0
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
1: Glorietta Blvd & Fourth St







MILCON_NorthOp Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1398	34	0	3795	552	0	0	476	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1684	41	0	4125	600	0	0	595	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4745			1745			3132	6470	622	5026	6190	1715
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4745			1745			3132	6470	622	5026	6190	1715
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	84
cM capacity (veh/h)	21			350			4	0	1354	0	0	77
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	674	674	378	1650	1650	1425	595	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	600	595	12				
cSH	1700	1700	1700	1700	1700	1700	1354	77				
Volume to Capacity	0.40	0.40	0.22	0.97	0.97	0.84	0.44	0.16				
Queue Length 95th (ft)	0	0	0	0	0	0	57	13				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	60.6				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	60.6				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				100.7%			ICU Level of Service		G			
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↑	
Volume (veh/h)	1259	201	0	3694	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1431	228	0	4104	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1679		2953	631	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1679		2953	631	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	39	
cM capacity (veh/h)			371		11	410	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	572	572	515	1368	1368	1368	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	228	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	410
Volume to Capacity	0.34	0.34	0.30	0.80	0.80	0.80	0.61
Queue Length 95th (ft)	0	0	0	0	0	0	99
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	26.7
Lane LOS							D
Approach Delay (s)	0.0			0.0			26.7
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			86.2%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1559	1943	342	105	102	0	0	277	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4640		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4640		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1676	2089	368	142	138	0	0	318	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1022	3103	0	142	138	0	0	330	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.6			21.4	
Effective Green, g (s)				131.2	131.2		20.0	46.6			21.4	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1054	3214		186	870			396	
v/s Ratio Prot				c0.67	0.67		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.97	0.97		0.76	0.16			0.83	
Uniform Delay, d1				27.2	27.0		82.4	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				20.4	9.2		16.8	0.1			14.0	
Delay (s)				47.7	36.2		99.2	56.1			96.3	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			39.0			78.0			96.3	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		45.3		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		189.4		Sum of lost time (s)						16.8		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	583	64	0	0	0	0	197	198	451	1442	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3262	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3262	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	634	70	0	0	0	0	229	215	490	1502	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	18	49	0	0	0
Lane Group Flow (vph)	0	635	41	0	0	0	0	288	89	490	1502	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1178	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.42	
v/s Ratio Perm		0.12	0.03						0.06			
v/c Ratio		0.36	0.07					0.24	0.17	0.70	0.73	
Uniform Delay, d1		41.5	37.2					38.4	37.3	63.2	26.0	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.3	
Delay (s)		41.6	37.3					38.5	37.5	66.2	27.3	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.2			36.9	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.0		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)						14.4		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: AM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	210	6	1112	585	0	1077
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0		5.0	
Lane Util. Factor	1.00		0.95		0.95	
Flpb, ped/bikes	1.00		0.99		1.00	
Flpb, ped/bikes	1.00		1.00		1.00	
Frt	1.00		0.95		1.00	
Frt Protected	0.95		1.00		1.00	
Satd. Flow (prot)	1592		3315		3362	
Frt Permitted	0.95		1.00		1.00	
Satd. Flow (perm)	1592		3315		3362	
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	244	7	1196	629	0	1134
RTOR Reduction (vph)	2	0	54	0	0	0
Lane Group Flow (vph)	249	0	1771	0	0	1134
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2		6	
Permitted Phases						
Actuated Green, G (s)	16.6		42.2		42.2	
Effective Green, g (s)	16.6		42.2		42.2	
Actuated g/C Ratio	0.24		0.62		0.62	
Clearance Time (s)	4.1		5.0		5.0	
Vehicle Extension (s)	3.0		3.0		3.0	
Lane Grp Cap (vph)	389		2060		2089	
v/s Ratio Prot	c0.16		c0.53		0.34	
v/s Ratio Perm						
v/c Ratio	0.64		0.86		0.54	
Uniform Delay, d1	23.0		10.4		7.3	
Progression Factor	1.00		1.00		1.00	
Incremental Delay, d2	3.6		3.8		0.3	
Delay (s)	26.6		14.3		7.6	
Level of Service	C		B		A	
Approach Delay (s)	26.6		14.3		7.6	
Approach LOS	C		B		A	
Intersection Summary						
HCM 2000 Control Delay			12.9		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.84			
Actuated Cycle Length (s)			67.9		Sum of lost time (s)	12.1
Intersection Capacity Utilization			75.7%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: AM PEAK



















	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	45	2	9	7	0	5	19	1320	25	38	1215	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1708		1770	3529		1770	3524	
Frt Permitted	0.74	0.78	1.00		0.87		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1312	1384	1583		1526		1770	3529		1770	3524	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	52	2	10	14	0	10	23	1571	30	41	1321	38
RTOR Reduction (vph)	0	0	8	0	20	0	0	1	0	0	1	0
Lane Group Flow (vph)	27	27	2	0	4	0	23	1600	0	41	1358	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	14.9	14.9	14.9		14.9		2.6	60.8		4.0	62.2	
Effective Green, g (s)	14.9	14.9	14.9		14.9		2.6	60.8		4.0	62.2	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.65		0.04	0.66	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	208	219	251		242		49	2287		75	2336	
v/s Ratio Prot							0.01	c0.45		c0.02	0.39	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.13	0.12	0.01		0.02		0.47	0.70		0.55	0.58	
Uniform Delay, d1	33.9	33.8	33.2		33.3		44.9	10.6		44.0	8.7	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		6.9	1.0		7.9	0.4	
Delay (s)	34.2	34.1	33.2		33.3		51.9	11.6		51.9	9.0	
Level of Service	C	C	C		C		D	B		D	A	
Approach Delay (s)		34.0			33.3			12.1			10.3	
Approach LOS		C			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			11.9		HCM 2000 Level of Service					B		
HCM 2000 Volume to Capacity ratio			0.59									
Actuated Cycle Length (s)			93.8		Sum of lost time (s)					14.1		
Intersection Capacity Utilization			55.1%		ICU Level of Service					B		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: AM PEAK
























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	22	0	1266	7	415	792	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Frt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.66	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	33	0	1391	8	423	808	0
RTOR Reduction (vph)	0	0	0	0	30	0	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1391	4	423	808	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.39		c0.24	0.23	
v/s Ratio Perm									0.00			
v/c Ratio					0.02			0.84	0.01	0.69	0.27	
Uniform Delay, d1					60.6			33.6	20.4	40.9	2.3	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			3.5	0.0	3.4	0.2	
Delay (s)					60.6			16.0	20.4	44.3	2.5	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			16.0			16.9	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay			17.0		HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio			0.73									
Actuated Cycle Length (s)			145.0		Sum of lost time (s)				18.9			
Intersection Capacity Utilization			76.8%		ICU Level of Service				D			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	48	13	1	63	125	133	1108	5	283	245	302
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.98	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frft	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3193	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3193	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	46	74	20	1	72	142	148	1231	6	325	282	347
RTOR Reduction (vph)	0	0	19	0	0	119	0	0	3	0	154	0
Lane Group Flow (vph)	46	74	1	0	73	23	148	1231	3	325	475	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1048	
v/s Ratio Prot	0.03	c0.04			c0.04		0.08	c0.35		c0.18	0.15	
v/s Ratio Perm			0.00			0.01		0.00				
v/c Ratio	0.38	0.58	0.01		0.25	0.09	0.27	0.78	0.00	0.95	0.45	
Uniform Delay, d1	64.5	65.5	62.9		53.4	52.1	37.6	34.2	22.3	57.9	38.4	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.91	
Incremental Delay, d2	2.0	6.2	0.1		0.4	0.2	0.3	3.9	0.0	36.0	1.4	
Delay (s)	66.5	71.7	63.0		53.9	52.3	37.9	38.1	22.3	91.6	36.4	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		68.7			52.8			38.0			55.2	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		46.9			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		82.0%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (veh/h)	22	193	4	85	317	8
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	26	227	5	106	345	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)			915		600	
pX, platoon unblocked						
vC, conflicting volume	756	58			111	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	756	58			111	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	77			77	
cM capacity (veh/h)	288	1008			1479	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	253	111	353			
Volume Left	26	0	345			
Volume Right	227	106	0			
cSH	1123	1700	1479			
Volume to Capacity	0.23	0.07	0.23			
Queue Length 95th (ft)	22	0	23			
Control Delay (s)	10.5	0.0	8.0			
Lane LOS	B		A			
Approach Delay (s)	10.5	0.0	8.0			
Approach LOS	B					
Intersection Summary						
Average Delay		7.7				
Intersection Capacity Utilization		34.6%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (vph)	25	3	1258	397	0	221
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	0.98		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1729		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1729		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	33	4	1324	418	0	345
RTOR Reduction (vph)	4	0	0	114	0	0
Lane Group Flow (vph)	33	0	1324	304	0	345
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	1.9		31.5	31.5		31.5
Effective Green, g (s)	1.9		31.5	31.5		31.5
Actuated g/C Ratio	0.04		0.73	0.73		0.73
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	75		2574	1105		2574
v/s Ratio Prot	c0.02		c0.37			0.10
v/s Ratio Perm				0.20		
v/c Ratio	0.44		0.51	0.28		0.13
Uniform Delay, d1	20.2		2.6	2.0		1.8
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	4.1		0.2	0.1		0.0
Delay (s)	24.3		2.7	2.1		1.8
Level of Service	C		A	A		A
Approach Delay (s)	24.3		2.6			1.8
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		2.8		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.51				
Actuated Cycle Length (s)		43.3		Sum of lost time (s)	9.9	
Intersection Capacity Utilization		47.2%		ICU Level of Service	A	
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↙
Volume (veh/h)	0	14	2056	5	5	248
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	24	2211	5	7	365
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2410	1108			2216	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2410	1108			2216	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	88			97	
cM capacity (veh/h)	26	204			233	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	24	1474	742	7	182	182
Volume Left	0	0	0	7	0	0
Volume Right	24	0	5	0	0	0
cSH	204	1700	1700	233	1700	1700
Volume to Capacity	0.12	0.87	0.44	0.03	0.11	0.11
Queue Length 95th (ft)	10	0	0	2	0	0
Control Delay (s)	24.9	0.0	0.0	21.0	0.0	0.0
Lane LOS	C			C		
Approach Delay (s)	24.9	0.0		0.4		
Approach LOS	C					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		67.0%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↙
Volume (vph)	16	84	1973	11	36	211
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	20	104	2122	12	52	306
RTOR Reduction (vph)	0	5	0	1	0	0
Lane Group Flow (vph)	20	99	2122	11	52	306
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.7	25.8	68.3	68.3	5.0	82.1
Effective Green, g (s)	15.7	20.7	68.3	68.3	5.0	82.1
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	259	305	2256	1009	82	2712
v/s Ratio Prot	0.01	c0.06	c0.60		c0.03	0.09
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.33	0.94	0.01	0.63	0.11
Uniform Delay, d1	39.4	37.2	17.6	7.1	50.2	3.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	8.6	0.0	14.9	0.0
Delay (s)	39.6	37.8	26.2	7.1	65.1	3.2
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.1		26.1			12.2
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay		24.8		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio		0.81				
Actuated Cycle Length (s)		107.1		Sum of lost time (s)		18.1
Intersection Capacity Utilization		70.6%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↗		↖	↗
Volume (veh/h)	0	31	1951	25	0	227
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	50	2054	26	0	307
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2220	1040			2080	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2220	1040			2080	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	78			100	
cM capacity (veh/h)	37	227			263	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	50	1369	711	153	153	
Volume Left	0	0	0	0	0	
Volume Right	50	0	26	0	0	
cSH	227	1700	1700	1700	1700	
Volume to Capacity	0.22	0.81	0.42	0.09	0.09	
Queue Length 95th (ft)	20	0	0	0	0	
Control Delay (s)	25.3	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	25.3	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		64.7%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↗	↖	↖	↗
Volume (vph)	9	6	1976	31	14	204
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	15	10	2058	32	17	252
RTOR Reduction (vph)	0	6	0	7	0	0
Lane Group Flow (vph)	15	4	2058	25	17	252
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.9	59.9	2.0	69.4
Effective Green, g (s)	1.4	3.4	59.9	59.9	2.0	69.4
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2738	1225	45	3173
v/s Ratio Prot	c0.01	0.00	c0.58		c0.01	0.07
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.47	0.06	0.75	0.02	0.38	0.08
Uniform Delay, d1	37.6	35.5	4.7	2.0	37.1	0.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.5	0.4	1.2	0.0	5.2	0.0
Delay (s)	48.1	35.8	5.9	2.0	42.3	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	43.2		5.9			3.1
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		5.9		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.73				
Actuated Cycle Length (s)		77.4		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		67.5%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	43	1	0	42	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	80	2	0	67	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	81	67	3					
Volume Left (vph)	0	0	80	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	836	1121	817	843	1121					
Control Delay (s)	7.2	6.2	7.7	7.5	6.2					
Approach Delay (s)	7.2		7.7	7.4						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.1%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: AM PEAK















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	35	0	0	31	218	3	1787	48	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1358	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	47	0	0	43	303	3	1901	51	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	0	20	0	0	0
Lane Group Flow (vph)	3	47	0	0	43	247	3	1901	31	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	15.9	15.9			15.9	15.9	47.7	43.6	43.6			
Effective Green, g (s)	15.9	15.9			15.9	15.9	47.7	43.6	43.6			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.60	0.60			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	296	406			406	345	1158	2116	946			
v/s Ratio Prot		0.03			0.02		0.00	c0.54				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.12			0.11	0.72	0.00	0.90	0.03			
Uniform Delay, d1	22.3	22.9			22.8	26.4	4.4	12.7	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	6.9	0.0	5.5	0.0			
Delay (s)	22.3	23.0			22.9	33.3	4.4	18.3	6.0			
Level of Service	C	C			C	C	A	B	A			
Approach Delay (s)		23.0			32.0			17.9			0.0	
Approach LOS		C			C			B			A	
Intersection Summary												
HCM 2000 Control Delay		20.1										
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		72.9				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		82.5%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: AM PEAK

























							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	0	12	258	1594	0	173	1
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	0	48	269	1660	0	219	1
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1587	110	220		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1587	110	220		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	100	95	80		0		
cM capacity (veh/h)	79	922	1346		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	48	269	830	830	146	74	0
Volume Left	0	269	0	0	0	0	0
Volume Right	48	0	0	0	0	1	0
cSH	922	1346	1700	1700	1700	1700	1700
Volume to Capacity	0.05	0.20	0.49	0.49	0.09	0.04	0.00
Queue Length 95th (ft)	4	19	0	0	0	0	0
Control Delay (s)	9.1	8.3	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	A					
Approach Delay (s)	9.1	1.2			0.0		
Approach LOS	A						
Intersection Summary							
Average Delay		1.2					
Intersection Capacity Utilization		60.7%		ICU Level of Service		B	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	378	0	37	2	1	2	25	1737	0	0	141	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3417	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3417	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	430	0	42	6	3	6	26	1828	0	0	204	61
RTOR Reduction (vph)	0	30	0	0	6	0	0	0	0	0	24	0
Lane Group Flow (vph)	430	12	0	6	3	0	26	1828	0	0	241	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	25.1	25.1		1.7	1.7		1.9	43.6			37.5	
Effective Green, g (s)	25.1	25.1		1.7	1.7		1.9	43.6			37.5	
Actuated g/C Ratio	0.29	0.29		0.02	0.02		0.02	0.51			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	522	466		35	33		39	1813			1505	
v/s Ratio Prot	c0.24	0.01		c0.00	0.00		0.01	c0.52			0.07	
v/s Ratio Perm												
v/c Ratio	0.82	0.03		0.17	0.09		0.67	1.01			0.16	
Uniform Delay, d1	27.9	21.3		41.0	40.9		41.3	20.7			14.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	10.2	0.0		2.3	1.2		35.5	23.2			0.1	
Delay (s)	38.1	21.3		43.3	42.2		76.8	43.9			14.4	
Level of Service	D	C		D	D		E	D			B	
Approach Delay (s)		36.6			42.6			44.4			14.4	
Approach LOS		D			D			D			B	
Intersection Summary												
HCM 2000 Control Delay		39.9					HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio		0.98										
Actuated Cycle Length (s)		85.1				Sum of lost time (s)		18.9				
Intersection Capacity Utilization		84.0%				ICU Level of Service		E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰↰↰	↰↰↰		↰	↰		↰	↰↰	↰
Volume (vph)	7	188	13	0	1600	16	36	22	1	19	39	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5035			5078		1770	1852			1732	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.19	
Satd. Flow (perm)	1770	5035			5078		1244	1852			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	
Adj. Flow (vph)	8	211	15	0	1758	18	43	26	1	25	51	64
RTOR Reduction (vph)	0	4	0	0	1	0	0	1	0	0	17	0
Lane Group Flow (vph)	8	222	0	0	1775	0	43	26	0	0	123	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1904			2062		241	360			53	
v/s Ratio Prot	c0.00	0.04			c0.35			0.01				
v/s Ratio Perm							c0.03				c0.38	
v/c Ratio	0.04	0.12			0.86		0.18	0.07			2.33	
Uniform Delay, d1	71.4	36.4			48.8		60.5	59.2			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			4.5		0.4	0.1			651.7	
Delay (s)	71.5	36.5			53.3		60.9	59.3			726.7	
Level of Service	E	D			D		E	E			F	
Approach Delay (s)		37.7			53.3			60.3			726.7	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		94.4			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		69.7%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰↰	↰↰↰							↰
Volume (vph)	0	206	0	379	1608	8	0	0	0	0	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3536							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3536							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	251	0	403	1711	9	0	0	0	0	0	16
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	10
Lane Group Flow (vph)	0	251	0	403	1720	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3213							609
v/s Ratio Prot		0.05		0.12	c0.49							
v/s Ratio Perm												0.00
v/c Ratio		0.13		0.23	0.54							0.01
Uniform Delay, d1		36.6		25.5	1.5							34.9
Progression Factor		0.42		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.1	0.2							0.0
Delay (s)		15.5		25.6	1.6							34.9
Level of Service		B		C	A							C
Approach Delay (s)		15.5			6.2			0.0				34.9
Approach LOS		B			A			A				C
Intersection Summary												
HCM 2000 Control Delay		7.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		66.4%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	9	232	0	0	128	103	0	0	0	47	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	11	276	0	0	138	111	0	0	0	52	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	248			276			495	546	276	491	491	193
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	248			276			495	546	276	491	491	193
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1317			1287			479	441	763	485	475	849

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	287	248	0	56
Volume Left	11	0	0	52
Volume Right	0	111	0	4
cSH	1317	1287	1700	502
Volume to Capacity	0.01	0.00	0.00	0.11
Queue Length 95th (ft)	1	0	0	9
Control Delay (s)	0.4	0.0	0.0	13.1
Lane LOS	A		A	B
Approach Delay (s)	0.4	0.0	0.0	13.1
Approach LOS			A	B

Intersection Summary

Average Delay	1.4			
Intersection Capacity Utilization	29.5%		ICU Level of Service	A
Analysis Period (min)	15			

NBC Coastal Campus

22: 3rd St & Palm Ave

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	270	4	26	208	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	314	5	28	224	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	319	28	249	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.1	5.5	5.1	5.6						
Degree Utilization, x	0.01	0.49	0.05	0.38	0.26	0.07						
Capacity (veh/h)	579	635	566	631	637	550						
Control Delay (s)	7.9	12.3	8.1	10.6	9.9	9.1						
Approach Delay (s)	12.2		10.3		9.9	9.1						
Approach LOS	B		B		A	A						

Intersection Summary

Delay	10.9			
Level of Service	B			
Intersection Capacity Utilization	37.3%		ICU Level of Service	A
Analysis Period (min)	15			




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	224	424	331	152	17	68
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	284	537	404	185	24	96
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	589				1600	295
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	589				1600	295
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	71				65	86
cM capacity (veh/h)	982				69	702
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	284	537	269	320	120	
Volume Left	284	0	0	0	24	
Volume Right	0	0	0	185	96	
cSH	982	1700	1700	1700	247	
Volume to Capacity	0.29	0.32	0.16	0.19	0.48	
Queue Length 95th (ft)	30	0	0	0	61	
Control Delay (s)	10.1	0.0	0.0	0.0	32.5	
Lane LOS	B				D	
Approach Delay (s)	3.5		0.0		32.5	
Approach LOS					D	
Intersection Summary						
Average Delay			4.4			
Intersection Capacity Utilization			41.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	417	15	26	332	0	65	35	80	1	21	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1720			1858	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.88			0.98	1.00
Satd. Flow (perm)	933	3521		823	3539			1534			1830	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	542	19	34	431	0	98	53	121	2	36	47
RTOR Reduction (vph)	0	3	0	0	0	0	0	33	0	0	0	30
Lane Group Flow (vph)	21	558	0	34	431	0	0	239	0	0	38	17
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.1	13.1		13.1	13.1			13.1			13.1	13.1
Effective Green, g (s)	13.1	13.1		13.1	13.1			13.1			13.1	13.1
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	345	1302		304	1309			567			677	585
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.16			0.02	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.42			0.06	0.03
Uniform Delay, d1	7.2	8.3		7.3	8.0			8.3			7.2	7.1
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.1			0.5			0.0	0.0
Delay (s)	7.3	8.6		7.5	8.1			8.8			7.2	7.1
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.5			8.1			8.8			7.2	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.4			HCM 2000 Level of Service			A			
HCM 2000 Volume to Capacity ratio			0.42									
Actuated Cycle Length (s)			35.4			Sum of lost time (s)			9.2			
Intersection Capacity Utilization			46.3%			ICU Level of Service			A			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	513	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	558	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			562		558	558
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			562		558	558
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1009		491	529
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	558	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	518			
Volume to Capacity	0.33	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.1			
Lane LOS			B			
Approach Delay (s)	0.0		12.1			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			37.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: AM PEAK









Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑↑↑	↑	↑	↑	↑	↑	↑	↑
Volume (vph)	21	645	34	23	1756	42	158	36	1900	87	44	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6				4.6
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95				0.95
Frt	1.00	0.99		1.00	1.00			0.97				0.98
Flt Protected	0.95	1.00		0.95	1.00			0.97				0.97
Satd. Flow (prot)	1770	5048		1770	5068			3324				3363
Flt Permitted	0.95	1.00		0.95	1.00			0.97				0.97
Satd. Flow (perm)	1770	5048		1770	5068			3324				3363
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	768	40	25	1930	46	190	43	59	106	54	29
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	805	0	25	1975	0	0	280	0	0	181	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0				35.0
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0				35.0
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19				0.19
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6				4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0				3.0
Lane Grp Cap (vph)	147	2235		118	2159			646				653
v/s Ratio Prot	0.01	c0.16		c0.01	c0.39			c0.08				c0.05
v/s Ratio Perm												
v/c Ratio	0.17	0.36		0.21	0.91			0.43				0.28
Uniform Delay, d1	76.7	33.2		79.5	48.6			63.8				61.7
Progression Factor	1.00	1.00		1.27	0.71			1.00				1.00
Incremental Delay, d2	0.6	0.5		0.7	6.4			0.5				0.2
Delay (s)	77.3	33.7		102.1	40.8			64.2				62.0
Level of Service	E	C		F	D			E				E
Approach Delay (s)		35.0			41.5			64.2				62.0
Approach LOS		D			D			E				E
Intersection Summary												
HCM 2000 Control Delay		43.1										D
HCM 2000 Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		71.9%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: AM PEAK










Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	870	34	20	1925	11	17	4	30	53	10	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5081			1685		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.91		0.67	1.00	
Satd. Flow (perm)	1770	5057		1770	5081			1551		1242	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	978	38	23	2188	12	23	5	41	76	14	20
RTOR Reduction (vph)	0	2	0	0	0	0	0	29	0	0	17	0
Lane Group Flow (vph)	2	1014	0	23	2200	0	0	40	0	76	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			258		207	283	
v/s Ratio Prot	0.00	0.20		c0.01	c0.43						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.29		0.19	0.59			0.15		0.37	0.06	
Uniform Delay, d1	86.1	11.0		79.4	11.4			64.2		66.6	63.1	
Progression Factor	1.68	0.27		1.41	0.29			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.5	0.4			0.3		1.1	0.1	
Delay (s)	145.6	3.2		112.7	3.8			64.4		67.7	63.2	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.5			4.9			64.4			66.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		7.7			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.54										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		70.9%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	936	62	93	1784	50	141	18	88	164	35	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	0.91	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5038		1770	5085	1583		1784	1583		3374	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5038		1770	5085	1583		1784	1583		3374	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1052	70	112	2149	60	158	20	99	219	47	19
RTOR Reduction (vph)	0	4	0	0	0	28	0	0	82	0	3	0
Lane Group Flow (vph)	3	1118	0	112	2149	32	0	178	17	0	282	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		581	
v/s Ratio Prot	0.00	0.22		c0.06	c0.42			c0.10			c0.08	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.50		0.57	0.80	0.04		0.58	0.06		0.48	
Uniform Delay, d1	86.2	35.9		75.9	34.2	20.1		68.5	62.3		67.3	
Progression Factor	1.22	0.63		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.8		4.0	2.5	0.1		2.6	0.1		0.6	
Delay (s)	106.3	23.4		79.9	36.7	20.2		71.2	62.4		67.9	
Level of Service	F	C		E	D	C		E	E		E	
Approach Delay (s)		23.6			38.4			68.0			67.9	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		38.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		88.4%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	↰
Volume (vph)	13	1198	25	42	1911	11	15	6	47	37	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1670			1722	
Flt Permitted	0.95	1.00		0.95	1.00			0.93			0.78	
Satd. Flow (perm)	1770	5070		1770	5081			1566			1384	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	14	1302	27	49	2222	13	18	7	56	49	3	28
RTOR Reduction (vph)	0	2	0	0	0	0	0	44	0	0	22	0
Lane Group Flow (vph)	14	1327	0	49	2235	0	0	37	0	0	58	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Effective Green, g (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2666		72	2829			332			293	
v/s Ratio Prot	0.01	0.26		c0.03	c0.44							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.82	0.50		0.68	0.79			0.11			0.20	
Uniform Delay, d1	35.1	10.8		33.6	12.5			22.6			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	132.1	0.1		23.3	1.5			0.1			0.3	
Delay (s)	167.2	11.0		56.9	14.0			22.7			23.4	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		12.6			14.9			22.7			23.4	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		14.4			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		71.1			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		54.0%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰	↰	↰
Volume (vph)	89	1212	29	239	1853	210	72	71	755	230	90	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1749	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	103	1409	34	254	1971	223	80	79	839	274	107	89
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	182	0	3	56
Lane Group Flow (vph)	103	1441	0	254	1971	156	80	312	271	274	113	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.4	30.4	10.4	34.1	34.1
Effective Green, g (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.4	30.4	10.4	34.1	34.1
Actuated g/C Ratio	0.05	0.30		0.15	0.41	0.41	0.06	0.26	0.26	0.09	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	177	1543		273	2070	644	102	406	394	308	514	442
v/s Ratio Prot	0.03	0.28		c0.14	c0.39		0.05	c0.20		c0.08	c0.06	
v/s Ratio Perm						0.10		0.18				0.02
v/c Ratio	0.58	0.93		0.93	0.95	0.24	0.78	0.77	0.69	0.89	0.22	0.05
Uniform Delay, d1	53.7	39.2		48.4	33.3	22.6	53.9	39.5	38.5	52.2	30.9	29.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.8	10.7		36.3	10.7	0.2	31.6	8.5	4.9	25.2	0.2	0.1
Delay (s)	58.5	49.9		84.7	43.9	22.8	85.5	48.0	43.4	77.4	31.1	29.4
Level of Service	E	D		F	D	C	F	D	D	E	C	C
Approach Delay (s)		50.5			46.2			48.9			57.8	
Approach LOS		D			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		48.9			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.90										
Actuated Cycle Length (s)		115.9			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		84.0%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕	↕↕
Volume (vph)	0	278	1107	0	152	1198
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	312	1190	0	169	1331
RTOR Reduction (vph)	0	0	0	0	0	6
Lane Group Flow (vph)	0	312	1190	0	169	1325
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.34		0.10	c0.48
v/s Ratio Perm						
v/c Ratio		0.12	1.02		0.82	0.86
Uniform Delay, d1		2.5	26.8		34.5	15.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	31.4		21.4	5.4
Delay (s)		2.5	58.2		55.8	20.8
Level of Service		A	E		E	C
Approach Delay (s)		2.5	58.2		24.8	
Approach LOS		A	E		C	
Intersection Summary						
HCM 2000 Control Delay			35.7		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.99			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			64.3%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕		↕	↕		↕	↕	↕
Volume (vph)	0	431	0	0	413	513	794	1	141	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3245		1681	1632				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3245		1681	1632				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	495	0	0	449	558	863	1	153	0	0	0
RTOR Reduction (vph)	0	0	0	0	351	0	0	29	0	0	0	0
Lane Group Flow (vph)	0	495	0	0	656	0	518	470	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.4			16.4		19.9	19.9				
Effective Green, g (s)		16.4			16.4		19.9	19.9				
Actuated g/C Ratio		0.37			0.37		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1310			1201		755	733				
v/s Ratio Prot		0.14			c0.20							
v/s Ratio Perm							c0.31	0.29				
v/c Ratio		0.38			0.55		0.69	0.64				
Uniform Delay, d1		10.2			11.0		9.7	9.4				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.5		2.6	1.9				
Delay (s)		10.4			11.5		12.3	11.4				
Level of Service		B			B		B	B				
Approach Delay (s)		10.4			11.5		11.8				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					11.4					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.62							
Actuated Cycle Length (s)					44.3					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					67.6%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰		↰	↰	↰	↰
Volume (veh/h)	0	3	4	65	13	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	90	32	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	133	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	133	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	858	1042	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	96	32			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	1042	1581	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			16.7%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St







MILCON_NorthOp Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰
Volume (veh/h)	0	4046	17	0	1798	243	0	0	907	0	0	55
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%			0%			0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4215	18	0	1854	251	0	0	1008	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2124			4252			4965	6368	1454	3424	6251	783
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2124			4252			4965	6368	1454	3424	6251	783
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	249			34			0	0	1829	1	0	325
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1686	1686	861	741	741	621	1008	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	251	1008	83				
cSH	1700	1700	1700	1700	1700	1700	1829	325				
Volume to Capacity	0.99	0.99	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	89	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.4	19.8				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.4	19.8				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				143.3%	ICU Level of Service		H					
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: PM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↑	
Volume (veh/h)	3812	130	0	1835	0	200	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	3930	134	0	1911	0	244	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4084		4674	1417	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4084		4674	1417	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			40		1	122	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1572	1572	920	637	637	637	244
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	244
cSH	1700	1700	1700	1700	1700	1700	122
Volume to Capacity	0.92	0.92	0.54	0.37	0.37	0.37	1.99
Queue Length 95th (ft)	0	0	0	0	0	0	495
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	534.5
Lane LOS							F
Approach Delay (s)	0.0			0.0			534.5
Approach LOS							F
Intersection Summary							
Average Delay			21.0				
Intersection Capacity Utilization			97.6%		ICU Level of Service		F
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↑	↑↑↑		↑	↑↑			↑↑	↑
Volume (vph)	0	0	0	963	634	109	86	251			860	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3528	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3528	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1014	667	115	89	259	0	0	887	16
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	507	1277	0	89	259	0	0	901	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1432		98	1989			1568	
v/s Ratio Prot				c0.33	0.28		c0.05	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.08	0.96d1		0.91	0.13			0.57	
Uniform Delay, d1				31.1	29.7		42.3	9.3			18.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				64.3	7.4		61.4	0.0			0.5	
Delay (s)				95.4	37.1		103.7	9.3			19.2	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			53.6			33.5			19.2	
Approach LOS		A			D			C			B	
Intersection Summary												
HCM 2000 Control Delay			41.1				HCM 2000 Level of Service				D	
HCM 2000 Volume to Capacity ratio			0.79									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)			17.2		
Intersection Capacity Utilization		135.5%					ICU Level of Service			H		
Analysis Period (min)			15									
d1 Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔↔	
Volume (vph)	7	2108	106	0	0	0	0	337	435	760	1087	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3128	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3128	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2316	116	0	0	0	0	392	506	792	1132	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2324	87	0	0	0	0	614	249	792	1132	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					949	409	865	2022	
v/s Ratio Prot		c0.46						c0.20		c0.23	0.32	
v/s Ratio Perm			0.06						0.18			
v/c Ratio		1.26	0.15					0.65	0.61	0.92	0.56	
Uniform Delay, d1		55.8	37.7					52.8	52.1	63.6	23.6	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		122.6	0.1					1.5	2.6	14.1	0.3	
Delay (s)		178.4	37.8					54.4	54.6	77.7	24.0	
Level of Service		F	D					D	D	E	C	
Approach Delay (s)		171.7			0.0			54.4			46.1	
Approach LOS		F			A			D			D	
Intersection Summary												
HCM 2000 Control Delay			105.8								F	
HCM 2000 Volume to Capacity ratio			0.96									
Actuated Cycle Length (s)			175.0							14.4		
Intersection Capacity Utilization			135.5%							H		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔
Volume (vph)	168	11	847	668	0	1181
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.93			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1584		3257			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1584		3257			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	215	14	952	751	0	1270
RTOR Reduction (vph)	2	0	68	0	0	0
Lane Group Flow (vph)	227	0	1635	0	0	1270
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	297		2461			2540
v/s Ratio Prot	c0.14		c0.50			0.38
v/s Ratio Perm						
v/c Ratio	0.77		0.66			0.50
Uniform Delay, d1	61.7		9.6			7.7
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	11.2		1.4			0.7
Delay (s)	72.8		11.0			8.4
Level of Service	E		B			A
Approach Delay (s)	72.8		11.0			8.4
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay			14.4			B
HCM 2000 Volume to Capacity ratio			0.70			
Actuated Cycle Length (s)			160.0			12.1
Intersection Capacity Utilization			78.3%			D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	139	9	28	25	9	24	22	1436	47	65	1398	147
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1695	1583		1721		1770	3522		1770	3489	
Flt Permitted	0.69	0.69	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1219	1217	1583		1463		1770	3522		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	178	12	36	39	14	38	24	1544	51	71	1520	160
RTOR Reduction (vph)	0	0	30	0	23	0	0	1	0	0	3	0
Lane Group Flow (vph)	94	96	6	0	68	0	24	1594	0	71	1677	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	18.9	18.9	18.9		18.9		3.1	72.0		8.0	76.9	
Effective Green, g (s)	18.9	18.9	18.9		18.9		3.1	72.0		8.0	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	202	263		243		48	2230		124	2359	
v/s Ratio Prot							0.01	0.45		c0.04	c0.48	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.47	0.48	0.02		0.28		0.50	0.71		0.57	0.71	
Uniform Delay, d1	42.8	42.9	39.7		41.4		54.5	14.0		51.2	11.5	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	1.8	0.0		0.6		8.0	1.1		6.3	1.0	
Delay (s)	44.5	44.7	39.7		42.1		62.5	15.1		57.4	12.5	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.8			42.1			15.8			14.3	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.5			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		113.7			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		73.2%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	0	0	0	7	0	140	0	1247	0	31	1533	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1619			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1619			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	10	0	203	0	1327	0	33	1648	0
RTOR Reduction (vph)	0	0	0	0	165	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	48	0	0	1327	0	33	1648	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					14.1			45.5		1.7	51.4	
Effective Green, g (s)					14.1			45.5		1.7	51.4	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					301			2129		39	2406	
v/s Ratio Prot					c0.03			0.37		0.02	c0.47	
v/s Ratio Perm												
v/c Ratio					0.16			0.62		0.85	0.68	
Uniform Delay, d1					25.8			9.6		36.8	7.2	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.2			0.6		84.9	0.8	
Delay (s)					26.0			10.2		121.7	8.1	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			26.0			10.2			10.3	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay		11.3			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		75.6			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		59.8%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	284	48	115	6	67	409	27	565	2	135	1361	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1516		1855	1511	1770	3539	1350	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1516		1855	1511	1770	3539	1350	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	374	63	151	7	73	445	30	621	2	144	1448	68
RTOR Reduction (vph)	0	0	122	0	0	226	0	0	1	0	2	0
Lane Group Flow (vph)	374	63	29	0	80	219	30	621	1	144	1514	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.7	27.7	27.7		23.1	23.1	2.9	56.2	56.2	16.6	69.9	
Effective Green, g (s)	27.7	27.7	27.7		23.1	23.1	2.9	56.2	56.2	16.6	69.9	
Actuated g/C Ratio	0.19	0.19	0.19		0.16	0.16	0.02	0.39	0.39	0.12	0.49	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	342	360	293		299	244	35	1390	530	205	1716	
v/s Ratio Prot	c0.21	0.03			0.04		0.02	0.18		c0.08	c0.43	
v/s Ratio Perm			0.02			c0.14		0.00				
v/c Ratio	1.09	0.17	0.10		0.27	0.90	0.86	0.45	0.00	0.70	0.88	
Uniform Delay, d1	57.6	48.1	47.4		52.5	58.8	69.8	32.0	26.4	60.8	32.9	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	76.1	0.2	0.1		0.5	31.4	94.8	1.0	0.0	10.4	6.9	
Delay (s)	133.8	48.3	47.5		53.0	90.1	164.6	33.0	26.4	71.2	39.8	
Level of Service	F	D	D		D	F	F	C	C	E	D	
Approach Delay (s)		102.5			84.5			39.0			42.5	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay		58.6								E		
HCM 2000 Volume to Capacity ratio		0.94										
Actuated Cycle Length (s)		143.0				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		78.6%				ICU Level of Service		D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	305	481	3	35	174	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	339	534	4	49	198	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	428	29			54	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	428	29			54	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	33	49			87	
cM capacity (veh/h)	510	1046			1552	
Direction, Lane #						
Volume Total	873	54	201			
Volume Left	339	0	198			
Volume Right	534	49	0			
cSH	1123	1700	1552			
Volume to Capacity	0.78	0.03	0.13			
Queue Length 95th (ft)	207	0	11			
Control Delay (s)	18.4	0.0	7.5			
Lane LOS	C		A			
Approach Delay (s)	18.4	0.0	7.5			
Approach LOS	C					
Intersection Summary						
Average Delay		15.6				
Intersection Capacity Utilization		40.0%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	308	6	600	38	0	1485
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	390	8	667	42	0	1669
RTOR Reduction (vph)	1	0	0	24	0	0
Lane Group Flow (vph)	397	0	667	18	0	1669
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.22		0.19			c0.47
v/s Ratio Perm				0.01		
v/c Ratio	0.47		0.44	0.03		1.10
Uniform Delay, d1	18.6		21.1	17.3		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.2	0.0		54.8
Delay (s)	19.0		21.3	17.3		84.7
Level of Service	B		C	B		F
Approach Delay (s)	19.0		21.0			84.7
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay			59.0		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			0.77			
Actuated Cycle Length (s)			105.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			91.0%		ICU Level of Service	E
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (veh/h)	4	6	455	3	14	1422
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	529	3	15	1563
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1343	266			533	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1343	266			533	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	94	98			99	
cM capacity (veh/h)	141	732			1031	
Direction, Lane #						
Volume Total	20	353	180	15	781	781
Volume Left	8	0	0	15	0	0
Volume Right	12	0	3	0	0	0
cSH	274	1700	1700	1031	1700	1700
Volume to Capacity	0.07	0.21	0.11	0.01	0.46	0.46
Queue Length 95th (ft)	6	0	0	1	0	0
Control Delay (s)	19.2	0.0	0.0	8.5	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	19.2	0.0		0.1		
Approach LOS	C					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			49.3%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↕	↖	↗	↕
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	29	55	403	11	99	1327
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	32	60	458	12	109	1458
RTOR Reduction (vph)	0	44	0	7	0	0
Lane Group Flow (vph)	32	16	458	5	109	1458
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.3	21.5	27.8	27.8	7.1	43.7
Effective Green, g (s)	9.3	16.4	27.8	27.8	7.1	43.7
Actuated g/C Ratio	0.15	0.26	0.45	0.45	0.11	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	264	416	1579	706	201	2482
v/s Ratio Prot	c0.02	0.01	0.13		0.06	c0.41
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.04	0.29	0.01	0.54	0.59
Uniform Delay, d1	23.0	17.1	11.0	9.6	26.1	4.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.0	3.0	0.4
Delay (s)	23.2	17.1	11.1	9.6	29.0	5.1
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.2		11.0			6.7
Approach LOS	B		B			A

Intersection Summary

HCM 2000 Control Delay	8.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	62.3	Sum of lost time (s)	18.1
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↕	↖	↗	↕
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (veh/h)	0	22	394	18	0	1356
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	29	453	21	0	1474
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1200	237			474	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1200	237			474	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	178	765			1085	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	29	302	172	737	737	
Volume Left	0	0	0	0	0	
Volume Right	29	0	21	0	0	
cSH	765	1700	1700	1700	1700	
Volume to Capacity	0.04	0.18	0.10	0.43	0.43	
Queue Length 95th (ft)	3	0	0	0	0	
Control Delay (s)	9.9	0.0	0.0	0.0	0.0	
Lane LOS	A					
Approach Delay (s)	9.9	0.0		0.0		
Approach LOS	A					

Intersection Summary







Average Delay	0.1				
Intersection Capacity Utilization	40.8%		ICU Level of Service	A	
Analysis Period (min)	15				

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	29	25	387	18	22	1332
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	40	35	412	19	24	1464
RTOR Reduction (vph)	0	32	0	8	0	0
Lane Group Flow (vph)	40	3	412	11	24	1464
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.4	27.1	27.1	1.8	36.4
Effective Green, g (s)	2.6	4.4	27.1	27.1	1.8	36.4
Actuated g/C Ratio	0.06	0.10	0.59	0.59	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	152	2103	940	69	2824
v/s Ratio Prot	c0.02	0.00	0.12		0.01	c0.41
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.40	0.02	0.20	0.01	0.35	0.52
Uniform Delay, d1	20.7	18.7	4.2	3.8	21.3	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.6	0.1	0.0	0.0	3.0	0.2
Delay (s)	23.4	18.7	4.3	3.8	24.4	1.7
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.2		4.3			2.1
Approach LOS	C		A			A

Intersection Summary







HCM 2000 Control Delay	3.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	45.6	Sum of lost time (s)	14.1
Intersection Capacity Utilization	47.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	10	13	81	7	0	172	12	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	10	14	105	9	0	193	13	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	10	14	114	207						
Volume Left (vph)	0	0	105	0						
Volume Right (vph)	0	14	0	13						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.13	0.18						
Capacity (veh/h)	873	1121	860	1121						
Control Delay (s)	7.1	6.2	7.7	6.9						
Approach Delay (s)	6.6		7.7	6.9						
Approach LOS	A		A	A						

Intersection Summary

Delay	7.2		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

NBC Coastal Campus

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑			↑	↱	↰	↑	↱			
Volume (vph)	9	178	0	0	78	133	11	311	66	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1301	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	10	202	0	0	90	153	12	342	73	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	121	0	39	0	0	0	0
Lane Group Flow (vph)	10	202	0	0	90	32	12	342	34	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.7	18.7	18.7			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.7	18.7	18.7			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	269	386			386	328	817	1634	730			
v/s Ratio Prot		c0.11			0.05		0.01	c0.10				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.52			0.23	0.10	0.01	0.21	0.05			
Uniform Delay, d1	12.8	14.3			13.4	13.0	5.9	6.5	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.3			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.9	15.6			13.7	13.1	5.9	6.6	6.0			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.3		6.4			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.5			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.31										
Actuated Cycle Length (s)		40.5			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		40.3%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: PM PEAK











Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰		↰	↑	↱	↑	↱
Volume (veh/h)	1	258	13	449	0	1494	0
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	4	1032	15	510	0	1660	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1945	830	1660		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1945	830	1660		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	93	0	96		0		
cM capacity (veh/h)	55	313	384		0		
Direction, Lane #							
Volume Total	1036	15	255	255	1107	553	0
Volume Left	4	15	0	0	0	0	0
Volume Right	1032	0	0	0	0	0	0
cSH	308	384	1700	1700	1700	1700	1700
Volume to Capacity	3.37	0.04	0.15	0.15	0.65	0.33	0.00
Queue Length 95th (ft)	Err	3	0	0	0	0	0
Control Delay (s)	Err	14.7	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B					
Approach Delay (s)	Err	0.4			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			3216.1				
Intersection Capacity Utilization			64.0%		ICU Level of Service		
Analysis Period (min)			15				B

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: PM PEAK











Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	0	65	1	1	0	70	323	11	1	1324	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3522		1770	3474	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3522		1770	3474	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	112	0	87	2	2	0	77	355	12	1	1471	207
RTOR Reduction (vph)	0	70	0	0	0	0	0	2	0	0	8	0
Lane Group Flow (vph)	112	17	0	2	2	0	77	365	0	1	1670	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	17.9	17.9		0.8	0.8		5.8	52.4		0.8	47.4	
Effective Green, g (s)	17.9	17.9		0.8	0.8		5.8	52.4		0.8	47.4	
Actuated g/C Ratio	0.20	0.20		0.01	0.01		0.06	0.58		0.01	0.52	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	348	312		15	16		113	2032		15	1813	
v/s Ratio Prot	c0.06	0.01		c0.00	0.00		c0.04	0.10		0.00	c0.48	
v/s Ratio Perm												
v/c Ratio	0.32	0.05		0.13	0.12		0.68	0.18		0.07	0.92	
Uniform Delay, d1	31.2	29.6		44.7	44.7		41.6	9.1		44.6	20.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.1		4.0	3.5		15.6	0.0		1.9	8.2	
Delay (s)	31.8	29.7		48.7	48.2		57.2	9.1		46.5	28.2	
Level of Service	C	C		D	D		E	A		D	C	
Approach Delay (s)		30.9			48.4			17.4			28.2	
Approach LOS		C			D			B			C	
Intersection Summary												
HCM 2000 Control Delay		26.4										
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		90.8										
Intersection Capacity Utilization		69.9%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	1281	56	0	359	33	12	38	4	23	25	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5053			5021		1770	1835			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.17	
Satd. Flow (perm)	1770	5053			5021		1313	1835			299	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	62	1456	64	0	382	35	17	54	6	27	29	24
RTOR Reduction (vph)	0	2	0	0	6	0	0	2	0	0	8	0
Lane Group Flow (vph)	62	1518	0	0	411	0	17	58	0	0	72	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1911			2039		255	356			49	
v/s Ratio Prot	c0.04	c0.30			c0.08			c0.03				
v/s Ratio Perm							0.01				c0.24	
v/c Ratio	0.32	0.79			0.20		0.07	0.16			1.46	
Uniform Delay, d1	73.7	49.7			34.6		59.2	60.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.9	3.5			0.2		0.1	0.2			291.2	
Delay (s)	74.6	53.2			34.8		59.3	60.5			366.2	
Level of Service	E	D			C		E	E			F	
Approach Delay (s)		54.1			34.8			60.2			366.2	
Approach LOS		D			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		62.1										
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←
Volume (vph)	0	1310	0	482	395	36	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3495							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3495							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1472	0	513	420	38	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1472	0	513	458	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3176							609
v/s Ratio Prot		c0.29		c0.15	c0.13							
v/s Ratio Perm												0.00
v/c Ratio		0.77		0.27	0.14							0.00
Uniform Delay, d1		49.0		20.5	0.9							34.8
Progression Factor		0.18		1.00	1.00							1.00
Incremental Delay, d2		1.7		0.1	0.0							0.0
Delay (s)		10.5		20.6	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		10.5			11.3		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		10.9					HCM 2000 Level of Service		B			
HCM 2000 Volume to Capacity ratio		0.50										
Actuated Cycle Length (s)		180.0					Sum of lost time (s)		22.3			
Intersection Capacity Utilization		48.2%					ICU Level of Service		A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		←←			←←			←←			←←	
Volume (veh/h)	3	212	0	0	304	40	0	0	0	103	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	247	0	0	345	45	0	0	0	156	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	391			247			634	644	247	622	622	368
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	391			247			634	644	247	622	622	368
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	61	100	98
cM capacity (veh/h)	1168			1319			384	390	792	398	402	677
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	250	391	0	168								
Volume Left	3	0	0	156								
Volume Right	0	45	0	12								
cSH	1168	1319	1700	411								
Volume to Capacity	0.00	0.00	0.00	0.41								
Queue Length 95th (ft)	0	0	0	49								
Control Delay (s)	0.1	0.0	0.0	19.7								
Lane LOS	A		A	C								
Approach Delay (s)	0.1	0.0	0.0	19.7								
Approach LOS			A	C								
Intersection Summary												
Average Delay		4.1										
Intersection Capacity Utilization		31.3%					ICU Level of Service		A			
Analysis Period (min)		15										

NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱			↰	↱		↰	↱
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	293	12	84	318	24	14	38	67	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	376	15	94	357	27	25	67	118	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	391	94	384	209	161						
Volume Left (vph)	9	0	94	0	25	61						
Volume Right (vph)	0	15	0	27	118	28						
Hadj (s)	0.53	0.01	0.53	-0.02	-0.28	0.00						
Departure Headway (s)	7.2	6.7	7.1	6.5	6.6	7.0						
Degree Utilization, x	0.02	0.72	0.19	0.70	0.38	0.31						
Capacity (veh/h)	472	520	485	529	479	437						
Control Delay (s)	9.1	23.9	10.5	22.0	13.7	13.2						
Approach Delay (s)	23.6		19.8		13.7	13.2						
Approach LOS	C		C		B	B						
Intersection Summary												
Delay			19.1									
Level of Service			C									
Intersection Capacity Utilization			41.2%		ICU Level of Service		A					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱
Volume (veh/h)	72	421	454	39	52	140
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	74	434	528	45	61	165
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	573				1133	287
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	573				1133	287
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	93				66	77
cM capacity (veh/h)	996				182	710
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	74	434	352	221	226	
Volume Left	74	0	0	0	61	
Volume Right	0	0	0	45	165	
cSH	996	1700	1700	1700	397	
Volume to Capacity	0.07	0.26	0.21	0.13	0.57	
Queue Length 95th (ft)	6	0	0	0	85	
Control Delay (s)	8.9	0.0	0.0	0.0	25.3	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		25.3	
Approach LOS					D	
Intersection Summary						
Average Delay			4.9			
Intersection Capacity Utilization			40.3%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	28	430	29	31	456	1900	54	19	1900	12	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3536			1754			1841	1583
Flt Permitted	0.47	1.00		0.45	1.00			0.79			0.90	1.00
Satd. Flow (perm)	870	3505		834	3536			1417			1669	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	512	35	34	501	3	66	23	27	16	53	39
RTOR Reduction (vph)	0	7	0	0	1	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	540	0	34	503	0	0	95	0	0	69	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Effective Green, g (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	414	1671		397	1686			309			364	345
v/s Ratio Prot		c0.15			0.14							
v/s Ratio Perm	0.04			0.04				c0.07			0.04	0.01
v/c Ratio	0.08	0.32		0.09	0.30			0.31			0.19	0.02
Uniform Delay, d1	4.3	4.9		4.3	4.8			9.9			9.6	9.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.6			0.3	0.0
Delay (s)	4.4	5.0		4.4	4.9			10.5			9.9	9.3
Level of Service	A	A		A	A			B			A	A
Approach Delay (s)		5.0			4.9			10.5			9.7	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		30.2			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		44.6%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												







NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↰			↰	↰
Volume (veh/h)	732	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	893	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			902		893	893
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			902		893	893
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	99
cM capacity (veh/h)			753		312	340
Direction, Lane #						
Volume Total	EB 1	EB 2	NB 1			
Volume Left	893	10	12			
Volume Right	0	0	9			
cSH	0	10	3			
Volume to Capacity	1700	1700	319			
Queue Length 95th (ft)	0.53	0.01	0.04			
Control Delay (s)	0	0	3			
Lane LOS	0.0	0.0	16.7			
Approach Delay (s)			C			
Approach LOS			16.7			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			48.5%		ICU Level of Service	A
Analysis Period (min)			15			








NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	40	1603	120	56	771	127	94	87	61	168	77	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5032		1770	4978			3341			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5032		1770	4978			3341			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	43	1705	128	57	779	128	103	96	67	189	87	28
RTOR Reduction (vph)	0	5	0	0	12	0	0	19	0	0	4	0
Lane Group Flow (vph)	43	1828	0	57	895	0	0	247	0	0	300	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2116		157	1982			649			658	
v/s Ratio Prot	0.02	c0.36		c0.03	0.18			c0.07			c0.09	
v/s Ratio Perm												
v/c Ratio	0.22	0.86		0.36	0.45			0.38			0.46	
Uniform Delay, d1	72.9	47.5		77.2	39.7			63.1			64.1	
Progression Factor	1.00	1.00		1.25	0.70			1.00			1.00	
Incremental Delay, d2	0.6	3.9		1.4	0.7			0.4			0.5	
Delay (s)	73.5	51.4		97.6	28.6			63.5			64.6	
Level of Service	E	D		F	C			E			E	
Approach Delay (s)		51.9			32.7			63.5			64.6	
Approach LOS		D			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		48.5			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		116.6%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	1878	55	47	1166	53	21	10	34	62	12	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5064		1770	5052			1703		1770	1718	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.63	1.00	
Satd. Flow (perm)	1770	5064		1770	5052			1551		1169	1718	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	1916	56	48	1202	55	25	12	41	73	14	15
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	13	0
Lane Group Flow (vph)	20	1971	0	48	1255	0	0	55	0	73	16	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Effective Green, g (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3564		157	3668			190		143	210	
v/s Ratio Prot	0.01	c0.39		c0.03	c0.25						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.55		0.31	0.34			0.29		0.51	0.08	
Uniform Delay, d1	79.3	12.9		76.8	9.0			71.8		73.9	69.9	
Progression Factor	1.44	0.10		1.57	0.30			1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4		0.9	0.2			0.9		3.1	0.2	
Delay (s)	115.0	1.7		121.6	2.9			72.7		76.9	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		2.8			7.3			72.7			75.0	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.2			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.52										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		58.7%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰	↰↰	
Volume (vph)	26	1693	192	153	1239	79	125	39	124	150	43	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5008		1770	5085	1583		1794	1583		3371	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5008		1770	5085	1583		1794	1583		3371	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	28	1801	204	158	1277	81	136	42	135	203	58	27
RTOR Reduction (vph)	0	8	0	0	0	37	0	0	112	0	4	0
Lane Group Flow (vph)	28	1997	0	158	1277	44	0	178	23	0	284	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2217		192	2364	736		305	269		574	
v/s Ratio Prot	0.02	c0.40		c0.09	c0.25			c0.10			c0.08	
v/s Ratio Perm						0.03			0.01			
v/c Ratio	0.18	0.90		0.82	0.54	0.06		0.58	0.09		0.49	
Uniform Delay, d1	75.9	46.5		78.5	34.4	26.5		68.8	62.8		67.6	
Progression Factor	1.04	0.91		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	5.6		23.9	0.9	0.2		7.9	0.6		3.0	
Delay (s)	79.7	48.0		102.4	35.3	26.7		76.7	63.5		70.6	
Level of Service	E	D		F	D	C		E	E		E	
Approach Delay (s)		48.5			41.8			71.0			70.6	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		49.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.75										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		100.9%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: PM PEAK






















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰	↰	↰	↰↰	
Volume (vph)	9	1890	48	166	1531	15	38	8	79	23	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5067		1770	5078			1678			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.83	
Satd. Flow (perm)	1770	5067		1770	5078			1513			1506	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85		0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	10	2100	53	175	1612	16	45	9	93	28	12	12
RTOR Reduction (vph)	0	2	0	0	1	0	0	74	0	0	10	0
Lane Group Flow (vph)	10	2151	0	175	1627	0	0	73	0	0	42	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4				4	
Actuated Green, G (s)	0.8	40.4		11.2	50.8			17.2			17.2	
Effective Green, g (s)	0.8	40.4		11.2	50.8			17.2			17.2	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2422		234	3052			307			306	
v/s Ratio Prot	0.01	c0.42		c0.10	0.32							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.62	0.89		0.75	0.53			0.24			0.14	
Uniform Delay, d1	41.7	20.0		35.3	9.9			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	57.6	4.4		12.3	0.2			0.4			0.2	
Delay (s)	99.3	24.4		47.6	10.1			28.6			27.8	
Level of Service	F	C		D	B			C			C	
Approach Delay (s)		24.7			13.7			28.6			27.8	
Approach LOS		C			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		20.1			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		84.5			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		67.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	185	1834	24	321	1539	544	64	173	522	576	234	223
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	195	1931	25	345	1655	585	68	184	555	626	254	242
RTOR Reduction (vph)	0	1	0	0	0	88	0	26	269	0	2	132
Lane Group Flow (vph)	195	1955	0	345	1655	497	68	358	86	626	276	86
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.3	36.4		45.0	70.1	70.1	8.6	36.8	36.8	11.8	40.0	40.0
Effective Green, g (s)	11.3	36.4		45.0	70.1	70.1	8.6	36.8	36.8	11.8	40.0	40.0
Actuated g/C Ratio	0.07	0.24		0.30	0.46	0.46	0.06	0.24	0.24	0.08	0.26	0.26
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1216		524	2346	730	100	395	364	266	460	396
v/s Ratio Prot	0.06	c0.39		c0.19	c0.33		0.04	c0.22		c0.18	c0.16	
v/s Ratio Perm						0.31			0.06			0.06
v/c Ratio	0.76	1.61		0.66	0.71	0.68	0.68	0.91	0.24	2.35	0.60	0.22
Uniform Delay, d1	69.0	57.8		46.7	32.7	32.1	70.3	55.9	46.3	70.0	48.9	43.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.8	277.4		3.0	1.0	2.6	17.3	23.8	0.3	620.6	2.1	0.3
Delay (s)	81.8	335.2		49.7	33.6	34.7	87.6	79.7	46.6	690.6	51.1	44.0
Level of Service	F	F		D	C	C	F	E	D	F	D	D
Approach Delay (s)		312.2			36.0			65.8			406.5	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay			191.1		HCM 2000 Level of Service					F		
HCM 2000 Volume to Capacity ratio			1.15									
Actuated Cycle Length (s)			151.9		Sum of lost time (s)					21.9		
Intersection Capacity Utilization			120.7%		ICU Level of Service					H		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2016 Alt 1

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↑	↑↑↑
Volume (vph)	0	492	832	0	431	1577
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	553	885	0	474	1733
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	0	553	885	0	474	1729
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.16	c0.25		0.27	c0.62
v/s Ratio Perm						
v/c Ratio		0.31	1.03		0.71	0.97
Uniform Delay, d1		11.6	30.3		21.3	13.9
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	39.1		3.7	15.4
Delay (s)		11.7	69.4		25.0	29.3
Level of Service		B	E		C	C
Approach Delay (s)		11.7	69.4		28.4	
Approach LOS		B	E		C	
Intersection Summary						
HCM 2000 Control Delay		35.8			HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio		1.06				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		83.4%			ICU Level of Service	E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑				
Volume (vph)	0	917	0	0	515	245	423	2	105	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.25	0.25	0.25	
Adj. Flow (vph)	0	955	0	0	579	275	455	2	113	0	0	0
RTOR Reduction (vph)	0	0	0	0	99	0	0	38	0	0	0	0
Lane Group Flow (vph)	0	955	0	0	755	0	291	241	0	0	0	0
Turn Type	NA			NA		Perm	NA					
Protected Phases	4			8			2					
Permitted Phases							2					
Actuated Green, G (s)		18.7			18.7		13.6	13.6				
Effective Green, g (s)		18.7			18.7		13.6	13.6				
Actuated g/C Ratio		0.46			0.46		0.34	0.34				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)	1642			1562			567	545				
v/s Ratio Prot	c0.27			0.22								
v/s Ratio Perm							c0.17	0.15				
v/c Ratio	0.58			0.48			0.51	0.44				
Uniform Delay, d1	7.9			7.5			10.7	10.4				
Progression Factor	1.00			1.00			1.00	1.00				
Incremental Delay, d2	0.5			0.2			0.8	0.6				
Delay (s)	8.5			7.7			11.5	11.0				
Level of Service	A			A			B	B				
Approach Delay (s)	8.5			7.7			11.2			0.0		
Approach LOS	A			A			B			A		
Intersection Summary												
HCM 2000 Control Delay		8.9				HCM 2000 Level of Service		A				
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		40.3				Sum of lost time (s)		8.0				
Intersection Capacity Utilization		47.0%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												





















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2016 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	3	36	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	3	52	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	73	52	52			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	73	52	52			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	926	1015	1554			
Direction, Lane #						
Volume Total	16	12	52			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	1015	1554	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.3	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.3	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.5				
Intersection Capacity Utilization		17.2%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St










MILCON_NorthOp Year 2017 Alt 1
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Volume (veh/h)	0	1401	34	0	3825	552	0	0	476	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1688	41	0	4158	600	0	0	595	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4778			1749			3146	6506	623	5060	6227	1726
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4778			1749			3146	6506	623	5060	6227	1726
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	84
cM capacity (veh/h)	20			349			4	0	1355	0	0	75
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	675	675	379	1663	1663	1432	595	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	600	595	12				
cSH	1700	1700	1700	1700	1700	1700	1355	75				
Volume to Capacity	0.40	0.40	0.22	0.98	0.98	0.84	0.44	0.16				
Queue Length 95th (ft)	0	0	0	0	0	0	57	13				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	61.7				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	61.7				
Approach LOS							A	F				
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			101.3%	ICU Level of Service				G				
Analysis Period (min)			15									

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Volume (veh/h)	1262	201	0	3725	0	231	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1434	228	0	4139	0	251	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1682		2968	632	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1682		2968	632	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	39	
cM capacity (veh/h)			370		11	409	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	574	574	515	1380	1380	1380	251
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	228	0	0	0	251
cSH	1700	1700	1700	1700	1700	1700	409
Volume to Capacity	0.34	0.34	0.30	0.81	0.81	0.81	0.61
Queue Length 95th (ft)	0	0	0	0	0	0	99
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	26.8
Lane LOS							D
Approach Delay (s)	0.0			0.0			26.8
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			86.8%		ICU Level of Service		E
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1589	1944	342	106	102	0	0	277	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4640		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4640		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1709	2090	368	143	138	0	0	318	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1025	3134	0	143	138	0	0	330	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.6			21.4	
Effective Green, g (s)				131.2	131.2		20.0	46.6			21.4	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1054	3214		186	870			396	
v/s Ratio Prot				0.67	c0.68		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				0.97	0.98		0.77	0.16			0.83	
Uniform Delay, d1				27.4	27.5		82.4	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				21.2	10.7		17.2	0.1			14.0	
Delay (s)				48.6	38.2		99.7	56.1			96.3	
Level of Service				D	D		F	E			F	
Approach Delay (s)		0.0			40.8			78.3			96.3	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		46.8		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		189.4		Sum of lost time (s)						16.8		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	583	70	0	0	0	0	198	201	451	1472	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3258	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3258	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	634	76	0	0	0	0	230	218	490	1533	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	19	49	0	0	0
Lane Group Flow (vph)	0	635	47	0	0	0	0	292	88	490	1533	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Effective Green, g (s)		60.0	60.0					62.0	62.0	35.2	100.0	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.21	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1777	553					1177	520	704	2062	
v/s Ratio Prot								0.09		0.14	c0.43	
v/s Ratio Perm		0.12	0.03						0.06			
v/c Ratio		0.36	0.08					0.25	0.17	0.70	0.74	
Uniform Delay, d1		41.5	37.4					38.5	37.3	63.2	26.4	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.0	1.5	
Delay (s)		41.6	37.5					38.6	37.4	66.2	27.8	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.2			0.0			38.2			37.1	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		38.2		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio		0.61										
Actuated Cycle Length (s)		171.6		Sum of lost time (s)						14.4		
Intersection Capacity Utilization		201.0%		ICU Level of Service						H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: AM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	212	6	1124	589	0	1124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3316			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3316			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	247	7	1209	633	0	1183
RTOR Reduction (vph)	2	0	53	0	0	0
Lane Group Flow (vph)	252	0	1789	0	0	1183
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	16.7		42.5			42.5
Effective Green, g (s)	16.7		42.5			42.5
Actuated g/C Ratio	0.24		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	389		2063			2092
v/s Ratio Prot	c0.16		c0.54			0.35
v/s Ratio Perm						
v/c Ratio	0.65		0.87			0.57
Uniform Delay, d1	23.2		10.6			7.5
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	3.7		4.1			0.4
Delay (s)	26.9		14.7			7.9
Level of Service	C		B			A
Approach Delay (s)	26.9		14.7			7.9
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			13.2		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.85			
Actuated Cycle Length (s)			68.3		Sum of lost time (s)	12.1
Intersection Capacity Utilization			76.2%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	46	2	9	7	0	5	19	1334	25	38	1262	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1708		1770	3529		1770	3525	
Frt Permitted	0.74	0.78	1.00		0.87		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1312	1385	1583		1527		1770	3529		1770	3525	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	53	2	10	14	0	10	23	1588	30	41	1372	38
RTOR Reduction (vph)	0	0	8	0	20	0	0	1	0	0	1	0
Lane Group Flow (vph)	28	27	2	0	4	0	23	1617	0	41	1409	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.3	15.3	15.3		15.3		2.6	63.0		4.0	64.4	
Effective Green, g (s)	15.3	15.3	15.3		15.3		2.6	63.0		4.0	64.4	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.65		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	208	219	251		242		47	2306		73	2354	
v/s Ratio Prot							0.01	c0.46		c0.02	0.40	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.13	0.12	0.01		0.02		0.49	0.70		0.56	0.60	
Uniform Delay, d1	34.9	34.8	34.1		34.2		46.2	10.7		45.3	8.9	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		7.8	1.0		9.5	0.4	
Delay (s)	35.2	35.0	34.2		34.2		54.1	11.7		54.9	9.3	
Level of Service	D	D	C		C		D	B		D	A	
Approach Delay (s)		35.0			34.2			12.3			10.6	
Approach LOS		C			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.1		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.59									
Actuated Cycle Length (s)			96.4		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			56.4%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	22	0	1280	7	418	836	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	33	0	1407	8	427	853	0
RTOR Reduction (vph)	0	0	0	0	30	0	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1407	4	427	853	0
Turn Type	Split			Split	NA		NA	Perm		Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.40		c0.24	0.24	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.85	0.01	0.70	0.29	
Uniform Delay, d1					60.6			33.9	20.4	41.0	2.3	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			3.7	0.0	3.5	0.2	
Delay (s)					60.6			16.1	20.4	44.5	2.6	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			16.2			16.6	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		16.9			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		77.4%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd







MILCON_NorthOp Year 2017 Alt 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	49	14	1	63	126	134	1122	5	285	285	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.98	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3215	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1861	1510	1770	3539	1347	1770	3215	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	46	75	22	1	72	143	149	1247	6	328	328	349
RTOR Reduction (vph)	0	0	20	0	0	120	0	0	3	0	133	0
Lane Group Flow (vph)	46	75	2	0	73	23	149	1247	3	328	544	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1055	
v/s Ratio Prot	0.03	c0.04			c0.04		0.08	c0.35		c0.19	0.17	
v/s Ratio Perm			0.00			0.02			0.00			
v/c Ratio	0.38	0.59	0.02		0.25	0.09	0.27	0.79	0.00	0.96	0.52	
Uniform Delay, d1	64.5	65.5	62.9		53.4	52.1	37.7	34.4	22.3	58.0	39.4	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.91	
Incremental Delay, d2	2.0	6.7	0.1		0.4	0.2	0.3	4.1	0.0	38.1	1.8	
Delay (s)	66.5	72.2	63.0		53.9	52.3	37.9	38.6	22.3	93.8	37.8	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		68.9			52.8			38.4			56.1	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		47.5			HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		83.5%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												







NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	27	194	4	86	319	8
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	32	228	5	108	347	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	761	59			112	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	761	59			112	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	77			77	
cM capacity (veh/h)	286	1007			1477	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	260	112	355			
Volume Left	32	0	347			
Volume Right	228	108	0			
cSH	1147	1700	1477			
Volume to Capacity	0.23	0.07	0.23			
Queue Length 95th (ft)	22	0	23			
Control Delay (s)	10.8	0.0	8.0			
Lane LOS	B		A			
Approach Delay (s)	10.8	0.0	8.0			
Approach LOS	B					
Intersection Summary						
Average Delay			7.8			
Intersection Capacity Utilization			34.8%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	30	3	1272	401	0	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1737		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1737		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	40	4	1339	422	0	408
RTOR Reduction (vph)	4	0	0	116	0	0
Lane Group Flow (vph)	40	0	1339	306	0	408
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	1.9		31.0	31.0		31.0
Effective Green, g (s)	1.9		31.0	31.0		31.0
Actuated g/C Ratio	0.04		0.72	0.72		0.72
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	77		2563	1100		2563
v/s Ratio Prot	c0.02		c0.38			0.12
v/s Ratio Perm				0.20		
v/c Ratio	0.52		0.52	0.28		0.16
Uniform Delay, d1	20.0		2.6	2.0		1.8
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	6.2		0.2	0.1		0.0
Delay (s)	26.3		2.8	2.2		1.9
Level of Service	C		A	A		A
Approach Delay (s)	26.3		2.7			1.9
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.0		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.52			
Actuated Cycle Length (s)			42.8		Sum of lost time (s)	9.9
Intersection Capacity Utilization			47.6%		ICU Level of Service	A
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↑↑
Volume (veh/h)	0	15	2077	5	5	293
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2233	5	7	431
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2466	1119			2239	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2466	1119			2239	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	87			97	
cM capacity (veh/h)	24	201			228	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1489	750	7	215	215
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	201	1700	1700	228	1700	1700
Volume to Capacity	0.13	0.88	0.44	0.03	0.13	0.13
Queue Length 95th (ft)	11	0	0	2	0	0
Control Delay (s)	25.5	0.0	0.0	21.3	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	25.5	0.0		0.4		
Approach LOS	D					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		67.6%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	17	84	1993	11	36	256
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	104	2143	12	52	371
RTOR Reduction (vph)	0	5	0	1	0	0
Lane Group Flow (vph)	21	99	2143	11	52	371
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.7	25.8	68.3	68.3	5.0	82.1
Effective Green, g (s)	15.7	20.7	68.3	68.3	5.0	82.1
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	259	305	2256	1009	82	2712
v/s Ratio Prot	0.01	c0.06	c0.61		c0.03	0.10
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.33	0.95	0.01	0.63	0.14
Uniform Delay, d1	39.5	37.2	17.8	7.1	50.2	3.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6	9.6	0.0	14.9	0.0
Delay (s)	39.6	37.8	27.4	7.1	65.1	3.3
Level of Service	D	D	C	A	E	A
Approach Delay (s)	38.1		27.3			10.9
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay		25.2		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio		0.82				
Actuated Cycle Length (s)		107.1		Sum of lost time (s)		18.1
Intersection Capacity Utilization		71.1%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↖	↗		↖	↗
Volume (veh/h)	0	31	1971	25	0	271
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	50	2075	26	0	366
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2271	1051			2101	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2271	1051			2101	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	78			100	
cM capacity (veh/h)	34	223			258	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	50	1383	718	183	183	
Volume Left	0	0	0	0	0	
Volume Right	50	0	26	0	0	
cSH	223	1700	1700	1700	1700	
Volume to Capacity	0.22	0.81	0.42	0.11	0.11	
Queue Length 95th (ft)	21	0	0	0	0	
Control Delay (s)	25.7	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	25.7	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		65.3%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↗	↖	↖	↗
Volume (vph)	9	6	1996	31	15	248
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	15	10	2079	32	19	306
RTOR Reduction (vph)	0	5	0	7	0	0
Lane Group Flow (vph)	15	5	2079	25	19	306
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.8	59.8	2.0	69.3
Effective Green, g (s)	1.4	3.4	59.8	59.8	2.0	69.3
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2737	1224	45	3172
v/s Ratio Prot	c0.01	0.00	c0.59		c0.01	0.09
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.47	0.08	0.76	0.02	0.42	0.10
Uniform Delay, d1	37.6	35.4	4.8	2.0	37.1	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.5	0.5	1.3	0.0	6.3	0.0
Delay (s)	48.0	35.9	6.1	2.0	43.4	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	43.2		6.0			3.0
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		6.0		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.74				
Actuated Cycle Length (s)		77.3		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		68.0%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	44	1	0	43	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	81	2	0	68	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	83	68	3					
Volume Left (vph)	0	0	81	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	834	1121	816	842	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.4						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.2%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: AM PEAK















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	35	0	0	31	219	3	1805	49	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1358	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	47	0	0	43	304	3	1920	52	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	21	0	0	0	0
Lane Group Flow (vph)	3	47	0	0	43	248	3	1920	31	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	15.9	15.9			15.9	15.9	47.7	43.6	43.6			
Effective Green, g (s)	15.9	15.9			15.9	15.9	47.7	43.6	43.6			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.60	0.60			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	296	406			406	345	1158	2116	946			
v/s Ratio Prot		0.03			0.02		0.00	c0.54				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.12			0.11	0.72	0.00	0.91	0.03			
Uniform Delay, d1	22.3	22.9			22.8	26.4	4.4	12.9	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	7.0	0.0	6.1	0.0			
Delay (s)	22.3	23.0			22.9	33.4	4.4	19.0	6.0			
Level of Service	C	C			C	C	A	B	A			
Approach Delay (s)		23.0				32.1		18.6			0.0	
Approach LOS		C				C		B			A	
Intersection Summary												
HCM 2000 Control Delay		20.7				HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio		0.86										
Actuated Cycle Length (s)		72.9				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		83.0%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: AM PEAK

























							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	5	21	357	1606	0	174	44
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	20	84	372	1673	0	220	56
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None		None		
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	1828	138	276		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1828	138	276		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	59	91	71		0		
cM capacity (veh/h)	48	885	1284		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	104	372	836	836	147	129	0
Volume Left	20	372	0	0	0	0	0
Volume Right	84	0	0	0	0	56	0
cSH	205	1284	1700	1700	1700	1700	1700
Volume to Capacity	0.51	0.29	0.49	0.49	0.09	0.08	0.00
Queue Length 95th (ft)	64	30	0	0	0	0	0
Control Delay (s)	39.5	8.9	0.0	0.0	0.0	0.0	0.0
Lane LOS	E	A					
Approach Delay (s)	39.5	1.6			0.0		
Approach LOS	E						
Intersection Summary							
Average Delay			3.1				
Intersection Capacity Utilization			61.1%		ICU Level of Service		B
Analysis Period (min)			15				

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	382	0	37	2	1	2	25	1845	0	0	151	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3422	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3422	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	434	0	42	6	3	6	26	1942	0	0	219	62
RTOR Reduction (vph)	0	30	0	0	6	0	0	0	0	0	22	0
Lane Group Flow (vph)	434	12	0	6	3	0	26	1942	0	0	259	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	25.3	25.3		1.7	1.7		1.9	43.6			37.5	
Effective Green, g (s)	25.3	25.3		1.7	1.7		1.9	43.6			37.5	
Actuated g/C Ratio	0.30	0.30		0.02	0.02		0.02	0.51			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	524	469		35	33		39	1808			1504	
v/s Ratio Prot	c0.25	0.01		c0.00	0.00		0.01	c0.55			0.08	
v/s Ratio Perm												
v/c Ratio	0.83	0.03		0.17	0.09		0.67	1.07			0.17	
Uniform Delay, d1	28.0	21.3		41.1	41.0		41.4	20.8			14.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	10.4	0.0		2.3	1.2		35.5	44.2			0.1	
Delay (s)	38.4	21.3		43.4	42.3		76.9	65.1			14.5	
Level of Service	D	C		D	D		E	E			B	
Approach Delay (s)		36.9			42.7			65.2			14.5	
Approach LOS		D			D			E			B	
Intersection Summary												
HCM 2000 Control Delay			55.0				HCM 2000 Level of Service				D	
HCM 2000 Volume to Capacity ratio			1.02									
Actuated Cycle Length (s)			85.3				Sum of lost time (s)				18.9	
Intersection Capacity Utilization			87.2%				ICU Level of Service				E	
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	7	198	14	0	1706	17	37	22	1	19	39	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5034			5078		1770	1852			1731	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.19	
Satd. Flow (perm)	1770	5034			5078		1243	1852			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	
Adj. Flow (vph)	8	222	16	0	1875	19	44	26	1	25	51	65
RTOR Reduction (vph)	0	4	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	8	234	0	0	1893	0	44	26	0	0	124	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1904			2062		241	360			53	
v/s Ratio Prot	c0.00	0.05			c0.37			0.01				
v/s Ratio Perm							c0.04				c0.38	
v/c Ratio	0.04	0.12			0.92		0.18	0.07			2.33	
Uniform Delay, d1	71.4	36.5			50.6		60.6	59.2			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			7.2		0.4	0.1			653.1	
Delay (s)	71.5	36.6			57.8		60.9	59.3			728.1	
Level of Service	E	D			E		E	E			F	
Approach Delay (s)		37.7			57.8			60.3			728.1	
Approach LOS		D			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		96.0			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.91										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		71.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	216	0	382	1714	8	0	0	0	0	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3537							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3537							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	263	0	406	1823	9	0	0	0	0	0	16
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	10
Lane Group Flow (vph)	0	263	0	406	1832	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3214							609
v/s Ratio Prot		0.05		0.12	c0.52							
v/s Ratio Perm												0.00
v/c Ratio		0.14		0.24	0.57							0.01
Uniform Delay, d1		36.7		25.5	1.6							34.9
Progression Factor		0.41		1.00	1.00							1.00
Incremental Delay, d2		0.1		0.1	0.2							0.0
Delay (s)		15.3		25.6	1.8							34.9
Level of Service		B		C	A							C
Approach Delay (s)		15.3			6.1		0.0					34.9
Approach LOS		B			A		A					C
Intersection Summary												
HCM 2000 Control Delay		7.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		69.3%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	9	233	0	0	128	104	0	0	0	47	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	11	277	0	0	138	112	0	0	0	52	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	249			277			497	548	277	492	492	194
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	249			277			497	548	277	492	492	194
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1316			1285			478	440	761	484	474	848
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	288	249	0	56								
Volume Left	11	0	0	52								
Volume Right	0	112	0	4								
cSH	1316	1285	1700	501								
Volume to Capacity	0.01	0.00	0.00	0.11								
Queue Length 95th (ft)	1	0	0	9								
Control Delay (s)	0.4	0.0	0.0	13.1								
Lane LOS	A			B								
Approach Delay (s)	0.4	0.0	0.0	13.1								
Approach LOS				B								
Intersection Summary												
Average Delay				1.4								
Intersection Capacity Utilization				29.6%								A
Analysis Period (min)				15								

NBC Coastal Campus

22: 3rd St & Palm Ave











MILCON_NorthOp Year 2017 Alt 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	271	4	26	208	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	315	5	28	224	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	320	28	249	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.1	5.5	5.1	5.6						
Degree Utilization, x	0.01	0.49	0.05	0.38	0.26	0.07						
Capacity (veh/h)	579	635	566	631	637	549						
Control Delay (s)	7.9	12.4	8.2	10.6	9.9	9.1						
Approach Delay (s)	12.3		10.3		9.9	9.1						
Approach LOS	B		B		A	A						
Intersection Summary												
Delay				10.9								
Level of Service				B								
Intersection Capacity Utilization				37.3%								A
Analysis Period (min)				15								


















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: AM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	225	424	332	152	17	68
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	285	537	405	185	24	96
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	590				1604	295
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	590				1604	295
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	71				65	86
cM capacity (veh/h)	981				68	701
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	285	537	270	320	120	
Volume Left	285	0	0	0	24	
Volume Right	0	0	0	185	96	
cSH	981	1700	1700	1700	246	
Volume to Capacity	0.29	0.32	0.16	0.19	0.49	
Queue Length 95th (ft)	30	0	0	0	62	
Control Delay (s)	10.2	0.0	0.0	0.0	32.8	
Lane LOS	B				D	
Approach Delay (s)	3.5		0.0		32.8	
Approach LOS					D	
Intersection Summary						
Average Delay			4.5			
Intersection Capacity Utilization			41.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	417	15	26	333	0	65	36	80	1	21	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1721			1858	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.88			0.98	1.00
Satd. Flow (perm)	933	3521		823	3539			1536			1830	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	542	19	34	432	0	98	55	121	2	36	47
RTOR Reduction (vph)	0	3	0	0	0	0	0	33	0	0	0	30
Lane Group Flow (vph)	21	558	0	34	432	0	0	241	0	0	38	17
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.1	13.1		13.1	13.1			13.2			13.2	13.2
Effective Green, g (s)	13.1	13.1		13.1	13.1			13.2			13.2	13.2
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	344	1299		303	1305			571			680	588
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.16			0.02	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.42			0.06	0.03
Uniform Delay, d1	7.2	8.4		7.4	8.1			8.3			7.2	7.1
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.2			0.5			0.0	0.0
Delay (s)	7.3	8.6		7.5	8.2			8.8			7.2	7.1
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.6			8.2			8.8			7.1	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.4		HCM 2000 Level of Service				A			
HCM 2000 Volume to Capacity ratio			0.43									
Actuated Cycle Length (s)			35.5		Sum of lost time (s)				9.2			
Intersection Capacity Utilization			46.3%		ICU Level of Service				A			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	514	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	559	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			563		559	559
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			563		559	559
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1008		490	529
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	559	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	517			
Volume to Capacity	0.33	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.1			
Lane LOS			B			
Approach Delay (s)	0.0		12.1			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			37.1%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑↑↑	↑	↑	↑	↑	↑	↑	↑
Volume (vph)	21	658	34	23	1861	42	160	36	50	88	44	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5048		1770	5069			3323			3363	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5048		1770	5069			3323			3363	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	783	40	25	2045	46	193	43	60	107	54	29
RTOR Reduction (vph)	0	3	0	0	1	0	0	13	0	0	8	0
Lane Group Flow (vph)	25	820	0	25	2090	0	0	283	0	0	182	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2235		118	2159			646			653	
v/s Ratio Prot	0.01	c0.16		c0.01	c0.41			c0.09			c0.05	
v/s Ratio Perm												
v/c Ratio	0.17	0.37		0.21	0.97			0.44			0.28	
Uniform Delay, d1	76.7	33.4		79.5	50.5			63.8			61.7	
Progression Factor	1.00	1.00		1.25	0.75			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.7	11.3			0.5			0.2	
Delay (s)	77.3	33.8		100.3	49.3			64.3			62.0	
Level of Service	E	C		F	D			E			E	
Approach Delay (s)		35.1			49.9			64.3			62.0	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		48.2			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		74.0%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰		↰	↰	↰	↰	↰	↰
Volume (vph)	2	884	34	20	2032	11	18	4	30	54	10	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5081			1688		1770	1698	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5057		1770	5081			1542		1237	1698	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	993	38	23	2309	12	25	5	41	77	14	20
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	17	0
Lane Group Flow (vph)	2	1029	0	23	2321	0	0	44	0	77	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases						4				8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			257		206	283	
v/s Ratio Prot	0.00	0.20		c0.01	c0.46						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.30		0.19	0.62			0.17		0.37	0.06	
Uniform Delay, d1	86.1	11.1		79.4	11.9			64.3		66.7	63.1	
Progression Factor	1.70	0.27		1.43	0.31			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.5	0.5			0.3		1.1	0.1	
Delay (s)	147.2	3.2		113.8	4.2			64.6		67.8	63.2	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.5			5.3			64.6			66.4	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		7.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		72.9%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	3	951	62	94	1888	51	143	19	89	165	35	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.91	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5038		1770	5085	1583		1784	1583		3374	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5038		1770	5085	1583		1784	1583		3374	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1069	70	113	2275	61	161	21	100	220	47	19
RTOR Reduction (vph)	0	4	0	0	0	29	0	0	83	0	2	0
Lane Group Flow (vph)	3	1135	0	113	2275	32	0	182	17	0	284	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2230		196	2703	841		307	272		581	
v/s Ratio Prot	0.00	0.23		c0.06	c0.45			c0.10			c0.08	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.51		0.58	0.84	0.04		0.59	0.06		0.49	
Uniform Delay, d1	86.2	36.1		76.0	35.7	20.2		68.7	62.3		67.3	
Progression Factor	1.22	0.63		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.8		4.1	3.4	0.1		3.1	0.1		0.6	
Delay (s)	106.3	23.4		80.0	39.1	20.2		71.7	62.4		68.0	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.6			40.5			68.4			68.0	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		39.7			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		90.4%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	↰
Volume (vph)	13	1215	25	42	2015	11	15	6	48	37	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1670			1722	
Flt Permitted	0.95	1.00		0.95	1.00			0.93			0.78	
Satd. Flow (perm)	1770	5070		1770	5081			1566			1383	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	14	1321	27	49	2343	13	18	7	57	49	3	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	45	0	0	22	0
Lane Group Flow (vph)	14	1347	0	49	2356	0	0	37	0	0	58	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.5		2.9	39.7			15.1			15.1	
Effective Green, g (s)	0.7	37.5		2.9	39.7			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2670		72	2833			332			293	
v/s Ratio Prot	0.01	0.27		c0.03	c0.46							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.82	0.50		0.68	0.83			0.11			0.20	
Uniform Delay, d1	35.2	10.9		33.7	13.0			22.6			23.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	132.1	0.2		23.3	2.2			0.1			0.3	
Delay (s)	167.3	11.0		57.0	15.2			22.8			23.4	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		12.6			16.1			22.8			23.4	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		15.2			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		71.2			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		56.1%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰↰	↰	↰
Volume (vph)	90	1227	29	241	1956	212	73	71	760	231	91	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1749	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1749	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	105	1427	34	256	2081	226	81	79	844	275	108	89
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	182	0	3	56
Lane Group Flow (vph)	105	1459	0	256	2081	159	81	314	274	275	114	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.4	30.4	10.4	34.1	34.1
Effective Green, g (s)	6.0	35.3		17.9	47.2	47.2	6.7	30.4	30.4	10.4	34.1	34.1
Actuated g/C Ratio	0.05	0.30		0.15	0.41	0.41	0.06	0.26	0.26	0.09	0.29	0.29
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	177	1543		273	2070	644	102	406	394	308	514	442
v/s Ratio Prot	0.03	0.29		c0.14	c0.41		0.05	c0.20		c0.08	c0.07	
v/s Ratio Perm						0.10		0.18				0.02
v/c Ratio	0.59	0.95		0.94	1.01	0.25	0.79	0.77	0.69	0.89	0.22	0.05
Uniform Delay, d1	53.8	39.4		48.4	34.4	22.6	53.9	39.5	38.6	52.2	30.9	29.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.2	12.2		37.6	21.1	0.2	33.3	8.8	5.3	26.1	0.2	0.1
Delay (s)	59.0	51.6		86.1	55.4	22.8	87.3	48.4	43.8	78.3	31.1	29.4
Level of Service	E	D		F	E	C	F	D	D	E	C	C
Approach Delay (s)		52.1			55.6			49.4			58.3	
Approach LOS		D			E			D			E	
Intersection Summary												
HCM 2000 Control Delay		53.7			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.93										
Actuated Cycle Length (s)		115.9			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		86.1%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Volume (vph)	0	280	1136	0	153	1275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	315	1222	0	170	1417
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	0	315	1222	0	170	1412
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.35		0.10	c0.51
v/s Ratio Perm						
v/c Ratio		0.12	1.05		0.82	0.92
Uniform Delay, d1		2.5	26.8		34.5	16.4
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	39.6		22.3	9.5
Delay (s)		2.5	66.4		56.8	25.9
Level of Service		A	E		E	C
Approach Delay (s)		2.5	66.4		29.2	
Approach LOS		A	E		C	
Intersection Summary						
HCM 2000 Control Delay		41.1			HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio		1.04				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		67.0%			ICU Level of Service	C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↖	↗				
Volume (vph)	0	434	0	0	418	517	819	1	142	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.95				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3246		1681	1633				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3246		1681	1633				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	499	0	0	454	562	890	1	154	0	0	0
RTOR Reduction (vph)	0	0	0	0	354	0	0	28	0	0	0	0
Lane Group Flow (vph)	0	499	0	0	662	0	534	483	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		16.7			16.7		20.5	20.5				
Effective Green, g (s)		16.7			16.7		20.5	20.5				
Actuated g/C Ratio		0.37			0.37		0.45	0.45				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1307			1199		762	740				
v/s Ratio Prot		0.14			c0.20							
v/s Ratio Perm							c0.32	0.30				
v/c Ratio		0.38			0.55		0.70	0.65				
Uniform Delay, d1		10.5			11.3		9.9	9.6				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.6		2.9	2.1				
Delay (s)		10.6			11.8		12.8	11.7				
Level of Service		B			B		B	B				
Approach Delay (s)		10.6			11.8		12.2				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay		11.8							HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		45.2							Sum of lost time (s)		8.0	
Intersection Capacity Utilization		68.6%							ICU Level of Service		C	
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰		↰	↰	↰	↰
Volume (veh/h)	0	3	4	65	13	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	90	32	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	133	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	133	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	858	1042	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	96	32			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	1042	1581	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			16.7%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰
Volume (veh/h)	0	4076	17	0	1806	243	0	0	908	0	0	55
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%			0%			0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4246	18	0	1862	251	0	0	1009	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2132			4284			4999	6407	1464	3442	6291	786
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2132			4284			4999	6407	1464	3442	6291	786
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	247			33			0	0	1835	1	0	324
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1698	1698	867	745	745	623	1009	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	251	1009	83				
cSH	1700	1700	1700	1700	1700	1700	1835	324				
Volume to Capacity	1.00	1.00	0.51	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	89	25				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3	19.9				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.3	19.9				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				144.0%	ICU Level of Service		H					
Analysis Period (min)				15								

* User Entered Value

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: PM PEAK

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: PM PEAK

HCM Unsignalized Intersection Capacity Analysis

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔↔	
Volume (vph)	7	2109	108	0	0	0	0	344	464	760	1094	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.98	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.94	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3118	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3118	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2318	119	0	0	0	0	400	540	792	1140	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2326	90	0	0	0	0	642	263	792	1140	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					946	409	865	2022	
v/s Ratio Prot		c0.46						c0.21		c0.23	0.32	
v/s Ratio Perm			0.06						0.19			
v/c Ratio		1.26	0.16					0.68	0.64	0.92	0.56	
Uniform Delay, d1		55.8	37.7					53.5	52.7	63.6	23.7	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		123.1	0.1					2.0	3.4	14.1	0.4	
Delay (s)		178.9	37.9					55.4	56.2	77.7	24.1	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		172.0			0.0			55.7			46.1	
Approach LOS		F			A			E			D	
Intersection Summary												
HCM 2000 Control Delay			105.7								F	
HCM 2000 Volume to Capacity ratio			0.97									
Actuated Cycle Length (s)			175.0							14.4		
Intersection Capacity Utilization			135.6%							H		
Analysis Period (min)			15									
c Critical Lane Group												













NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔		↔↔			↔↔
Volume (vph)	169	11	892	673	0	1200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1584		3264			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1584		3264			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	217	14	1002	756	0	1290
RTOR Reduction (vph)	2	0	65	0	0	0
Lane Group Flow (vph)	229	0	1693	0	0	1290
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	297		2466			2540
v/s Ratio Prot	c0.14		c0.52			0.38
v/s Ratio Perm						
v/c Ratio	0.77		0.69			0.51
Uniform Delay, d1	61.8		9.9			7.8
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	11.8		1.6			0.7
Delay (s)	73.5		11.5			8.5
Level of Service	E		B			A
Approach Delay (s)	73.5		11.5			8.5
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay			14.7			B
HCM 2000 Volume to Capacity ratio			0.72			
Actuated Cycle Length (s)			160.0			12.1
Intersection Capacity Utilization			79.7%			D
Analysis Period (min)			15			
c Critical Lane Group						













NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	140	9	28	25	9	24	22	1485	48	65	1419	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.94		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1695	1583		1721		1770	3522		1770	3489	
Flt Permitted	0.69	0.69	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1219	1217	1583		1463		1770	3522		1770	3489	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	179	12	36	39	14	38	24	1597	52	71	1542	162
RTOR Reduction (vph)	0	0	30	0	23	0	0	1	0	0	3	0
Lane Group Flow (vph)	95	96	6	0	68	0	24	1648	0	71	1701	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4		4							
Actuated Green, G (s)	18.9	18.9	18.9		18.9		3.1	72.0		8.0	76.9	
Effective Green, g (s)	18.9	18.9	18.9		18.9		3.1	72.0		8.0	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	202	263		243		48	2230		124	2359	
v/s Ratio Prot							0.01	0.47		c0.04	c0.49	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.47	0.48	0.02		0.28		0.50	0.74		0.57	0.72	
Uniform Delay, d1	42.9	42.9	39.7		41.4		54.5	14.4		51.2	11.6	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	1.8	0.0		0.6		8.0	1.3		6.3	1.1	
Delay (s)	44.6	44.7	39.7		42.1		62.5	15.7		57.4	12.7	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		43.9			42.1			16.4			14.5	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.8			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		113.7			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		73.9%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: PM PEAK













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	7	0	141	0	1295	0	31	1555	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1619			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1619			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	10	0	204	0	1378	0	33	1672	0
RTOR Reduction (vph)	0	0	0	0	166	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	48	0	0	1378	0	33	1672	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			45.5		1.7	51.4	
Effective Green, g (s)					14.1			45.5		1.7	51.4	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					301			2129		39	2406	
v/s Ratio Prot					c0.03			0.39		0.02	c0.47	
v/s Ratio Perm												
v/c Ratio					0.16			0.65		0.85	0.69	
Uniform Delay, d1					25.8			9.8		36.8	7.3	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.2			0.7		84.9	0.9	
Delay (s)					26.0			10.5		121.7	8.2	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			26.0			10.5			10.4	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay		11.5			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		75.6			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		60.5%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: PM PEAK







Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	286	49	116	6	68	413	27	609	2	136	1381	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1516		1855	1511	1770	3539	1349	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1516		1855	1511	1770	3539	1349	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	376	64	153	7	74	449	30	669	2	145	1469	68
RTOR Reduction (vph)	0	0	124	0	0	218	0	0	1	0	2	0
Lane Group Flow (vph)	376	64	29	0	81	231	30	669	1	145	1535	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.7	27.7	27.7		24.1	24.1	2.9	56.0	56.0	16.8	69.9	
Effective Green, g (s)	27.7	27.7	27.7		24.1	24.1	2.9	56.0	56.0	16.8	69.9	
Actuated g/C Ratio	0.19	0.19	0.19		0.17	0.17	0.02	0.39	0.39	0.12	0.49	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	340	358	291		310	252	35	1376	524	206	1704	
v/s Ratio Prot	c0.21	0.03			0.04		0.02	0.19		c0.08	c0.44	
v/s Ratio Perm			0.02			c0.15		0.00				
v/c Ratio	1.11	0.18	0.10		0.26	0.92	0.86	0.49	0.00	0.70	0.90	
Uniform Delay, d1	58.1	48.6	47.9		52.2	59.0	70.3	33.2	26.9	61.2	33.9	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	80.4	0.2	0.2		0.5	34.8	94.8	1.2	0.0	10.4	8.1	
Delay (s)	138.6	48.9	48.0		52.7	93.7	165.1	34.4	26.9	71.6	42.0	
Level of Service	F	D	D		D	F	F	C	C	E	D	
Approach Delay (s)		105.5			87.4			40.0			44.5	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay		60.4								E		
HCM 2000 Volume to Capacity ratio		0.95										
Actuated Cycle Length (s)		144.0				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		79.3%				ICU Level of Service		D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	309	484	3	40	176	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	343	538	4	56	200	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	436	32			61	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	436	32			61	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	32	48			87	
cM capacity (veh/h)	503	1041			1543	
Direction, Lane #						
Volume Total	881	61	203			
Volume Left	343	0	200			
Volume Right	538	56	0			
cSH	1105	1700	1543			
Volume to Capacity	0.80	0.04	0.13			
Queue Length 95th (ft)	224	0	11			
Control Delay (s)	19.6	0.0	7.6			
Lane LOS	C		A			
Approach Delay (s)	19.6	0.0	7.6			
Approach LOS	C					
Intersection Summary						
Average Delay		16.5				
Intersection Capacity Utilization		40.4%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus

10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	312	6	644	43	0	1506
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	395	8	716	48	0	1692
RTOR Reduction (vph)	1	0	0	27	0	0
Lane Group Flow (vph)	402	0	716	21	0	1692
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.23		0.20			c0.48
v/s Ratio Perm				0.01		
v/c Ratio	0.48		0.47	0.03		1.11
Uniform Delay, d1	18.6		21.4	17.3		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4		0.2	0.0		60.7
Delay (s)	19.1		21.7	17.3		90.6
Level of Service	B		C	B		F
Approach Delay (s)	19.1		21.4			90.6
Approach LOS	B		C			F

Intersection Summary

HCM 2000 Control Delay	62.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	9.9
Intersection Capacity Utilization	91.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

NBC Coastal Campus

11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (veh/h)	4	6	502	3	15	1444
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	584	3	16	1587
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1412	294			587	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1412	294			587	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	94	98			98	
cM capacity (veh/h)	127	703			984	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	20	389	198	16	793	793
Volume Left	8	0	0	16	0	0
Volume Right	12	0	3	0	0	0
cSH	250	1700	1700	984	1700	1700
Volume to Capacity	0.08	0.23	0.12	0.02	0.47	0.47
Queue Length 95th (ft)	6	0	0	1	0	0
Control Delay (s)	20.7	0.0	0.0	8.7	0.0	0.0
Lane LOS	C			A		
Approach Delay (s)	20.7	0.0		0.1		
Approach LOS	C					

Intersection Summary

Average Delay	0.3		
Intersection Capacity Utilization	49.9%	ICU Level of Service	A
Analysis Period (min)	15		

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	29	55	449	11	100	1348
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	32	60	510	12	110	1481
RTOR Reduction (vph)	0	44	0	7	0	0
Lane Group Flow (vph)	32	16	510	5	110	1481
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	18	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.3	21.5	27.6	27.6	7.1	43.5
Effective Green, g (s)	9.3	16.4	27.6	27.6	7.1	43.5
Actuated g/C Ratio	0.15	0.26	0.44	0.44	0.11	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	265	418	1572	703	202	2479
v/s Ratio Prot	c0.02	0.01	0.14		0.06	c0.42
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.04	0.32	0.01	0.54	0.60
Uniform Delay, d1	22.9	17.0	11.2	9.6	26.0	4.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.0	3.0	0.4
Delay (s)	23.1	17.0	11.3	9.6	29.0	5.2
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.1		11.3			6.8
Approach LOS	B		B			A

Intersection Summary

HCM 2000 Control Delay	8.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	62.1	Sum of lost time (s)	18.1
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↕	↕			↕
Volume (veh/h)	0	22	440	18	0	1377
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	29	506	21	0	1497
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1264	263			526	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1264	263			526	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	161	735			1037	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	29	337	189	748	748	
Volume Left	0	0	0	0	0	
Volume Right	29	0	21	0	0	
cSH	735	1700	1700	1700	1700	
Volume to Capacity	0.04	0.20	0.11	0.44	0.44	
Queue Length 95th (ft)	3	0	0	0	0	
Control Delay (s)	10.1	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.1	0.0		0.0		
Approach LOS	B					

Intersection Summary

Average Delay	0.1				
Intersection Capacity Utilization	41.4%		ICU Level of Service	A	
Analysis Period (min)	15				

NBC Coastal Campus

14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	29	25	433	18	22	1353
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	40	35	461	19	24	1487
RTOR Reduction (vph)	0	32	0	8	0	0
Lane Group Flow (vph)	40	3	461	11	24	1487
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.4	27.2	27.2	1.8	36.5
Effective Green, g (s)	2.6	4.4	27.2	27.2	1.8	36.5
Actuated g/C Ratio	0.06	0.10	0.60	0.60	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	152	2106	942	69	2826
v/s Ratio Prot	c0.02	0.00	0.13		0.01	c0.42
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.40	0.02	0.22	0.01	0.35	0.53
Uniform Delay, d1	20.8	18.7	4.3	3.8	21.4	1.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.6	0.1	0.1	0.0	3.0	0.2
Delay (s)	23.4	18.8	4.4	3.8	24.4	1.8
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.2		4.3			2.1
Approach LOS	C		A			A

Intersection Summary

HCM 2000 Control Delay	3.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	45.7	Sum of lost time (s)	14.1
Intersection Capacity Utilization	48.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	10	14	82	7	0	174	12	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	10	15	106	9	0	196	13	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	10	15	116	209						
Volume Left (vph)	0	0	106	0						
Volume Right (vph)	0	15	0	13						
Hadj (s)	0.03	-0.57	0.22	0.00						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.13	0.19						
Capacity (veh/h)	873	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	6.9						
Approach Delay (s)	6.6		7.8	6.9						
Approach LOS	A		A	A						

Intersection Summary




















Delay	7.2		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

NBC Coastal Campus

16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	180	0	0	79	134	11	356	67	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1300	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	10	205	0	0	91	154	12	391	74	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	122	0	0	40	0	0	0
Lane Group Flow (vph)	10	205	0	0	91	32	12	391	34	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.5	18.5	18.5			
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.5	18.5	18.5			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	270	388			388	329	812	1624	726			
v/s Ratio Prot		c0.11			0.05		0.01	c0.11				
v/s Ratio Perm	0.01					0.02			0.02			
v/c Ratio	0.04	0.53			0.23	0.10	0.01	0.24	0.05			
Uniform Delay, d1	12.7	14.2			13.3	12.9	5.9	6.6	6.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.3			0.3	0.1	0.0	0.1	0.0			
Delay (s)	12.8	15.5			13.6	13.0	5.9	6.7	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.2		6.6				0.0	
Approach LOS		B			B		A				A	
Intersection Summary												
HCM 2000 Control Delay			10.3			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.33									
Actuated Cycle Length (s)			40.3			Sum of lost time (s)			13.4			
Intersection Capacity Utilization			40.4%			ICU Level of Service			A			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↰	↰	↑	↰	↰	↰
Volume (veh/h)	44	355	32	453	0	1505	11
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	176	1420	36	515	0	1672	12
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2008	842	1684		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2008	842	1684		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	0	90		0		
cM capacity (veh/h)	46	307	376		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	1596	36	257	257	1115	570	0
Volume Left	176	36	0	0	0	0	0
Volume Right	1420	0	0	0	0	12	0
cSH	190	376	1700	1700	1700	1700	1700
Volume to Capacity	8.41	0.10	0.15	0.15	0.66	0.34	0.00
Queue Length 95th (ft)	Err	8	0	0	0	0	0
Control Delay (s)	Err	15.6	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C					
Approach Delay (s)	Err	1.0			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			4165.1				
Intersection Capacity Utilization			73.0%		ICU Level of Service		
Analysis Period (min)			15		C		

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↖	→	↗	↖	→	↗	↖	→	↗	↖	→	↗
Lane Configurations	↖	↖		↖	↖		↖	↖		↖	↖	↖
Volume (vph)	84	0	65	1	1	0	71	344	11	1	1428	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3523		1770	3477	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3523		1770	3477	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	112	0	87	2	2	0	78	378	12	1	1587	209
RTOR Reduction (vph)	0	70	0	0	0	0	0	1	0	0	8	0
Lane Group Flow (vph)	112	17	0	2	2	0	78	389	0	1	1788	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	17.9	17.9		0.8	0.8		5.8	52.4		0.8	47.4	
Effective Green, g (s)	17.9	17.9		0.8	0.8		5.8	52.4		0.8	47.4	
Actuated g/C Ratio	0.20	0.20		0.01	0.01		0.06	0.58		0.01	0.52	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	348	312		15	16		113	2033		15	1815	
v/s Ratio Prot	c0.06	0.01		c0.00	0.00		c0.04	0.11		0.00	c0.51	
v/s Ratio Perm												
v/c Ratio	0.32	0.05		0.13	0.12		0.69	0.19		0.07	0.99	
Uniform Delay, d1	31.2	29.6		44.7	44.7		41.6	9.1		44.6	21.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.1		4.0	3.5		16.6	0.0		1.9	17.6	
Delay (s)	31.8	29.7		48.7	48.2		58.2	9.2		46.5	38.9	
Level of Service	C	C		D	D		E	A		D	D	
Approach Delay (s)		30.9			48.4			17.4			39.0	
Approach LOS		C			D			B			D	
Intersection Summary												
HCM 2000 Control Delay		34.2										
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		90.8							18.9			
Intersection Capacity Utilization		72.9%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: PM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	↖	→	↗	↖	→	↗	↖	→	↗	↖	→	↗
Lane Configurations	↖	↖		↖	↖		↖	↖		↖	↖	↖
Volume (vph)	55	1384	57	0	381	33	12	38	4	23	25	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			0.99		1.00	0.98			0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1770	5055			5025		1770	1835			1758	
Flt Permitted	0.95	1.00			1.00		0.70	1.00			0.17	
Satd. Flow (perm)	1770	5055			5025		1313	1835			299	
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	62	1573	65	0	405	35	17	54	6	27	29	24
RTOR Reduction (vph)	0	2	0	0	5	0	0	2	0	0	8	0
Lane Group Flow (vph)	62	1636	0	0	435	0	17	58	0	0	72	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1912			2040		255	356			49	
v/s Ratio Prot	c0.04	c0.32			c0.09			c0.03				
v/s Ratio Perm							0.01				c0.24	
v/c Ratio	0.32	0.86			0.21		0.07	0.16			1.46	
Uniform Delay, d1	73.7	51.4			34.8		59.2	60.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.9	5.2			0.2		0.1	0.2			291.2	
Delay (s)	74.6	56.6			35.0		59.3	60.5			366.2	
Level of Service	E	E			C		E	E			F	
Approach Delay (s)		57.2			35.0			60.2			366.2	
Approach LOS		E			C			E			F	
Intersection Summary												
HCM 2000 Control Delay		63.8										
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		180.0							22.3			
Intersection Capacity Utilization		67.8%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑↑			↑↑	↑↑							↑
Volume (vph)	0	1413	0	485	417	36	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3497							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3497							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1588	0	516	444	38	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1588	0	516	482	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3178							609
v/s Ratio Prot		c0.31		c0.15	c0.14							
v/s Ratio Perm												0.00
v/c Ratio		0.83		0.27	0.15							0.00
Uniform Delay, d1		50.6		20.5	0.9							34.8
Progression Factor		0.21		1.00	1.00							1.00
Incremental Delay, d2		2.1		0.1	0.0							0.0
Delay (s)		12.7		20.6	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		12.7			11.1		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		12.2				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.53										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		50.3%				ICU Level of Service		A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave



















MILCON_NorthOp Year 2017 Alt 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑				↑↑
Volume (veh/h)	3	212	0	0	306	40	0	0	0	104	0	8
Sign Control		Free			Free			Stop				Stop
Grade		0%			0%			0%				0%
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	247	0	0	348	45	0	0	0	158	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	393			247			636	647	247	624	624	370
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	393			247			636	647	247	624	624	370
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	60	100	98
cM capacity (veh/h)	1165			1319			383	389	792	397	401	675
Direction, Lane #												
Volume Total	250	393	0	170								
Volume Left	3	0	0	158								
Volume Right	0	45	0	12								
cSH	1165	1319	1700	409								
Volume to Capacity	0.00	0.00	0.00	0.41								
Queue Length 95th (ft)	0	0	0	50								
Control Delay (s)	0.1	0.0	0.0	19.9								
Lane LOS	A			A								
Approach Delay (s)	0.1	0.0	0.0	19.9								
Approach LOS				A								
Intersection Summary												
Average Delay		4.2										
Intersection Capacity Utilization		31.4%				ICU Level of Service		A				
Analysis Period (min)		15										












NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop			Stop				Stop			Stop	
Volume (vph)	7	294	12	84	320	24	14	38	67	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	377	15	94	360	27	25	67	118	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	392	94	387	209	161						
Volume Left (vph)	9	0	94	0	25	61						
Volume Right (vph)	0	15	0	27	118	28						
Hadj (s)	0.53	0.01	0.53	-0.01	-0.28	0.00						
Departure Headway (s)	7.2	6.7	7.1	6.5	6.6	7.0						
Degree Utilization, x	0.02	0.73	0.19	0.70	0.38	0.31						
Capacity (veh/h)	472	519	485	529	478	436						
Control Delay (s)	9.1	24.1	10.5	22.3	13.7	13.3						
Approach Delay (s)	23.8		20.0		13.7	13.3						
Approach LOS	C		C		B	B						
Intersection Summary												
Delay			19.3									
Level of Service			C									
Intersection Capacity Utilization			41.3%		ICU Level of Service		A					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			 			
Volume (veh/h)	72	421	454	39	52	141
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	74	434	528	45	61	166
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	573				1133	287
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	573				1133	287
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	93				66	77
cM capacity (veh/h)	996				182	710
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	74	434	352	221	227	
Volume Left	74	0	0	0	61	
Volume Right	0	0	0	45	166	
cSH	996	1700	1700	1700	398	
Volume to Capacity	0.07	0.26	0.21	0.13	0.57	
Queue Length 95th (ft)	6	0	0	0	86	
Control Delay (s)	8.9	0.0	0.0	0.0	25.4	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		25.4	
Approach LOS					D	
Intersection Summary						
Average Delay			4.9			
Intersection Capacity Utilization			40.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↲	↰	↱	↲	↰	↱	↲	↰	↱	↲
Volume (vph)	28	430	29	31	456	3	54	19	22	12	41	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3536			1754			1842	1583
Flt Permitted	0.47	1.00		0.45	1.00			0.78			0.90	1.00
Satd. Flow (perm)	870	3505		834	3536			1416			1671	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	512	35	34	501	3	66	23	27	16	54	39
RTOR Reduction (vph)	0	7	0	0	1	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	540	0	34	503	0	0	95	0	0	70	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Effective Green, g (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	414	1671		397	1686			309			365	345
v/s Ratio Prot		c0.15			0.14							
v/s Ratio Perm	0.04			0.04			c0.07			0.04		0.01
v/c Ratio	0.08	0.32		0.09	0.30		0.31			0.19		0.02
Uniform Delay, d1	4.3	4.9		4.3	4.8		9.9			9.6		9.3
Progression Factor	1.00	1.00		1.00	1.00		1.00			1.00		1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1		0.6			0.3		0.0
Delay (s)	4.4	5.0		4.4	4.9		10.5			9.9		9.3
Level of Service	A	A		A	A		B			A		A
Approach Delay (s)		5.0			4.9		10.5			9.7		
Approach LOS		A			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		30.2			Sum of lost time (s)		9.2					
Intersection Capacity Utilization		44.6%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												







NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↱	↲	↰	↱	↲
Volume (veh/h)	752	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	917	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			927		917	917
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			927		917	917
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	99
cM capacity (veh/h)			738		302	330
Direction, Lane #						
Volume Total	917	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	308			
Volume to Capacity	0.54	0.01	0.04			
Queue Length 95th (ft)	0	0	3			
Control Delay (s)	0.0	0.0	17.1			
Lane LOS			C			
Approach Delay (s)	0.0		17.1			
Approach LOS			C			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			49.6%		ICU Level of Service	A
Analysis Period (min)			15			








NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	40	1706	122	57	794	128	95	88	61	169	77	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Flt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5034		1770	4980			3342			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5034		1770	4980			3342			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	43	1815	130	58	802	129	104	97	67	190	87	28
RTOR Reduction (vph)	0	4	0	0	11	0	0	18	0	0	4	0
Lane Group Flow (vph)	43	1941	0	58	920	0	0	250	0	0	301	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2117		157	1983			649			658	
v/s Ratio Prot	0.02	c0.39		c0.03	0.18			c0.07			c0.09	
v/s Ratio Perm												
v/c Ratio	0.22	0.92		0.37	0.46			0.39			0.46	
Uniform Delay, d1	72.9	49.2		77.2	40.0			63.1			64.1	
Progression Factor	1.00	1.00		1.24	0.73			1.00			1.00	
Incremental Delay, d2	0.6	6.8		1.4	0.7			0.4			0.5	
Delay (s)	73.5	56.0		97.4	29.7			63.5			64.6	
Level of Service	E	E		F	C			E			E	
Approach Delay (s)		56.4			33.7			63.5			64.6	
Approach LOS		E			C			E			E	
Intersection Summary												
HCM 2000 Control Delay		51.3			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		117.5%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	1983	56	48	1192	54	21	10	34	62	12	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5064		1770	5052			1703		1770	1718	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.63	1.00	
Satd. Flow (perm)	1770	5064		1770	5052			1551		1169	1718	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2023	57	49	1229	56	25	12	41	73	14	15
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	13	0
Lane Group Flow (vph)	20	2079	0	49	1283	0	0	55	0	73	16	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Effective Green, g (s)	12.0	126.7		16.0	130.7			22.1		22.1	22.1	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3564		157	3668			190		143	210	
v/s Ratio Prot	0.01	c0.41		c0.03	c0.25						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.58		0.31	0.35			0.29		0.51	0.08	
Uniform Delay, d1	79.3	13.4		76.8	9.0			71.8		73.9	69.9	
Progression Factor	1.45	0.10		1.56	0.30			1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4		1.0	0.2			0.9		3.1	0.2	
Delay (s)	115.1	1.6		121.0	2.9			72.7		76.9	70.1	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		2.7			7.2			72.7			75.0	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		7.9			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.55										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		59.5%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	1790	194	154	1265	80	126	39	125	151	43	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5011		1770	5085	1583		1794	1583		3371	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5011		1770	5085	1583		1794	1583		3371	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	28	1904	206	159	1304	82	137	42	136	204	58	27
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	113	0	4	0
Lane Group Flow (vph)	28	2103	0	159	1304	45	0	179	23	0	285	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2218		192	2364	736		305	269		574	
v/s Ratio Prot	0.02	c0.42		c0.09	c0.26			c0.10			c0.08	
v/s Ratio Perm					0.03			0.01				
v/c Ratio	0.18	0.95		0.83	0.55	0.06		0.59	0.09		0.50	
Uniform Delay, d1	75.9	48.2		78.6	34.6	26.5		68.8	62.8		67.6	
Progression Factor	1.04	0.93		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	8.9		24.4	0.9	0.2		8.0	0.6		3.0	
Delay (s)	79.3	53.7		103.0	35.6	26.7		76.8	63.5		70.7	
Level of Service	E	D		F	D	C		E	E		E	
Approach Delay (s)		54.0			42.0			71.1			70.7	
Approach LOS		D			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		52.1			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			19.3				
Intersection Capacity Utilization		102.8%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	1994	49	167	1559	15	38	8	80	23	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5067		1770	5078			1678			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.83	
Satd. Flow (perm)	1770	5067		1770	5078			1514			1505	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85		0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	10	2216	54	176	1641	16	45	9	94	28	12	12
RTOR Reduction (vph)	0	2	0	0	1	0	0	75	0	0	10	0
Lane Group Flow (vph)	10	2268	0	176	1656	0	0	73	0	0	42	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.4		11.2	50.8			17.2			17.2	
Effective Green, g (s)	0.8	40.4		11.2	50.8			17.2			17.2	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2422		234	3052			308			306	
v/s Ratio Prot	0.01	c0.45		c0.10	0.33							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.62	0.94		0.75	0.54			0.24			0.14	
Uniform Delay, d1	41.7	20.8		35.3	10.0			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	57.6	7.7		12.8	0.2			0.4			0.2	
Delay (s)	99.3	28.5		48.1	10.2			28.6			27.8	
Level of Service	F	C		D	B			C			C	
Approach Delay (s)		28.8			13.8			28.6			27.8	
Approach LOS		C			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		22.4			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		84.5			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		69.9%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	186	1936	25	323	1567	548	64	175	526	580	236	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	196	2038	26	347	1685	589	68	186	560	630	257	243
RTOR Reduction (vph)	0	1	0	0	0	87	0	26	271	0	2	131
Lane Group Flow (vph)	196	2063	0	347	1685	502	68	362	87	630	279	88
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.3	36.4		45.0	70.1	70.1	8.6	37.1	37.1	11.8	40.3	40.3
Effective Green, g (s)	11.3	36.4		45.0	70.1	70.1	8.6	37.1	37.1	11.8	40.3	40.3
Actuated g/C Ratio	0.07	0.24		0.30	0.46	0.46	0.06	0.24	0.24	0.08	0.26	0.26
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	254	1213		523	2342	729	100	397	366	266	462	398
v/s Ratio Prot	0.06	c0.41		c0.20	c0.33		0.04	c0.22		c0.18	c0.16	
v/s Ratio Perm						0.32			0.06			0.06
v/c Ratio	0.77	1.70		0.66	0.72	0.69	0.68	0.91	0.24	2.37	0.60	0.22
Uniform Delay, d1	69.2	57.9		47.0	33.1	32.4	70.4	56.0	46.2	70.2	49.0	43.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.5	319.0		3.2	1.1	2.7	17.3	24.8	0.3	627.3	2.2	0.3
Delay (s)	82.7	376.9		50.1	34.2	35.2	87.8	80.8	46.5	697.5	51.2	44.0
Level of Service	F	F		D	C	D	F	F	D	F	D	D
Approach Delay (s)		351.4			36.5			66.3			410.1	
Approach LOS		F			D			E			F	

Intersection Summary

HCM 2000 Control Delay	206.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.19		
Actuated Cycle Length (s)	152.2	Sum of lost time (s)	21.9
Intersection Capacity Utilization	123.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2017 Alt 1

Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	↔
Volume (vph)	0	498	842	0	434	1602
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	560	896	0	477	1760
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	0	560	896	0	477	1756
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.16	c0.25		0.27	c0.63
v/s Ratio Perm						
v/c Ratio		0.31	1.04		0.72	0.99
Uniform Delay, d1		11.6	30.3		21.4	14.2
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	42.9		3.7	18.5
Delay (s)		11.7	73.2		25.1	32.7
Level of Service		B	E		C	C
Approach Delay (s)		11.7	73.2		31.1	
Approach LOS		B	E		C	

Intersection Summary

HCM 2000 Control Delay	38.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	84.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑↑				
Volume (vph)	0	926	0	0	520	247	429	2	105	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Frt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1615				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1615				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	965	0	0	584	278	461	2	113	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	37	0	0	0	0
Lane Group Flow (vph)	0	965	0	0	764	0	295	244	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.0			19.0		13.9	13.9				
Effective Green, g (s)		19.0			19.0		13.9	13.9				
Actuated g/C Ratio		0.46			0.46		0.34	0.34				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1644			1564		571	548				
v/s Ratio Prot		0.27			0.23							
v/s Ratio Perm							0.18	0.15				
v/c Ratio		0.59			0.49		0.52	0.45				
Uniform Delay, d1		8.1			7.6		10.8	10.5				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.5			0.2		0.8	0.6				
Delay (s)		8.6			7.8		11.6	11.1				
Level of Service		A			A		B	B				
Approach Delay (s)		8.6			7.8		11.3				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		9.0			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		40.9			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		47.4%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2017 Alt 1
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	3	36	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	3	52	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	73	52	52			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	73	52	52			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	926	1015	1554			
Direction, Lane #						
Volume Total	16	12	52			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	1015	1554	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.3	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.3	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.5				
Intersection Capacity Utilization		17.2%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1412	34	0	3976	553	0	0	477	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1701	41	0	4322	601	0	0	596	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4943			1762			3214	6685	628	5229	6404	1781
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4943			1762			3214	6685	628	5229	6404	1781
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	83
cM capacity (veh/h)	17			345			3	0	1357	0	0	69
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	680	680	381	1729	1729	1465	596	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	601	596	12				
cSH	1700	1700	1700	1700	1700	1700	1357	69				
Volume to Capacity	0.40	0.40	0.22	1.02	1.02	0.86	0.44	0.17				
Queue Length 95th (ft)	0	0	0	0	0	0	57	15				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	67.9				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	67.9				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				104.2%			ICU Level of Service		G			
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR						
Lane Configurations	↑↑↑			↑↑↑		↑						
Volume (veh/h)	1273	202	0	3876	0	232						
Sign Control	Free			Free	Stop							
Grade	0%			0%	0%							
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92						
Hourly flow rate (vph)	1447	230	0	4307	0	252						
Pedestrians	20			20	20							
Lane Width (ft)	12.0			12.0	12.0							
Walking Speed (ft/s)	4.0			4.0	4.0							
Percent Blockage	2			2	2							
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume				1696	3037	637						
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol				1696	3037	637						
tC, single (s)				4.1	6.8	6.9						
tC, 2 stage (s)												
tF (s)				2.2	3.5	3.3						
p0 queue free %				100	100	38						
cM capacity (veh/h)				366	10	406						
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1					
Volume Total	579	579	519	1436	1436	1436	252					
Volume Left	0	0	0	0	0	0	0					
Volume Right	0	0	230	0	0	0	252					
cSH	1700	1700	1700	1700	1700	1700	406					
Volume to Capacity	0.34	0.34	0.31	0.84	0.84	0.84	0.62					
Queue Length 95th (ft)	0	0	0	0	0	0	101					
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.3					
Lane LOS							D					
Approach Delay (s)	0.0			0.0			27.3					
Approach LOS							D					
Intersection Summary												
Average Delay				1.1								
Intersection Capacity Utilization				89.8%			ICU Level of Service		E			
Analysis Period (min)				15								

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1738	1946	343	107	102	0	0	278	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4637		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4637		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1869	2092	369	145	138	0	0	320	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1065	3257	0	145	138	0	0	332	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3210		186	872			397	
v/s Ratio Prot				0.70	c0.70		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				1.01	1.01		0.78	0.16			0.84	
Uniform Delay, d1				29.2	29.2		82.6	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				30.6	19.7		18.4	0.1			14.2	
Delay (s)				59.7	48.8		101.0	56.1			96.5	
Level of Service				E	D		F	E			F	
Approach Delay (s)		0.0			51.5			79.1			96.5	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay				56.1			HCM 2000 Level of Service			E		
HCM 2000 Volume to Capacity ratio				0.96								
Actuated Cycle Length (s)				189.5			Sum of lost time (s)			16.8		
Intersection Capacity Utilization				201.0%			ICU Level of Service			H		
Analysis Period (min)				15								
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	584	92	0	0	0	0	199	211	451	1621	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3251	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3251	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	635	100	0	0	0	0	231	229	490	1689	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	20	48	0	0	0
Lane Group Flow (vph)	0	636	71	0	0	0	0	298	94	490	1689	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					62.8	62.8	35.2	100.8	
Effective Green, g (s)		60.0	60.0					62.8	62.8	35.2	100.8	
Actuated g/C Ratio		0.35	0.35					0.36	0.36	0.20	0.58	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1769	550					1184	524	700	2069	
v/s Ratio Prot								0.09		0.14	c0.48	
v/s Ratio Perm		0.13	0.04						0.07			
v/c Ratio		0.36	0.13					0.25	0.18	0.70	0.82	
Uniform Delay, d1		41.9	38.4					38.4	37.3	63.7	28.4	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.1	2.6	
Delay (s)		42.0	38.5					38.5	37.4	66.8	31.1	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.5			0.0			38.1			39.1	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		39.5						HCM 2000 Level of Service		D		
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		172.4						Sum of lost time (s)		14.4		
Intersection Capacity Utilization		201.0%						ICU Level of Service		H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON_NorthOp Year 2021 Alt 3north

Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	219	6	1169	608	0	1333
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3316			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3316			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	255	7	1257	654	0	1403
RTOR Reduction (vph)	1	0	53	0	0	0
Lane Group Flow (vph)	261	0	1858	0	0	1403
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	18.8		45.4			45.4
Effective Green, g (s)	18.8		45.4			45.4
Actuated g/C Ratio	0.26		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	408		2053			2082
v/s Ratio Prot	c0.16		c0.56			0.42
v/s Ratio Perm						
v/c Ratio	0.64		0.91			0.67
Uniform Delay, d1	24.2		12.1			9.1
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	3.3		6.1			0.9
Delay (s)	27.5		18.2			10.0
Level of Service	C		B			A
Approach Delay (s)	27.5		18.2			10.0
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			15.7		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.87			
Actuated Cycle Length (s)			73.3		Sum of lost time (s)	12.1
Intersection Capacity Utilization			78.2%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2021 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↕	↕	↕	↔	↔	↔
Volume (vph)	47	2	10	8	0	5	19	1385	26	40	1476	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1713		1770	3529		1770	3527	
Frt Permitted	0.74	0.78	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1310	1377	1583		1513		1770	3529		1770	3527	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	55	2	12	16	0	10	23	1649	31	43	1604	39
RTOR Reduction (vph)	0	0	10	0	22	0	0	1	0	0	1	0
Lane Group Flow (vph)	29	28	2	0	4	0	23	1679	0	43	1642	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.4	15.4	15.4		15.4		2.7	64.7		4.0	66.0	
Effective Green, g (s)	15.4	15.4	15.4		15.4		2.7	64.7		4.0	66.0	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	205	215	248		237		48	2325		72	2370	
v/s Ratio Prot							0.01	c0.48		c0.02	0.47	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.14	0.13	0.01		0.02		0.48	0.72		0.60	0.69	
Uniform Delay, d1	35.7	35.6	34.9		35.0		47.1	10.9		46.3	9.9	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		7.4	1.1		12.6	0.9	
Delay (s)	36.0	35.9	35.0		35.0		54.4	12.0		58.9	10.8	
Level of Service	D	D	C		D		D	B		E	B	
Approach Delay (s)		35.8			35.0			12.6			12.0	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.9		HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio			0.61									
Actuated Cycle Length (s)			98.2		Sum of lost time (s)			14.1				
Intersection Capacity Utilization			62.4%		ICU Level of Service			B				
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	23	0	1329	8	431	1036	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	35	0	1460	9	440	1057	0
RTOR Reduction (vph)	0	0	0	0	32	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1460	4	440	1057	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.41		c0.25	0.30	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.88	0.01	0.72	0.35	
Uniform Delay, d1					60.6			34.7	20.4	41.4	2.5	
Progression Factor					1.00			0.36	1.00	1.00	1.00	
Incremental Delay, d2					0.1			4.5	0.0	4.2	0.3	
Delay (s)					60.6			17.1	20.5	45.6	2.9	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			17.1			15.4	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		16.8			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		84.2%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												











NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	31	55	14	1	70	130	147	1166	5	354	389	333
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3249	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3249	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	48	85	22	1	80	148	163	1296	6	407	447	383
RTOR Reduction (vph)	0	0	20	0	0	125	0	0	3	0	107	0
Lane Group Flow (vph)	48	85	2	0	81	23	163	1296	3	407	723	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1066	
v/s Ratio Prot	0.03	c0.05			c0.04		0.09	c0.37		c0.23	0.22	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.39	0.66	0.02		0.27	0.10	0.30	0.82	0.00	1.19	0.68	
Uniform Delay, d1	64.6	65.9	62.9		53.7	52.1	38.0	35.2	22.3	58.5	42.1	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.92	
Incremental Delay, d2	2.1	12.2	0.1		0.5	0.2	0.3	5.0	0.0	111.7	3.4	
Delay (s)	66.7	78.1	63.0		54.2	52.3	38.3	40.2	22.3	167.8	42.3	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		72.4			53.0			39.9			83.6	
Approach LOS		E			D			D			F	
Intersection Summary												
HCM 2000 Control Delay		60.0			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		88.4%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												











NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	41	200	4	112	394	9
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	48	235	5	140	428	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked	0.99					
vC, conflicting volume	941	75			145	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	938	75			145	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	76	76			70	
cM capacity (veh/h)	205	986			1437	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	284	145	438			
Volume Left	48	0	428			
Volume Right	235	140	0			
cSH	1189	1700	1437			
Volume to Capacity	0.24	0.09	0.30			
Queue Length 95th (ft)	23	0	32			
Control Delay (s)	12.9	0.0	8.4			
Lane LOS	B		A			
Approach Delay (s)	12.9	0.0	8.4			
Approach LOS	B					
Intersection Summary						
Average Delay		8.5				
Intersection Capacity Utilization		39.0%	ICU Level of Service	A		
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	44	3	1331	437	0	365
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1753		3539	1520		3539
Flt Permitted	0.96		1.00	1.00		1.00
Satd. Flow (perm)	1753		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	59	4	1401	460	0	570
RTOR Reduction (vph)	4	0	0	139	0	0
Lane Group Flow (vph)	59	0	1401	321	0	570
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		29.9	29.9		29.9
Effective Green, g (s)	3.0		29.9	29.9		29.9
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	122		2472	1061		2472
v/s Ratio Prot	c0.03		c0.40			0.16
v/s Ratio Perm				0.21		
v/c Ratio	0.49		0.57	0.30		0.23
Uniform Delay, d1	19.2		3.2	2.5		2.3
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	3.0		0.3	0.2		0.0
Delay (s)	22.2		3.5	2.6		2.4
Level of Service	C		A	A		A
Approach Delay (s)	22.2		3.3			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.6	HCM 2000 Level of Service		A	
HCM 2000 Volume to Capacity ratio		0.56				
Actuated Cycle Length (s)		42.8	Sum of lost time (s)		9.9	
Intersection Capacity Utilization		49.2%	ICU Level of Service		A	
Analysis Period (min)		15				
c Critical Lane Group						

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↑↑
Volume (veh/h)	0	15	2182	5	5	410
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2346	5	7	603
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2665	1176			2352	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2665	1176			2352	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			96	
cM capacity (veh/h)	18	184			206	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1564	787	7	301	301
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	184	1700	1700	206	1700	1700
Volume to Capacity	0.14	0.92	0.46	0.04	0.18	0.18
Queue Length 95th (ft)	12	0	0	3	0	0
Control Delay (s)	27.7	0.0	0.0	23.2	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	27.7	0.0		0.3		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			70.5%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	17	87	2095	12	38	371
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	107	2253	13	55	538
RTOR Reduction (vph)	0	3	0	1	0	0
Lane Group Flow (vph)	21	104	2253	12	55	538
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.8	25.9	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.8	20.8	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	261	307	2253	1008	82	2709
v/s Ratio Prot	0.01	c0.07	c0.64		c0.03	0.15
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.34	1.00	0.01	0.67	0.20
Uniform Delay, d1	39.4	37.2	19.4	7.1	50.2	3.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	19.0	0.0	19.4	0.0
Delay (s)	39.5	37.9	38.4	7.1	69.7	3.5
Level of Service	D	D	D	A	E	A
Approach Delay (s)	38.1		38.2			9.6
Approach LOS	D		D			A
Intersection Summary						
HCM 2000 Control Delay			32.6		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.86			
Actuated Cycle Length (s)			107.1		Sum of lost time (s)	18.1
Intersection Capacity Utilization			74.1%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↑↑			↑↑
Volume (veh/h)	0	32	2073	26	0	387
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	52	2182	27	0	523
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2457	1105			2209	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2457	1105			2209	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	75			100	
cM capacity (veh/h)	25	206			234	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	52	1455	755	261	261	
Volume Left	0	0	0	0	0	
Volume Right	52	0	27	0	0	
cSH	206	1700	1700	1700	1700	
Volume to Capacity	0.25	0.86	0.44	0.15	0.15	
Queue Length 95th (ft)	24	0	0	0	0	
Control Delay (s)	28.3	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	28.3	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		68.1%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	10	6	2099	32	15	364
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	16	10	2186	33	19	449
RTOR Reduction (vph)	0	4	0	7	0	0
Lane Group Flow (vph)	16	6	2186	26	19	449
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.7	59.7	2.0	69.2
Effective Green, g (s)	1.4	3.4	59.7	59.7	2.0	69.2
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2736	1224	45	3172
v/s Ratio Prot	c0.01	0.00	c0.62		c0.01	0.13
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.50	0.09	0.80	0.02	0.42	0.14
Uniform Delay, d1	37.6	35.4	5.2	2.0	37.0	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.8	0.6	1.7	0.0	6.3	0.0
Delay (s)	49.3	36.0	6.9	2.0	43.3	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	44.2		6.8			2.2
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		6.4		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.78				
Actuated Cycle Length (s)		77.2		Sum of lost time (s)		14.1
Intersection Capacity Utilization		70.9%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus MILCON_NorthOp Year 2021 Alt 3north
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	45	1	0	44	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	83	2	0	70	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	85	70	3					
Volume Left (vph)	0	0	83	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	833	1121	815	841	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.2%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus MILCON_NorthOp Year 2021 Alt 3north
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: AM PEAK















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	36	0	0	32	226	3	1903	50	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1357	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	48	0	0	44	314	3	2024	53	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	22	0	0	0	0
Lane Group Flow (vph)	3	48	0	0	44	258	3	2024	31	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.5	16.5			16.5	16.5	47.7	43.6	43.6			
Effective Green, g (s)	16.5	16.5			16.5	16.5	47.7	43.6	43.6			
Actuated g/C Ratio	0.22	0.22			0.22	0.22	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	304	418			418	355	1148	2099	939			
v/s Ratio Prot		0.03			0.02		0.00	c0.57				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.11			0.11	0.73	0.00	0.96	0.03			
Uniform Delay, d1	22.2	22.7			22.6	26.4	4.5	14.2	6.2			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	7.2	0.0	12.3	0.0			
Delay (s)	22.2	22.8			22.7	33.7	4.5	26.5	6.2			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.8			32.3			25.9			0.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay		26.8						HCM 2000 Level of Service		C		
HCM 2000 Volume to Capacity ratio		0.90										
Actuated Cycle Length (s)		73.5				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		86.2%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON_NorthOp Year 2021 Alt 3north

Timing Plan: AM PEAK

























							
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	17	32	854	1685	0	180	153
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	68	128	890	1755	0	228	194
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None			None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2981	211	422		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2981	211	422		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	84	22		0		
cM capacity (veh/h)	2	795	1134		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	196	890	878	878	152	270	0
Volume Left	68	890	0	0	0	0	0
Volume Right	128	0	0	0	0	194	0
cSH	7	1134	1700	1700	1700	1700	1700
Volume to Capacity	29.03	0.78	0.52	0.52	0.09	0.16	0.00
Queue Length 95th (ft)	Err	213	0	0	0	0	0
Control Delay (s)	Err	18.6	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C					
Approach Delay (s)	Err	6.3			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay		605.8					
Intersection Capacity Utilization		70.5%		ICU Level of Service		C	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2021 Alt 3north

Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	398	0	39	2	1	2	26	2412	0	0	164	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3427	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3427	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	452	0	44	6	3	6	27	2539	0	0	238	64
RTOR Reduction (vph)	0	31	0	0	6	0	0	0	0	0	21	0
Lane Group Flow (vph)	452	13	0	6	3	0	27	2539	0	0	281	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	25.9	25.9		1.7	1.7		1.9	43.5			37.4	
Effective Green, g (s)	25.9	25.9		1.7	1.7		1.9	43.5			37.4	
Actuated g/C Ratio	0.30	0.30		0.02	0.02		0.02	0.51			0.44	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	534	477		35	33		39	1794			1493	
v/s Ratio Prot	c0.26	0.01		c0.00	0.00		0.02	c0.72			0.08	
v/s Ratio Perm												
v/c Ratio	0.85	0.03		0.17	0.09		0.69	1.42			0.19	
Uniform Delay, d1	28.1	21.1		41.4	41.3		41.7	21.1			14.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	11.8	0.0		2.3	1.2		41.8	190.2			0.1	
Delay (s)	39.9	21.1		43.7	42.5		83.5	211.4			14.9	
Level of Service	D	C		D	D		F	F			B	
Approach Delay (s)		38.2			43.0			210.0			14.9	
Approach LOS		D			D			F			B	
Intersection Summary												
HCM 2000 Control Delay		166.6					HCM 2000 Level of Service		F			
HCM 2000 Volume to Capacity ratio		1.25										
Actuated Cycle Length (s)		85.8				Sum of lost time (s)		18.9				
Intersection Capacity Utilization		103.8%				ICU Level of Service		G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	8	214	14	0	2265	17	43	23	1	19	41	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5038			5080		1770	1853			1732	
Flt Permitted	0.95	1.00			1.00		0.67	1.00			0.19	
Satd. Flow (perm)	1770	5038			5080		1239	1853			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	
Adj. Flow (vph)	9	240	16	0	2489	19	51	27	1	25	53	66
RTOR Reduction (vph)	0	4	0	0	1	0	0	1	0	0	17	0
Lane Group Flow (vph)	9	252	0	0	2507	0	51	27	0	0	127	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1906			2063		240	360			53	
v/s Ratio Prot	c0.01	0.05			c0.49			0.01				
v/s Ratio Perm							c0.04				c0.39	
v/c Ratio	0.05	0.13			1.22		0.21	0.08			2.40	
Uniform Delay, d1	71.5	36.6			53.5		60.9	59.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.1			100.5		0.4	0.1			684.8	
Delay (s)	71.6	36.8			153.9		61.4	59.4			759.8	
Level of Service	E	D			F		E	E			F	
Approach Delay (s)		37.9			153.9			60.7			759.8	
Approach LOS		D			F			E			F	
Intersection Summary												
HCM 2000 Control Delay		170.3			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.06										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		82.6%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	232	0	394	2273	9	0	0	0	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3537							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3537							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	283	0	419	2418	10	0	0	0	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	283	0	419	2428	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3214							609
v/s Ratio Prot		0.06		0.12	c0.69							
v/s Ratio Perm												0.00
v/c Ratio		0.15		0.24	0.76							0.01
Uniform Delay, d1		36.8		25.6	2.4							34.9
Progression Factor		0.40		1.00	1.00							1.00
Incremental Delay, d2		0.2		0.1	1.0							0.0
Delay (s)		14.9		25.7	3.4							35.0
Level of Service		B		C	A							C
Approach Delay (s)		14.9			6.7		0.0				35.0	
Approach LOS		B			A		A				C	
Intersection Summary												
HCM 2000 Control Delay		7.6			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		84.8%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2021 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	9	237	0	0	128	104	0	0	0	47	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	11	282	0	0	138	112	0	0	0	52	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	249			282			502	553	282	497	497	194
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	249			282			502	553	282	497	497	194
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1316			1280			475	437	757	480	471	848

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	293	249	0	56
Volume Left	11	0	0	52
Volume Right	0	112	0	4
cSH	1316	1280	1700	497
Volume to Capacity	0.01	0.00	0.00	0.11
Queue Length 95th (ft)	1	0	0	9
Control Delay (s)	0.4	0.0	0.0	13.2
Lane LOS	A		A	B
Approach Delay (s)	0.4	0.0	0.0	13.2
Approach LOS			A	B

Intersection Summary

Average Delay	1.4			
Intersection Capacity Utilization	29.8%		ICU Level of Service	A
Analysis Period (min)	15			

NBC Coastal Campus

22: 3rd St & Palm Ave

MILCON_NorthOp Year 2021 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	276	4	26	209	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	321	5	28	225	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	326	28	251	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.1	5.5	5.1	5.7						
Degree Utilization, x	0.01	0.50	0.05	0.38	0.26	0.07						
Capacity (veh/h)	578	635	565	630	634	546						
Control Delay (s)	7.9	12.6	8.2	10.6	9.9	9.1						
Approach Delay (s)	12.5		10.4		9.9	9.1						
Approach LOS	B		B		A	A						

Intersection Summary

Delay	11.0			
Level of Service	B			
Intersection Capacity Utilization	37.6%		ICU Level of Service	A
Analysis Period (min)	15			























NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↕	↕↕		↕	
Volume (veh/h)	230	426	333	152	17	69
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	291	539	406	185	24	97
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	591				1620	296
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	591				1620	296
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	70				64	86
cM capacity (veh/h)	980				66	701
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	291	539	271	321	121	
Volume Left	291	0	0	0	24	
Volume Right	0	0	0	185	97	
cSH	980	1700	1700	1700	241	
Volume to Capacity	0.30	0.32	0.16	0.19	0.50	
Queue Length 95th (ft)	31	0	0	0	64	
Control Delay (s)	10.2	0.0	0.0	0.0	34.0	
Lane LOS	B				D	
Approach Delay (s)	3.6		0.0		34.0	
Approach LOS					D	
Intersection Summary						
Average Delay			4.6			
Intersection Capacity Utilization			42.0%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		 			 			 			 		
Volume (vph)	16	419	15	26	334	0	66	40	81	1	21	27	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00	
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00	
Satd. Flow (prot)	1770	3521		1770	3539			1723			1858	1583	
Flt Permitted	0.50	1.00		0.44	1.00			0.88			0.98	1.00	
Satd. Flow (perm)	931	3521		821	3539			1540			1829	1583	
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58	
Adj. Flow (vph)	21	544	19	34	434	0	100	61	123	2	36	47	
RTOR Reduction (vph)	0	3	0	0	0	0	0	32	0	0	0	29	
Lane Group Flow (vph)	21	560	0	34	434	0	0	252	0	0	38	18	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm	
Protected Phases		2			6			8			4		
Permitted Phases	2			6			8			4		4	
Actuated Green, G (s)	13.2	13.2		13.2	13.2			13.3			13.3	13.3	
Effective Green, g (s)	13.2	13.2		13.2	13.2			13.3			13.3	13.3	
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37	
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0	
Lane Grp Cap (vph)	344	1301		303	1308			573			681	589	
v/s Ratio Prot		c0.16			0.12								
v/s Ratio Perm	0.02			0.04				c0.16			0.02	0.01	
v/c Ratio	0.06	0.43		0.11	0.33			0.44			0.06	0.03	
Uniform Delay, d1	7.3	8.4		7.4	8.1			8.4			7.2	7.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00	
Incremental Delay, d2	0.1	0.2		0.2	0.2			0.5			0.0	0.0	
Delay (s)	7.3	8.7		7.6	8.2			8.9			7.2	7.1	
Level of Service	A	A		A	A			A			A	A	
Approach Delay (s)		8.6			8.2			8.9			7.2		
Approach LOS		A			A			A			A		
Intersection Summary													
HCM 2000 Control Delay			8.5	HCM 2000 Level of Service				A					
HCM 2000 Volume to Capacity ratio			0.43										
Actuated Cycle Length (s)			35.7	Sum of lost time (s)				9.2					
Intersection Capacity Utilization			46.7%	ICU Level of Service				A					
Analysis Period (min)			15										
c Critical Lane Group													

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	504	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	548	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			552		548	548
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			552		548	548
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1018		498	536
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	548	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	525			
Volume to Capacity	0.32	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.0			
Lane LOS			B			
Approach Delay (s)	0.0		12.0			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.5%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑↑↑	↑	↑	↑	↑	↑	↑	↑
Volume (vph)	21	684	35	23	2414	43	168	37	51	90	46	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5048		1770	5072			3325			3365	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5048		1770	5072			3325			3365	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	814	42	25	2653	47	202	45	61	110	56	29
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	853	0	25	2699	0	0	296	0	0	187	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2235		118	2161			646			654	
v/s Ratio Prot	0.01	c0.17		c0.01	c0.53			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.17	0.38		0.21	1.25			0.46			0.29	
Uniform Delay, d1	76.7	33.6		79.5	51.6			64.1			61.8	
Progression Factor	1.00	1.00		1.11	0.96			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.6	114.5			0.5			0.2	
Delay (s)	77.3	34.1		88.8	164.0			64.6			62.1	
Level of Service	E	C		F	F			E			E	
Approach Delay (s)		35.3			163.3			64.6			62.1	
Approach LOS		D			F			E			E	
Intersection Summary												
HCM 2000 Control Delay		123.7			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		84.7%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	
Volume (vph)	2	916	35	20	2589	12	18	4	31	55	11	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	5082			1687		1770	1704	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5057		1770	5082			1542		1231	1704	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	1029	39	23	2942	14	25	5	42	79	16	21
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	18	0
Lane Group Flow (vph)	2	1066	0	23	2956	0	0	44	0	79	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3718			257		205	284	
v/s Ratio Prot	0.00	0.21		c0.01	c0.58						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.31		0.19	0.79			0.17		0.39	0.07	
Uniform Delay, d1	86.1	11.2		79.4	15.5			64.3		66.8	63.2	
Progression Factor	1.71	0.26		1.42	0.40			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.1	0.2			0.3		1.2	0.1	
Delay (s)	147.9	3.2		113.1	6.3			64.6		68.0	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.4			7.1			64.6			66.5	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		83.7%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰		↰	↰	
Volume (vph)	3	987	64	96	2438	52	150	19	91	170	36	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.91	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1783	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1783	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1109	72	116	2937	63	169	21	102	227	48	20
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	84	0	3	0
Lane Group Flow (vph)	3	1177	0	116	2937	33	0	190	18	0	292	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.23		c0.07	c0.58			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.53		0.59	1.09	0.04		0.62	0.06		0.50	
Uniform Delay, d1	86.2	36.5		76.1	42.1	20.2		69.0	62.4		67.5	
Progression Factor	1.22	0.62		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.9		4.7	46.0	0.1		3.7	0.1		0.7	
Delay (s)	105.7	23.5		80.8	88.2	20.3		72.7	62.5		68.2	
Level of Service	F	C		F	F	C		E	E		E	
Approach Delay (s)		23.7			86.5			69.1			68.2	
Approach LOS		C			F			E			E	
Intersection Summary												
HCM 2000 Control Delay		69.2			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		101.0%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	↰
Volume (vph)	14	1255	25	43	2568	12	16	6	49	38	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5082			1670			1723	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.78	
Satd. Flow (perm)	1770	5070		1770	5082			1562			1378	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	15	1364	27	50	2986	14	19	7	58	50	3	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	46	0	0	22	0
Lane Group Flow (vph)	15	1390	0	50	3000	0	0	38	0	0	59	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Effective Green, g (s)	0.7	37.4		2.9	39.6			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2666		72	2830			331			292	
v/s Ratio Prot	0.01	0.27		c0.03	c0.59							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.88	0.52		0.69	1.06			0.12			0.20	
Uniform Delay, d1	35.2	11.0		33.7	15.7			22.6			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	159.7	0.2		25.2	35.5			0.2			0.3	
Delay (s)	194.9	11.2		58.8	51.3			22.8			23.4	
Level of Service	F	B		E	D			C			C	
Approach Delay (s)		13.1			51.4			22.8			23.4	
Approach LOS		B			D			C			C	
Intersection Summary												
HCM 2000 Control Delay		38.7			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		71.1			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		66.8%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	92	1268	30	247	2504	217	79	73	780	238	93	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	107	1474	35	263	2664	231	88	81	867	283	111	92
RTOR Reduction (vph)	0	2	0	0	0	67	0	155	182	0	3	60
Lane Group Flow (vph)	107	1507	0	263	2664	164	88	325	286	283	117	23
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.4	30.1	30.1	10.4	32.1	32.1
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.4	30.1	30.1	10.4	32.1	32.1
Actuated g/C Ratio	0.05	0.30		0.15	0.41	0.41	0.07	0.26	0.26	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	178	1544		274	2073	645	128	403	391	309	486	417
v/s Ratio Prot	0.03	0.30		c0.15	c0.52		0.05	c0.21		c0.08	0.07	
v/s Ratio Perm						0.10			0.19			0.02
v/c Ratio	0.60	0.98		0.96	1.29	0.25	0.69	0.81	0.73	0.92	0.24	0.06
Uniform Delay, d1	53.6	39.7		48.4	34.2	22.6	52.3	40.0	39.0	52.1	32.3	30.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.6	17.3		42.9	132.1	0.2	14.3	11.3	6.9	30.2	0.3	0.1
Delay (s)	59.2	57.1		91.3	166.3	22.8	66.5	51.3	45.9	82.3	32.5	30.6
Level of Service	E	E		F	F	C	E	D	D	F	C	C
Approach Delay (s)		57.2			149.6			50.2			61.2	
Approach LOS		E			F			D			E	
Intersection Summary												
HCM 2000 Control Delay		102.7			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.10										
Actuated Cycle Length (s)		115.5			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		97.4%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2021 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕	↕↕
Volume (vph)	0	288	1285	0	157	1686
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	324	1382	0	174	1873
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	324	1382	0	174	1870
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.39		0.10	c0.67
v/s Ratio Perm						
v/c Ratio		0.12	1.18		0.84	1.22
Uniform Delay, d1		2.5	26.8		34.6	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	91.9		25.2	105.5
Delay (s)		2.5	118.7		59.8	123.5
Level of Service		A	F		E	F
Approach Delay (s)		2.5	118.7		118.1	
Approach LOS		A	F		F	
Intersection Summary						
HCM 2000 Control Delay		108.3			HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio		1.29				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		81.6%			ICU Level of Service	D
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕		↕	↕↕				
Volume (vph)	0	446	0	0	438	530	950	1	145	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.96				
Flt Protected		1.00			1.00		0.95	0.96				
Satd. Flow (prot)		3539			3249		1681	1638				
Flt Permitted		1.00			1.00		0.95	0.96				
Satd. Flow (perm)		3539			3249		1681	1638				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	513	0	0	476	576	1033	1	158	0	0	0
RTOR Reduction (vph)	0	0	0	0	367	0	0	24	0	0	0	0
Lane Group Flow (vph)	0	513	0	0	685	0	609	559	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		17.2			17.2		22.3	22.3				
Effective Green, g (s)		17.2			17.2		22.3	22.3				
Actuated g/C Ratio		0.36			0.36		0.47	0.47				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1281			1176		789	768				
v/s Ratio Prot		0.14			c0.21							
v/s Ratio Perm							c0.36	0.34				
v/c Ratio		0.40			0.58		0.77	0.73				
Uniform Delay, d1		11.3			12.2		10.5	10.2				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		4.7	3.5				
Delay (s)		11.5			13.0		15.2	13.6				
Level of Service		B			B		B	B				
Approach Delay (s)		11.5			13.0		14.4				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay		13.3							HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		47.5							Sum of lost time (s)		8.0	
Intersection Capacity Utilization		73.2%							ICU Level of Service		D	
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔			↕	↕	
Volume (veh/h)	0	3	4	66	13	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	92	32	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	134	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	134	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	856	1042	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	97	32			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	1042	1581	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			16.7%	ICU Level of Service	A	
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕↕			↕↕↕				↕			↕
Volume (veh/h)	0	4155	17	0	1827	244	0	0	909	0	0	55
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4328	18	0	1884	252	0	0	1010	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2155			4366			5088	6512	1492	3492	6395	794
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2155			4366			5088	6512	1492	3492	6395	794
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	45	100	100	74
cM capacity (veh/h)	242			30			0	0	1852	1	0	320
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1731	1731	883	753	753	628	1010	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	252	1010	83				
cSH	1700	1700	1700	1700	1700	1700	1852	320				
Volume to Capacity	1.02	1.02	0.52	0.44	0.44	0.37	0.55	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	87	26				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3	20.2				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.3	20.2				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.5								
Intersection Capacity Utilization				145.5%	ICU Level of Service		H					
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	3986	130	0	1864	0	207	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	4109	134	0	1942	0	252	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4263		4864	1477	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4263		4864	1477	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			34		0	111	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1644	1644	956	647	647	647	252
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	252
cSH	1700	1700	1700	1700	1700	1700	111
Volume to Capacity	0.97	0.97	0.56	0.38	0.38	0.38	2.27
Queue Length 95th (ft)	0	0	0	0	0	0	549
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	660.0
Lane LOS							F
Approach Delay (s)	0.0			0.0			660.0
Approach LOS							F
Intersection Summary							
Average Delay			25.9				
Intersection Capacity Utilization			101.4%		ICU Level of Service		G
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑↑			↑↑↑	
Volume (vph)	0	0	0	991	635	109	114	252		0	0	861
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6				6.0
Lane Util. Factor				0.86	0.86		1.00	0.95				0.95
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Flpb, ped/bikes				1.00	1.00		1.00	1.00				1.00
Frt				1.00	0.99		1.00	1.00				1.00
Flt Protected				0.95	0.98		0.95	1.00				1.00
Satd. Flow (prot)				1522	4636		1770	3539				3528
Flt Permitted				0.95	0.98		0.95	1.00				1.00
Satd. Flow (perm)				1522	4636		1770	3539				3528
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1043	668	115	118	260	0	0	888	16
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	521	1293	0	118	260	0	0	902	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8				4
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6				40.0
Effective Green, g (s)				27.8	27.8		5.0	50.6				40.0
Actuated g/C Ratio				0.31	0.31		0.06	0.56				0.44
Clearance Time (s)				6.0	6.0		5.2	5.6				6.0
Vehicle Extension (s)				3.0	3.0		3.0	3.0				3.0
Lane Grp Cap (vph)				470	1432		98	1989				1568
v/s Ratio Prot				c0.34	0.28		c0.07	0.07				c0.26
v/s Ratio Perm												
v/c Ratio				1.11	0.99d1		1.20	0.13				0.58
Uniform Delay, d1				31.1	29.8		42.5	9.3				18.7
Progression Factor				1.00	1.00		1.00	1.00				1.00
Incremental Delay, d2				74.5	8.3		155.7	0.0				0.5
Delay (s)				105.6	38.1		198.2	9.3				19.2
Level of Service				F	D		F	A				B
Approach Delay (s)		0.0			57.3			68.3				19.2
Approach LOS		A			E			E				B
Intersection Summary												
HCM 2000 Control Delay			47.6				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.82									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)				17.2		
Intersection Capacity Utilization		135.9%				ICU Level of Service				H		
Analysis Period (min)			15									
d1 Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔↔	
Volume (vph)	7	2111	111	0	0	0	0	366	603	761	1114	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.97	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.93	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3074	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3074	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2320	122	0	0	0	0	426	701	793	1160	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2328	93	0	0	0	0	763	329	793	1160	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					932	409	865	2022	
v/s Ratio Prot		c0.46						c0.25		c0.23	0.33	
v/s Ratio Perm			0.06						0.24			
v/c Ratio		1.26	0.16					0.82	0.80	0.92	0.57	
Uniform Delay, d1		55.8	37.8					56.5	56.2	63.7	23.9	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		123.5	0.1					5.7	10.9	14.2	0.4	
Delay (s)		179.3	37.9					62.2	67.1	77.9	24.3	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		172.3			0.0			63.7			46.1	
Approach LOS		F			A			E			D	
Intersection Summary												
HCM 2000 Control Delay		105.6									F	
HCM 2000 Volume to Capacity ratio		1.02										
Actuated Cycle Length (s)		175.0							14.4			
Intersection Capacity Utilization		135.9%							H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave













MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔		↔↔			↔↔
Volume (vph)	175	12	1087	700	0	1259
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1583		3288			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1583		3288			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	224	15	1221	787	0	1354
RTOR Reduction (vph)	2	0	50	0	0	0
Lane Group Flow (vph)	237	0	1958	0	0	1354
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	296		2484			2540
v/s Ratio Prot	c0.15		c0.60			0.40
v/s Ratio Perm						
v/c Ratio	0.80		0.79			0.53
Uniform Delay, d1	62.2		11.8			8.0
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	14.4		2.6			0.8
Delay (s)	76.6		14.4			8.8
Level of Service	E		B			A
Approach Delay (s)	76.6		14.4			8.8
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay			16.4			HCM 2000 Level of Service B
HCM 2000 Volume to Capacity ratio			0.81			
Actuated Cycle Length (s)			160.0			Sum of lost time (s) 12.1
Intersection Capacity Utilization			85.8%			ICU Level of Service E
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2021 Alt 3north













Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	145	10	29	26	10	25	23	1704	49	68	1485	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1724		1770	3524		1770	3490	
Flt Permitted	0.68	0.68	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1201	1203	1583		1460		1770	3524		1770	3490	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	186	13	37	41	16	39	25	1832	53	74	1614	166
RTOR Reduction (vph)	0	0	31	0	22	0	0	1	0	0	2	0
Lane Group Flow (vph)	99	100	6	0	74	0	25	1884	0	74	1778	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	19.1	19.1	19.1		19.1		3.1	71.9		8.1	76.9	
Effective Green, g (s)	19.1	19.1	19.1		19.1		3.1	71.9		8.1	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	201	201	265		244		48	2224		125	2356	
v/s Ratio Prot							0.01	c0.53		c0.04	0.51	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.49	0.50	0.02		0.30		0.52	0.85		0.59	0.75	
Uniform Delay, d1	43.0	43.0	39.6		41.6		54.7	16.6		51.3	12.3	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.9	1.9	0.0		0.7		9.8	3.2		7.3	1.4	
Delay (s)	44.9	45.0	39.6		42.2		64.5	19.8		58.6	13.7	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		44.1			42.2			20.4			15.5	
Approach LOS		D			D			C			B	
Intersection Summary												
HCM 2000 Control Delay		20.1			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		113.9			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		75.8%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2021 Alt 3north

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	8	0	146	0	1508	0	32	1625	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	12	0	212	0	1604	0	34	1747	0
RTOR Reduction (vph)	0	0	0	0	172	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	52	0	0	1604	0	34	1747	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.1			45.1		1.7	51.0	
Effective Green, g (s)					14.1			45.1		1.7	51.0	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					303			2122		40	2400	
v/s Ratio Prot					c0.03			0.45		0.02	c0.49	
v/s Ratio Perm												
v/c Ratio					0.17			0.76		0.85	0.73	
Uniform Delay, d1					25.6			11.0		36.6	7.7	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			1.6		84.3	1.1	
Delay (s)					25.9			12.6		121.0	8.8	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			25.9			12.6			11.0	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					12.6			HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio					0.70							
Actuated Cycle Length (s)					75.2			Sum of lost time (s)		18.9		
Intersection Capacity Utilization					62.8%			ICU Level of Service		B		
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑	↱		↰	↑	↱	↑↑	↑	↰	↑↑	↱
Volume (vph)	323	55	129	6	75	475	28	730	2	140	1446	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1514		1855	1509	1770	3539	1343	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1514		1855	1509	1770	3539	1343	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	425	72	170	7	82	516	31	802	2	149	1538	70
RTOR Reduction (vph)	0	0	138	0	0	196	0	0	1	0	2	0
Lane Group Flow (vph)	425	72	32	0	89	320	31	802	1	149	1606	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.6	27.6	27.6		27.6	27.6	4.0	56.1	56.1	17.4	69.5	
Effective Green, g (s)	27.6	27.6	27.6		27.6	27.6	4.0	56.1	56.1	17.4	69.5	
Actuated g/C Ratio	0.19	0.19	0.19		0.19	0.19	0.03	0.38	0.38	0.12	0.47	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	329	347	282		345	281	47	1340	508	207	1648	
v/s Ratio Prot	c0.24	0.04			0.05		0.02	0.23		c0.08	c0.46	
v/s Ratio Perm			0.02			c0.21			0.00			
v/c Ratio	1.29	0.21	0.11		0.26	1.14	0.66	0.60	0.00	0.72	0.97	
Uniform Delay, d1	60.2	51.0	50.1		51.5	60.2	71.4	37.0	28.6	63.0	38.4	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	152.2	0.3	0.2		0.4	96.4	28.7	2.0	0.0	11.4	16.9	
Delay (s)	212.5	51.3	50.2		51.9	156.6	100.1	38.9	28.6	74.4	55.3	
Level of Service	F	D	D		D	F	F	D	C	E	E	
Approach Delay (s)		153.7			141.2			41.2			56.9	
Approach LOS		F			F			D			E	
Intersection Summary												
HCM 2000 Control Delay		83.4								F		
HCM 2000 Volume to Capacity ratio		1.08										
Actuated Cycle Length (s)		148.1				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		83.2%				ICU Level of Service		E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↑	↱			↱
Volume (veh/h)	344	554	3	53	181	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	382	616	4	75	206	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	456	42			79	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	456	42			79	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	21	40			86	
cM capacity (veh/h)	486	1029			1519	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	998	79	209			
Volume Left	382	0	206			
Volume Right	616	75	0			
cSH	940	1700	1519			
Volume to Capacity	1.06	0.05	0.14			
Queue Length 95th (ft)	582	0	12			
Control Delay (s)	67.6	0.0	7.6			
Lane LOS	F		A			
Approach Delay (s)	67.6	0.0	7.6			
Approach LOS	F					
Intersection Summary						
Average Delay		53.7				
Intersection Capacity Utilization		44.4%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (vph)	346	7	765	57	0	1575
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	438	9	850	63	0	1770
RTOR Reduction (vph)	1	0	0	36	0	0
Lane Group Flow (vph)	446	0	850	27	0	1770
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases			2			
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.25		0.24			c0.50
v/s Ratio Perm				0.02		
v/c Ratio	0.53		0.56	0.04		1.16
Uniform Delay, d1	19.3		22.5	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.6		0.4	0.0		81.6
Delay (s)	19.9		22.9	17.4		111.6
Level of Service	B		C	B		F
Approach Delay (s)	19.9		22.6			111.6
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay			72.5		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			0.83			
Actuated Cycle Length (s)			105.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			93.5%		ICU Level of Service	F
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (veh/h)	4	6	624	3	15	1544
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	726	3	16	1697
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1609	365			729	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1609	365			729	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	98			98	
cM capacity (veh/h)	94	632			871	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	20	484	245	16	848	848
Volume Left	8	0	0	16	0	0
Volume Right	12	0	3	0	0	0
cSH	192	1700	1700	871	1700	1700
Volume to Capacity	0.10	0.28	0.14	0.02	0.50	0.50
Queue Length 95th (ft)	9	0	0	1	0	0
Control Delay (s)	26.0	0.0	0.0	9.2	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	26.0	0.0		0.1		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			52.7%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2021 Alt 3north

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↕	↖	↗	↕
Lane Configurations	↖	↗	↕	↖	↗	↕
Volume (vph)	30	57	569	12	103	1446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	33	62	647	14	113	1589
RTOR Reduction (vph)	0	46	0	8	0	0
Lane Group Flow (vph)	33	16	647	6	113	1589
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.4	21.7	27.9	27.9	7.2	43.9
Effective Green, g (s)	9.4	16.6	27.9	27.9	7.2	43.9
Actuated g/C Ratio	0.15	0.27	0.45	0.45	0.12	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	265	419	1577	705	203	2481
v/s Ratio Prot	c0.02	0.01	0.18		0.06	c0.45
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.04	0.41	0.01	0.56	0.64
Uniform Delay, d1	23.0	17.1	11.8	9.7	26.2	5.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.2	0.0	3.3	0.6
Delay (s)	23.2	17.1	11.9	9.7	29.5	5.6
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.2		11.9			7.2
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			8.9		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.66			
Actuated Cycle Length (s)			62.6		Sum of lost time (s)	18.1
Intersection Capacity Utilization			51.9%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2021 Alt 3north







Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	↖	↗	↕	↖	↗	↕
Lane Configurations		↖	↕	↖		↕
Volume (veh/h)	0	23	560	18	0	1476
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	31	644	21	0	1604
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1456	332			664	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1456	332			664	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	121	664			921	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	31	429	235	802	802	
Volume Left	0	0	0	0	0	
Volume Right	31	0	21	0	0	
cSH	664	1700	1700	1700	1700	
Volume to Capacity	0.05	0.25	0.14	0.47	0.47	
Queue Length 95th (ft)	4	0	0	0	0	
Control Delay (s)	10.7	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.7	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			44.1%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2021 Alt 3north

Timing Plan: PM PEAK





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	30	26	553	18	23	1451
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	42	36	588	19	25	1595
RTOR Reduction (vph)	0	33	0	8	0	0
Lane Group Flow (vph)	42	3	588	11	25	1595
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	4.3	28.2	28.2	1.7	37.4
Effective Green, g (s)	2.6	4.3	28.2	28.2	1.7	37.4
Actuated g/C Ratio	0.06	0.09	0.61	0.61	0.04	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	98	146	2141	957	64	2840
v/s Ratio Prot	c0.02	0.00	0.17		0.01	c0.45
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.43	0.02	0.27	0.01	0.39	0.56
Uniform Delay, d1	21.3	19.2	4.4	3.7	21.9	1.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.1	0.1	0.0	3.9	0.3
Delay (s)	24.3	19.3	4.4	3.7	25.9	1.9
Level of Service	C	B	A	A	C	A
Approach Delay (s)	22.0		4.4			2.3
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	3.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	46.6	Sum of lost time (s)	14.1
Intersection Capacity Utilization	51.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2021 Alt 3north

Timing Plan: PM PEAK


























Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	11	14	85	8	0	179	13	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	11	15	110	10	0	201	15	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	11	15	121	216						
Volume Left (vph)	0	0	110	0						
Volume Right (vph)	0	15	0	15						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.19						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						

Intersection Summary			
Delay	7.2		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2021 Alt 3north

Timing Plan: PM PEAK

															
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR			
Lane Configurations															
Volume (vph)	10	185	0	0	81	138	12	474	69	0	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3						
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00						
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85						
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00						
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583						
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00						
Satd. Flow (perm)	1298	1863			1863	1583	1770	3539	1583						
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25			
Adj. Flow (vph)	11	210	0	0	93	159	13	521	76	0	0	0			
RTOR Reduction (vph)	0	0	0	0	0	126	0	41	0	0	0	0			
Lane Group Flow (vph)	11	210	0	0	93	33	13	521	35	0	0	0			
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm						
Protected Phases		4			8		5	2							
Permitted Phases	4					8			2						
Actuated Green, G (s)	8.4	8.4			8.4	8.4	18.3	18.3	18.3						
Effective Green, g (s)	8.4	8.4			8.4	8.4	18.3	18.3	18.3						
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46						
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3						
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0						
Lane Grp Cap (vph)	271	390			390	331	807	1615	722						
v/s Ratio Prot		c0.11			0.05		0.01	c0.15							
v/s Ratio Perm	0.01					0.02			0.02						
v/c Ratio	0.04	0.54			0.24	0.10	0.02	0.32	0.05						
Uniform Delay, d1	12.6	14.1			13.2	12.8	6.0	6.9	6.1						
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00						
Incremental Delay, d2	0.1	1.4			0.3	0.1	0.0	0.1	0.0						
Delay (s)	12.7	15.6			13.5	12.9	6.0	7.1	6.1						
Level of Service	B	B			B	B	A	A	A						
Approach Delay (s)		15.4			13.1		6.9			0.0					
Approach LOS		B			B		A			A					
Intersection Summary															
HCM 2000 Control Delay			10.1			HCM 2000 Level of Service				B					
HCM 2000 Volume to Capacity ratio			0.39												
Actuated Cycle Length (s)			40.1			Sum of lost time (s)				13.4					
Intersection Capacity Utilization			41.2%			ICU Level of Service				A					
Analysis Period (min)			15												
c Critical Lane Group															

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd









MILCON_NorthOp Year 2021 Alt 3north

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰		↰	↑	↱	↑	↱
Volume (veh/h)	152	850	70	467	0	1581	38
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	608	3400	80	531	0	1757	42
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2202	899	1799		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2202	899	1799		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	0	77		0		
cM capacity (veh/h)	29	282	339		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	4008	80	265	265	1171	628	0
Volume Left	608	80	0	0	0	0	0
Volume Right	3400	0	0	0	0	42	0
cSH	121	339	1700	1700	1700	1700	1700
Volume to Capacity	32.99	0.23	0.16	0.16	0.69	0.37	0.00
Queue Length 95th (ft)	Err	22	0	0	0	0	0
Control Delay (s)	Err	18.8	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C					
Approach Delay (s)	Err	2.5			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay		6245.4					
Intersection Capacity Utilization		119.7%			ICU Level of Service		
Analysis Period (min)		15			H		









NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	88	0	68	1	1	0	73	391	12	1	1981	198
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3524		1770	3491	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3524		1770	3491	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	117	0	91	2	2	0	80	430	13	1	2201	220
RTOR Reduction (vph)	0	73	0	0	0	0	0	1	0	0	5	0
Lane Group Flow (vph)	117	18	0	2	2	0	80	442	0	1	2416	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	17.9	17.9		0.8	0.8		5.8	52.1		0.8	47.1	
Effective Green, g (s)	17.9	17.9		0.8	0.8		5.8	52.1		0.8	47.1	
Actuated g/C Ratio	0.20	0.20		0.01	0.01		0.06	0.58		0.01	0.52	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	350	313		15	16		113	2028		15	1816	
v/s Ratio Prot	c0.07	0.01		c0.00	0.00		c0.05	0.13		0.00	c0.69	
v/s Ratio Perm												
v/c Ratio	0.33	0.06		0.13	0.12		0.71	0.22		0.07	1.33	
Uniform Delay, d1	31.2	29.5		44.5	44.5		41.5	9.3		44.5	21.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.1		4.0	3.5		18.3	0.1		1.9	152.5	
Delay (s)	31.7	29.5		48.5	48.0		59.8	9.4		46.4	174.2	
Level of Service	C	C		D	D		E	A		D	F	
Approach Delay (s)		30.8			48.3			17.1			174.1	
Approach LOS		C			D			B			F	
Intersection Summary												
HCM 2000 Control Delay		138.5										
HCM 2000 Volume to Capacity ratio		1.02										
Actuated Cycle Length (s)		90.5										
Intersection Capacity Utilization		81.0%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	57	1931	63	0	427	34	14	40		4	24	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6				5.6
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00				1.00
Flt	1.00	1.00			0.99		1.00	0.99				0.96
Flt Protected	0.95	1.00			1.00		0.95	1.00				0.98
Satd. Flow (prot)	1770	5061			5029		1770	1836				1760
Flt Permitted	0.95	1.00			1.00		0.70	1.00				0.16
Satd. Flow (perm)	1770	5061			5029		1310	1836				284
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	65	2194	72	0	454	36	20	57	6	28	31	24
RTOR Reduction (vph)	0	2	0	0	5	0	0	2	0	0	8	0
Lane Group Flow (vph)	65	2264	0	0	485	0	20	61	0	0	75	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1914			2042		254	357			47	
v/s Ratio Prot	c0.04	c0.45			c0.10			c0.03				
v/s Ratio Perm							0.02				c0.26	
v/c Ratio	0.33	1.18			0.24		0.08	0.17			1.59	
Uniform Delay, d1	73.8	56.0			35.1		59.3	60.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	88.0			0.3		0.1	0.2			344.4	
Delay (s)	74.8	144.0			35.4		59.4	60.6			419.4	
Level of Service	E	F			D		E	E			F	
Approach Delay (s)		142.0			35.4			60.3			419.4	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		130.0										
HCM 2000 Volume to Capacity ratio		0.89										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		77.1%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←
Volume (vph)	0	1961	0	500	465	38	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3500							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3500							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	2203	0	532	495	40	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	2203	0	532	535	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3181							609
v/s Ratio Prot		c0.43		c0.15	c0.15							
v/s Ratio Perm												0.00
v/c Ratio		1.15		0.28	0.17							0.00
Uniform Delay, d1		56.0		20.6	0.9							34.8
Progression Factor		0.36		1.00	1.00							1.00
Incremental Delay, d2		66.2		0.1	0.0							0.0
Delay (s)		86.1		20.7	0.9							34.9
Level of Service		F		C	A							C
Approach Delay (s)		86.1			10.8			0.0			34.9	
Approach LOS		F			B			A			C	
Intersection Summary												
HCM 2000 Control Delay		61.4				HCM 2000 Level of Service		E				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		61.3%				ICU Level of Service		B				
Analysis Period (min)		15										
c Critical Lane Group												



















NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		←←←←			←←←←			←←←←			←←←←	
Volume (veh/h)	3	214	0	0	310	40	0	0	0	104	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	249	0	0	352	45	0	0	0	158	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	398			249			643	654	249	631	631	375
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	398			249			643	654	249	631	631	375
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	60	100	98
cM capacity (veh/h)	1161			1317			379	385	790	393	397	671
Direction, Lane #												
Volume Total	252	398	0	170								
Volume Left	3	0	0	158								
Volume Right	0	45	0	12								
cSH	1161	1317	1700	405								
Volume to Capacity	0.00	0.00	0.00	0.42								
Queue Length 95th (ft)	0	0	0	51								
Control Delay (s)	0.1	0.0	0.0	20.2								
Lane LOS	A			A								
Approach Delay (s)	0.1	0.0	0.0	20.2								
Approach LOS				A								
Intersection Summary												
Average Delay		4.2										
Intersection Capacity Utilization		31.7%				ICU Level of Service		A				
Analysis Period (min)		15										













NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	296	12	85	324	24	14	38	68	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	379	15	96	364	27	25	67	119	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	395	96	391	211	161						
Volume Left (vph)	9	0	96	0	25	61						
Volume Right (vph)	0	15	0	27	119	28						
Hadj (s)	0.53	0.01	0.53	-0.01	-0.28	0.00						
Departure Headway (s)	7.2	6.7	7.1	6.6	6.7	7.1						
Degree Utilization, x	0.02	0.73	0.19	0.71	0.39	0.32						
Capacity (veh/h)	470	518	483	527	476	433						
Control Delay (s)	9.2	24.7	10.6	23.0	13.8	13.3						
Approach Delay (s)	24.4		20.6		13.8	13.3						
Approach LOS	C		C		B	B						
Intersection Summary												
Delay			19.8									
Level of Service			C									
Intersection Capacity Utilization			41.6%		ICU Level of Service			A				
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	74	423	456	39	52	145
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	76	436	530	45	61	171
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)	908					
pX, platoon unblocked						
vC, conflicting volume	576				1142	288
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	576				1142	288
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	92				66	76
cM capacity (veh/h)	994				179	709
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	76	436	353	222	232	
Volume Left	76	0	0	0	61	
Volume Right	0	0	0	45	171	
cSH	994	1700	1700	1700	398	
Volume to Capacity	0.08	0.26	0.21	0.13	0.58	
Queue Length 95th (ft)	6	0	0	0	89	
Control Delay (s)	8.9	0.0	0.0	0.0	25.9	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		25.9	
Approach LOS					D	
Intersection Summary						
Average Delay			5.1			
Intersection Capacity Utilization			40.7%	ICU Level of Service		A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↲	↰	↱	↲	↰	↱	↲	↰	↱	↲
Volume (vph)	28	432	29	31	458	3	55	20	22	12	45	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3536			1755			1843	1583
Flt Permitted	0.47	1.00		0.45	1.00			0.78			0.90	1.00
Satd. Flow (perm)	868	3505		832	3536			1412			1682	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	514	35	34	503	3	67	24	27	16	59	39
RTOR Reduction (vph)	0	7	0	0	1	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	542	0	34	505	0	0	97	0	0	75	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Effective Green, g (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	413	1671		396	1686			308			367	345
v/s Ratio Prot		c0.15			0.14							
v/s Ratio Perm	0.04			0.04				c0.07			0.04	0.01
v/c Ratio	0.08	0.32		0.09	0.30			0.31			0.20	0.02
Uniform Delay, d1	4.3	4.9		4.3	4.8			9.9			9.7	9.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.6			0.3	0.0
Delay (s)	4.4	5.0		4.4	4.9			10.5			9.9	9.3
Level of Service	A	A		A	A			B			A	A
Approach Delay (s)		5.0			4.9			10.5			9.7	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		30.2			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		44.8%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↱	↲	↰	↱	↲
Volume (veh/h)	1049	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	1279	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			1289		1279	1279
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1289		1279	1279
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		95	99
cM capacity (veh/h)			538		183	203
Direction, Lane #						
Volume Total	1279	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	188			
Volume to Capacity	0.75	0.01	0.06			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.0	0.0	25.5			
Lane LOS			D			
Approach Delay (s)	0.0		25.5			
Approach LOS			D			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			65.2%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	41	2252	129	58	850	131	99	90	63	174	80	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Flt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5044		1770	4984			3341			3386	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5044		1770	4984			3341			3386	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	44	2396	137	59	859	132	109	99	69	196	90	28
RTOR Reduction (vph)	0	3	0	0	11	0	0	18	0	0	4	0
Lane Group Flow (vph)	44	2530	0	59	980	0	0	259	0	0	310	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	75.7		16.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.42		0.09	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2121		157	1985			649			658	
v/s Ratio Prot	0.02	c0.50		c0.03	0.20			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.22	1.19		0.38	0.49			0.40			0.47	
Uniform Delay, d1	72.9	52.1		77.3	40.6			63.3			64.3	
Progression Factor	1.00	1.00		1.23	0.79			1.00			1.00	
Incremental Delay, d2	0.6	91.6		1.4	0.8			0.4			0.5	
Delay (s)	73.5	143.8		96.8	32.8			63.7			64.8	
Level of Service	E	F		F	C			E			E	
Approach Delay (s)		142.6			36.4			63.7			64.8	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		105.2			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		118.3%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	20	2536	57	49	1258	55	21	11	35	64	13	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	0.99			0.93			1.00	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.95	
Satd. Flow (prot)	1770	5069		1770	5053			1704			1770	
Flt Permitted	0.95	1.00		0.95	1.00			0.90			0.62	
Satd. Flow (perm)	1770	5069		1770	5053			1554			1156	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2588	58	51	1297	57	25	13	42	75	15	16
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	14	0
Lane Group Flow (vph)	20	2645	0	51	1352	0	0	57	0	75	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4				8	
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2			22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2			22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12			0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	118	3565		157	3666			191			142	
v/s Ratio Prot	0.01	c0.52		c0.03	c0.27						0.01	
v/s Ratio Perm								0.04			c0.06	
v/c Ratio	0.17	0.74		0.32	0.37			0.30			0.53	
Uniform Delay, d1	79.3	16.6		76.9	9.3			71.8			74.0	
Progression Factor	1.47	0.37		1.56	0.29			1.00			1.00	
Incremental Delay, d2	0.1	0.1		1.0	0.2			0.9			3.5	
Delay (s)	116.6	6.3		120.7	2.9			72.7			77.5	
Level of Service	F	A		F	A			E			E	
Approach Delay (s)		7.1			7.2			72.7			75.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		10.1			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		70.0%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰		↰↰	
Volume (vph)	27	2251	203	158	1333	82	130	40	128	155	45	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5022		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5022		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	29	2395	216	163	1374	85	141	43	139	209	61	27
RTOR Reduction (vph)	0	6	0	0	0	37	0	0	115	0	4	0
Lane Group Flow (vph)	29	2605	0	163	1374	48	0	184	24	0	293	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2			4				
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2223		192	2364	736		305	269		575	
v/s Ratio Prot	0.02	c0.52		c0.09	c0.27			c0.10			c0.09	
v/s Ratio Perm					0.03			0.01				
v/c Ratio	0.18	1.17		0.85	0.58	0.07		0.60	0.09		0.51	
Uniform Delay, d1	76.0	50.1		78.7	35.3	26.6		69.0	62.9		67.8	
Progression Factor	0.94	1.03		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.4	81.0		27.8	1.1	0.2		8.6	0.6		3.2	
Delay (s)	71.5	132.8		106.6	36.4	26.7		77.6	63.5		71.0	
Level of Service	E	F		F	D	C		E	E		E	
Approach Delay (s)		132.2			42.9			71.5			71.0	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		94.8			HCM 2000 Level of Service					F		
HCM 2000 Volume to Capacity ratio		0.89										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)					19.3		
Intersection Capacity Utilization		111.9%			ICU Level of Service					H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰	↰		↰↰	
Volume (vph)	10	2544	50	172	1634	16	39	8	82	23	11	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1770	5070		1770	5078			1677			1756	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.84	
Satd. Flow (perm)	1770	5070		1770	5078			1511			1515	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.95	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	11	2827	56	181	1720	17	46	9	96	28	14	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	76	0	0	11	0
Lane Group Flow (vph)	11	2881	0	181	1736	0	0	75	0	0	45	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.8	40.4		11.2	50.8			17.3			17.3	
Effective Green, g (s)	0.8	40.4		11.2	50.8			17.3			17.3	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2421		234	3049			308			309	
v/s Ratio Prot	0.01	c0.57		c0.10	0.34							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.69	1.19		0.77	0.57			0.24			0.15	
Uniform Delay, d1	41.8	22.1		35.5	10.3			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	80.1	90.0		14.7	0.2			0.4			0.2	
Delay (s)	121.9	112.1		50.1	10.5			28.6			27.8	
Level of Service	F	F		D	B			C			C	
Approach Delay (s)		112.1			14.2			28.6			27.8	
Approach LOS		F			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		71.3			HCM 2000 Level of Service					E		
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		84.6			Sum of lost time (s)					15.7		
Intersection Capacity Utilization		81.2%			ICU Level of Service					D		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	191	2481	29	332	1641	562	67	179	540	595	242	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5076		1770	5085	1583	1770	1631	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	201	2612	31	357	1765	604	71	190	574	647	263	250
RTOR Reduction (vph)	0	1	0	0	0	86	0	26	276	0	2	128
Lane Group Flow (vph)	201	2642	0	357	1765	518	71	371	91	647	286	97
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.4	36.4		45.0	70.0	70.0	8.7	37.8	37.8	11.8	40.9	40.9
Effective Green, g (s)	11.4	36.4		45.0	70.0	70.0	8.7	37.8	37.8	11.8	40.9	40.9
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1208		520	2327	724	100	403	371	264	467	402
v/s Ratio Prot	0.06	c0.52		c0.20	c0.35		0.04	c0.23		c0.19	c0.16	
v/s Ratio Perm					0.33			0.06				0.06
v/c Ratio	0.79	2.19		0.69	0.76	0.72	0.71	0.92	0.24	2.45	0.61	0.24
Uniform Delay, d1	69.6	58.3		47.7	34.4	33.4	70.9	56.1	46.1	70.5	49.1	43.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.8	537.0		3.8	1.5	3.4	20.6	26.3	0.3	664.2	2.4	0.3
Delay (s)	84.4	595.3		51.5	35.9	36.8	91.4	82.4	46.5	734.7	51.4	44.2
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		559.2			38.1			67.3			431.1	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		297.5			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.34										
Actuated Cycle Length (s)		152.9			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		136.5%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	↔
Volume (vph)	0	520	873	0	445	1668
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	584	929	0	489	1833
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	584	929	0	489	1830
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.17	c0.26		0.28	c0.66
v/s Ratio Perm						
v/c Ratio		0.33	1.08		0.74	1.03
Uniform Delay, d1		11.7	30.3		21.6	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	55.6		4.3	29.5
Delay (s)		11.8	85.9		25.9	44.0
Level of Service		B	F		C	D
Approach Delay (s)		11.8	85.9		40.2	
Approach LOS		B	F		D	
Intersection Summary						
HCM 2000 Control Delay		47.0			HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio		1.12				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		87.4%			ICU Level of Service	E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑				
Volume (vph)	0	959	0	0	534	253	448	2	108	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3369		1681	1616				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3369		1681	1616				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	999	0	0	600	284	482	2	116	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	33	0	0	0	0
Lane Group Flow (vph)	0	999	0	0	786	0	308	259	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.4			19.4		14.6	14.6				
Effective Green, g (s)		19.4			19.4		14.6	14.6				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1634			1556		584	561				
v/s Ratio Prot		0.28			0.23							
v/s Ratio Perm							0.18	0.16				
v/c Ratio		0.61			0.51		0.53	0.46				
Uniform Delay, d1		8.5			7.9		10.9	10.6				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.7			0.3		0.9	0.6				
Delay (s)		9.2			8.2		11.8	11.2				
Level of Service		A			A		B	B				
Approach Delay (s)		9.2			8.2		11.5				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		9.4			HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		42.0			Sum of lost time (s)		8.0					
Intersection Capacity Utilization		48.9%			ICU Level of Service		A					
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2021 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	3	36	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	3	52	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	73	52	52			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	73	52	52			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	926	1015	1554			
Direction, Lane #						
Volume Total	16	12	52			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	1015	1554	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.3	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.3	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.5				
Intersection Capacity Utilization		17.2%			ICU Level of Service	A
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St















MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑				↑			↑
Volume (veh/h)	0	1417	34	0	4017	553	0	0	477	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1707	41	0	4366	601	0	0	596	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4987			1768			3235	6735	630	5276	6455	1796
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4987			1768			3235	6735	630	5276	6455	1796
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	82
cM capacity (veh/h)	17			343			3	0	1358	0	0	67
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	683	683	382	1747	1747	1474	596	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	601	596	12				
cSH	1700	1700	1700	1700	1700	1700	1358	67				
Volume to Capacity	0.40	0.40	0.22	1.03	1.03	0.87	0.44	0.18				
Queue Length 95th (ft)	0	0	0	0	0	0	57	15				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	69.8				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	69.8				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				105.0%			ICU Level of Service		G			
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	  			  		  	
Volume (veh/h)	1277	202	0	3916	0	232	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1451	230	0	4351	0	252	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1701	3056		638	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1701	3056		638	
tC, single (s)			4.1	6.8		6.9	
tC, 2 stage (s)							
tF (s)			2.2	3.5		3.3	
p0 queue free %			100	100		38	
cM capacity (veh/h)			364	9		405	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	580	580	520	1450	1450	1450	252
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	230	0	0	0	252
cSH	1700	1700	1700	1700	1700	1700	405
Volume to Capacity	0.34	0.34	0.31	0.85	0.85	0.85	0.62
Queue Length 95th (ft)	0	0	0	0	0	0	102
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.5
Lane LOS							D
Approach Delay (s)	0.0			0.0			27.5
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			90.5%	ICU Level of Service		E	
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1777	1946	343	108	102	0	0	278	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1911	2092	369	146	138	0	0	320	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1070	3294	0	146	138	0	0	332	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3209		186	872			397	
v/s Ratio Prot				0.70	c0.71		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				1.02	1.03		0.78	0.16			0.84	
Uniform Delay, d1				29.2	29.2		82.7	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				31.8	23.2		19.2	0.1			14.2	
Delay (s)				61.0	52.3		101.9	56.1			96.5	
Level of Service				E	D		F	E			F	
Approach Delay (s)		0.0			54.4			79.6			96.5	
Approach LOS		A			D			E			F	
Intersection Summary												
HCM 2000 Control Delay				58.7			HCM 2000 Level of Service			E		
HCM 2000 Volume to Capacity ratio				0.97								
Actuated Cycle Length (s)				189.5			Sum of lost time (s)			16.8		
Intersection Capacity Utilization				201.0%			ICU Level of Service			H		
Analysis Period (min)				15								
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	584	100	0	0	0	0	200	215	452	1660	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3250	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3250	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	635	109	0	0	0	0	233	234	491	1729	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	21	48	0	0	0
Lane Group Flow (vph)	0	636	80	0	0	0	0	301	97	491	1729	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					63.2	63.2	35.2	101.2	
Effective Green, g (s)		60.0	60.0					63.2	63.2	35.2	101.2	
Actuated g/C Ratio		0.35	0.35					0.37	0.37	0.20	0.59	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1765	549					1188	527	699	2072	
v/s Ratio Prot								0.09		0.14	c0.49	
v/s Ratio Perm		0.13	0.05						0.07			
v/c Ratio		0.36	0.15					0.25	0.18	0.70	0.83	
Uniform Delay, d1		42.1	38.8					38.3	37.3	63.9	29.0	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.2	3.1	
Delay (s)		42.2	38.9					38.4	37.4	67.1	32.1	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.7			0.0			38.1			39.8	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		40.0					HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		172.8					Sum of lost time (s)			14.4		
Intersection Capacity Utilization		201.0%					ICU Level of Service			H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus MILCON_NorthOp Year 2022 Alt 3north
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave Timing Plan: AM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰	↱	↰	↱
Volume (vph)	220	6	1183	612	0	1392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Frt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1592		3317			3362
Frt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1592		3317			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	256	7	1272	658	0	1465
RTOR Reduction (vph)	1	0	52	0	0	0
Lane Group Flow (vph)	262	0	1878	0	0	1465
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	18.8		46.0			46.0
Effective Green, g (s)	18.8		46.0			46.0
Actuated g/C Ratio	0.25		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	405		2064			2092
v/s Ratio Prot	c0.16		c0.57			0.44
v/s Ratio Perm						
v/c Ratio	0.65		0.91			0.70
Uniform Delay, d1	24.6		12.1			9.3
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	3.5		6.5			1.1
Delay (s)	28.1		18.7			10.4
Level of Service	C		B			B
Approach Delay (s)	28.1		18.7			10.4
Approach LOS	C		B			B
Intersection Summary						
HCM 2000 Control Delay			16.0		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.87			
Actuated Cycle Length (s)			73.9		Sum of lost time (s)	12.1
Intersection Capacity Utilization			78.8%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus MILCON_NorthOp Year 2022 Alt 3north
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↰	↰	↱	↱	↰	↱	↱	↰	↱	↱
Volume (vph)	48	2	10	8	0	5	19	1401	26	40	1535	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	1.00	
Frt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1713		1770	3530		1770	3527	
Frt Permitted	0.74	0.78	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1310	1373	1583		1512		1770	3530		1770	3527	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	56	2	12	16	0	10	23	1668	31	43	1668	40
RTOR Reduction (vph)	0	0	10	0	22	0	0	1	0	0	1	0
Lane Group Flow (vph)	29	29	2	0	4	0	23	1698	0	43	1707	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.5	15.5	15.5		15.5		2.7	65.3		4.0	66.6	
Effective Green, g (s)	15.5	15.5	15.5		15.5		2.7	65.3		4.0	66.6	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.67	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	205	215	248		236		48	2330		71	2375	
v/s Ratio Prot							0.01	0.48		c0.02	c0.48	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.14	0.13	0.01		0.02		0.48	0.73		0.61	0.72	
Uniform Delay, d1	36.0	35.9	35.2		35.3		47.4	11.0		46.7	10.2	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		7.4	1.2		13.7	1.1	
Delay (s)	36.3	36.2	35.2		35.3		54.8	12.2		60.4	11.3	
Level of Service	D	D	D		D		D	B		E	B	
Approach Delay (s)		36.1			35.3			12.7			12.5	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			13.2							B		
HCM 2000 Volume to Capacity ratio			0.62									
Actuated Cycle Length (s)			98.9							14.1		
Intersection Capacity Utilization			64.0%							C		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	23	0	1345	8	434	1093	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	35	0	1478	9	443	1115	0
RTOR Reduction (vph)	0	0	0	0	32	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1478	4	443	1115	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.42		c0.25	0.32	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.89	0.01	0.73	0.37	
Uniform Delay, d1					60.6			35.0	20.4	41.5	2.6	
Progression Factor					1.00			0.36	1.00	1.00	1.00	
Incremental Delay, d2					0.1			4.8	0.0	4.3	0.4	
Delay (s)					60.6			17.5	20.5	45.8	3.0	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			17.5			15.1	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		16.8			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		86.2%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	31	56	14	1	71	131	148	1181	5	356	441	335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3267	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3267	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	48	86	22	1	81	149	164	1312	6	409	507	385
RTOR Reduction (vph)	0	0	20	0	0	125	0	0	3	0	95	0
Lane Group Flow (vph)	48	86	2	0	82	24	164	1312	3	409	797	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1072	
v/s Ratio Prot	0.03	c0.05			c0.04		0.09	c0.37		c0.23	0.24	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.39	0.67	0.02		0.28	0.10	0.30	0.83	0.00	1.20	0.74	
Uniform Delay, d1	64.6	65.9	62.9		53.7	52.1	38.0	35.4	22.3	58.5	43.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.93	
Incremental Delay, d2	2.1	13.0	0.1		0.5	0.2	0.3	5.3	0.0	113.9	4.5	
Delay (s)	66.7	78.9	63.0		54.2	52.3	38.3	40.7	22.3	169.9	44.7	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		72.9			53.0			40.4			84.0	
Approach LOS		E			D			D			F	
Intersection Summary												
HCM 2000 Control Delay		60.8			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.80										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		90.2%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (veh/h)	47	202	4	114	397	9
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	55	238	5	142	432	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)			915		600	
pX, platoon unblocked	0.99					
vC, conflicting volume	949	76			148	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	945	76			148	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	73	76			70	
cM capacity (veh/h)	202	985			1434	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	293	148	441			
Volume Left	55	0	432			
Volume Right	238	142	0			
cSH	1069	1700	1434			
Volume to Capacity	0.27	0.09	0.30			
Queue Length 95th (ft)	28	0	32			
Control Delay (s)	13.5	0.0	8.5			
Lane LOS	B		A			
Approach Delay (s)	13.5	0.0	8.5			
Approach LOS	B					
Intersection Summary						
Average Delay		8.7				
Intersection Capacity Utilization		39.1%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

	↖	↗	↖	↗	↖	↗
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↗
Volume (vph)	50	3	1347	441	0	417
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Frpb, ped/bikes	0.99		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1756		3539	1520		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1756		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	67	4	1418	464	0	652
RTOR Reduction (vph)	4	0	0	139	0	0
Lane Group Flow (vph)	67	0	1418	325	0	652
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.0		30.3	30.3		30.3
Effective Green, g (s)	3.0		30.3	30.3		30.3
Actuated g/C Ratio	0.07		0.70	0.70		0.70
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	121		2482	1066		2482
v/s Ratio Prot	c0.04		c0.40			0.18
v/s Ratio Perm				0.21		
v/c Ratio	0.56		0.57	0.31		0.26
Uniform Delay, d1	19.5		3.2	2.5		2.4
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	5.4		0.3	0.2		0.1
Delay (s)	24.9		3.5	2.6		2.4
Level of Service	C		A	A		A
Approach Delay (s)	24.9		3.3			2.4
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay		3.7		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.57				
Actuated Cycle Length (s)		43.2		Sum of lost time (s)	9.9	
Intersection Capacity Utilization		49.7%		ICU Level of Service	A	
Analysis Period (min)		15				

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2022 Alt 3north

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↑↑
Volume (veh/h)	0	15	2204	5	5	469
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2370	5	7	690
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2732	1188			2375	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2732	1188			2375	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			96	
cM capacity (veh/h)	16	181			201	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1580	795	7	345	345
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	181	1700	1700	201	1700	1700
Volume to Capacity	0.14	0.93	0.47	0.04	0.20	0.20
Queue Length 95th (ft)	12	0	0	3	0	0
Control Delay (s)	28.2	0.0	0.0	23.6	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	28.2	0.0		0.2		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			71.1%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2022 Alt 3north

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	17	87	2117	12	38	430
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	107	2276	13	55	623
RTOR Reduction (vph)	0	3	0	1	0	0
Lane Group Flow (vph)	21	104	2276	12	55	623
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.8	25.9	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.8	20.8	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.77
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	261	307	2253	1008	82	2709
v/s Ratio Prot	0.01	c0.07	c0.64		c0.03	0.18
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.34	1.01	0.01	0.67	0.23
Uniform Delay, d1	39.4	37.2	19.4	7.1	50.2	3.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	21.5	0.0	19.4	0.0
Delay (s)	39.5	37.9	40.9	7.1	69.7	3.6
Level of Service	D	D	D	A	E	A
Approach Delay (s)	38.1		40.8			9.0
Approach LOS	D		D			A
Intersection Summary						
HCM 2000 Control Delay			33.7		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.87			
Actuated Cycle Length (s)			107.1		Sum of lost time (s)	18.1
Intersection Capacity Utilization			74.7%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↑↑			↑↑
Volume (veh/h)	0	32	2094	26	0	446
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	52	2204	27	0	603
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2519	1116			2232	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2519	1116			2232	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	74			100	
cM capacity (veh/h)	23	202			229	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	52	1469	762	301	301	
Volume Left	0	0	0	0	0	
Volume Right	52	0	27	0	0	
cSH	202	1700	1700	1700	1700	
Volume to Capacity	0.26	0.86	0.45	0.18	0.18	
Queue Length 95th (ft)	24	0	0	0	0	
Control Delay (s)	28.8	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	28.8	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		68.7%		ICU Level of Service		C
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	10	6	2120	32	15	422
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	16	10	2208	33	19	521
RTOR Reduction (vph)	0	4	0	7	0	0
Lane Group Flow (vph)	16	6	2208	26	19	521
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.4	59.7	59.7	2.0	69.2
Effective Green, g (s)	1.4	3.4	59.7	59.7	2.0	69.2
Actuated g/C Ratio	0.02	0.04	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	69	2736	1224	45	3172
v/s Ratio Prot	c0.01	0.00	c0.62		c0.01	0.15
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.50	0.09	0.81	0.02	0.42	0.16
Uniform Delay, d1	37.6	35.4	5.3	2.0	37.0	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.8	0.6	1.8	0.0	6.3	0.0
Delay (s)	49.3	36.0	7.1	2.0	43.3	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	44.2		7.0			2.0
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		6.4		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio		0.79				
Actuated Cycle Length (s)		77.2		Sum of lost time (s)		14.1
Intersection Capacity Utilization		71.4%		ICU Level of Service		C
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus MILCON_NorthOp Year 2022 Alt 3north
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	45	1	0	44	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	83	2	0	70	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	85	70	3					
Volume Left (vph)	0	0	83	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	833	1121	815	841	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.2%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus MILCON_NorthOp Year 2022 Alt 3north
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑			↑	↑	↑	↑	↑			
Volume (vph)	2	37	0	0	32	228	3	1923	51	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1357	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	49	0	0	44	317	3	2046	54	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	22	0	0	0	0
Lane Group Flow (vph)	3	49	0	0	44	261	3	2046	32	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.6	16.6			16.6	16.6	47.7	43.6	43.6			
Effective Green, g (s)	16.6	16.6			16.6	16.6	47.7	43.6	43.6			
Actuated g/C Ratio	0.23	0.23			0.23	0.23	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	306	420			420	357	1147	2096	937			
v/s Ratio Prot		0.03			0.02		0.00	c0.58				
v/s Ratio Perm	0.00					c0.16			0.02			
v/c Ratio	0.01	0.12			0.10	0.73	0.00	0.98	0.03			
Uniform Delay, d1	22.1	22.7			22.6	26.4	4.6	14.5	6.2			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	7.5	0.0	14.3	0.0			
Delay (s)	22.1	22.8			22.7	34.0	4.6	28.8	6.3			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.8			32.6			28.2			0.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay		28.7						HCM 2000 Level of Service		C		
HCM 2000 Volume to Capacity ratio		0.91										
Actuated Cycle Length (s)		73.6				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		86.9%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱	↰
Volume (veh/h)	23	44	642	1698	0	181	210
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	92	176	669	1769	0	229	266
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2584	247	495		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2584	247	495		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	77	37		0		
cM capacity (veh/h)	8	753	1065		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	268	669	884	884	153	342	0
Volume Left	92	669	0	0	0	0	0
Volume Right	176	0	0	0	0	266	0
cSH	22	1065	1700	1700	1700	1700	1700
Volume to Capacity	12.17	0.63	0.52	0.52	0.09	0.20	0.00
Queue Length 95th (ft)	Err	116	0	0	0	0	0
Control Delay (s)	Err	13.9	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B					
Approach Delay (s)	Err	3.8			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay		840.2					
Intersection Capacity Utilization		64.3%		ICU Level of Service		C	
Analysis Period (min)		15					

NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↰
Volume (vph)	403	0	39	2	1	2	26	2211	0	0	177	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3432	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3432	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	458	0	44	6	3	6	27	2327	0	0	257	65
RTOR Reduction (vph)	0	31	0	0	6	0	0	0	0	0	19	0
Lane Group Flow (vph)	458	13	0	6	3	0	27	2327	0	0	303	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	26.2	26.2		1.7	1.7		1.9	43.4			37.3	
Effective Green, g (s)	26.2	26.2		1.7	1.7		1.9	43.4			37.3	
Actuated g/C Ratio	0.30	0.30		0.02	0.02		0.02	0.50			0.43	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	539	482		34	33		39	1785			1488	
v/s Ratio Prot	c0.26	0.01		c0.00	0.00		0.02	c0.66			0.09	
v/s Ratio Perm												
v/c Ratio	0.85	0.03		0.18	0.09		0.69	1.30			0.20	
Uniform Delay, d1	28.1	21.0		41.5	41.4		41.8	21.3			15.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	11.9	0.0		2.5	1.2		41.8	140.8			0.1	
Delay (s)	40.0	21.0		43.9	42.6		83.6	162.1			15.2	
Level of Service	D	C		D	D		F	F			B	
Approach Delay (s)		38.3			43.2			161.2			15.2	
Approach LOS		D			D			F			B	
Intersection Summary												
HCM 2000 Control Delay		126.6						HCM 2000 Level of Service		F		
HCM 2000 Volume to Capacity ratio		1.18										
Actuated Cycle Length (s)		86.0						Sum of lost time (s)		18.9		
Intersection Capacity Utilization		98.5%						ICU Level of Service		F		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	8	226	15	0	2060	17	45	23	1	19	41	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5037			5079		1770	1853			1731	
Flt Permitted	0.95	1.00			1.00		0.66	1.00			0.19	
Satd. Flow (perm)	1770	5037			5079		1237	1853			323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.77	0.77	0.77	0.77
Adj. Flow (vph)	9	254	17	0	2264	19	54	27	1	25	53	68
RTOR Reduction (vph)	0	4	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	9	267	0	0	2282	0	54	27	0	0	129	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4			3		
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1905			2062		240	360			53	
v/s Ratio Prot	c0.01	0.05			c0.45			0.01				
v/s Ratio Perm							c0.04				c0.40	
v/c Ratio	0.05	0.14			1.11		0.23	0.08			2.42	
Uniform Delay, d1	71.5	36.7			53.5		61.1	59.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.2			54.5		0.5	0.1			694.4	
Delay (s)	71.6	36.9			107.9		61.6	59.4			769.4	
Level of Service	E	D			F		E	E			F	
Approach Delay (s)		38.0			107.9			60.8			769.4	
Approach LOS		D			F			E			F	
Intersection Summary												
HCM 2000 Control Delay		134.1			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.02										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		78.6%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	244	0	397	2069	9	0	0	0	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3537							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3537							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	298	0	422	2201	10	0	0	0	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	298	0	422	2211	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3214							609
v/s Ratio Prot		0.06		0.12	c0.63							
v/s Ratio Perm												0.00
v/c Ratio		0.15		0.25	0.69							0.01
Uniform Delay, d1		36.9		25.7	2.0							34.9
Progression Factor		0.39		1.00	1.00							1.00
Incremental Delay, d2		0.2		0.1	0.6							0.0
Delay (s)		14.6		25.7	2.6							35.0
Level of Service		B		C	A							C
Approach Delay (s)		14.6			6.3		0.0					35.0
Approach LOS		B			A		A					C
Intersection Summary												
HCM 2000 Control Delay		7.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.71										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		79.1%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	9	239	0	0	129	104	0	0	0	47	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	11	285	0	0	139	112	0	0	0	52	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	251			285			505	556	285	501	501	195
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	251			285			505	556	285	501	501	195
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1315			1278			472	435	754	478	468	847
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	295	251	0	56								
Volume Left	11	0	0	52								
Volume Right	0	112	0	4								
cSH	1315	1278	1700	495								
Volume to Capacity	0.01	0.00	0.00	0.11								
Queue Length 95th (ft)	1	0	0	10								
Control Delay (s)	0.4	0.0	0.0	13.2								
Lane LOS	A			B								
Approach Delay (s)	0.4	0.0	0.0	13.2								
Approach LOS				B								
Intersection Summary												
Average Delay				1.4								
Intersection Capacity Utilization				29.9%								A
Analysis Period (min)				15								

NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	278	4	26	210	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	323	5	28	226	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	328	28	252	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.1	5.5	5.1	5.7						
Degree Utilization, x	0.01	0.50	0.05	0.38	0.26	0.07						
Capacity (veh/h)	578	635	565	629	633	545						
Control Delay (s)	7.9	12.7	8.2	10.7	9.9	9.1						
Approach Delay (s)	12.5		10.4		9.9	9.1						
Approach LOS	B		B		A	A						
Intersection Summary												
Delay					11.1							
Level of Service					B							
Intersection Capacity Utilization				37.7%		ICU Level of Service						A
Analysis Period (min)				15								




















NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱	↰↱		↰	↱
Volume (veh/h)	232	426	334	153	17	70
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	294	539	407	187	24	99
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	594				1627	297
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	594				1627	297
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	70				63	86
cM capacity (veh/h)	978				65	699
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	294	539	272	322	123	
Volume Left	294	0	0	0	24	
Volume Right	0	0	0	187	99	
cSH	978	1700	1700	1700	240	
Volume to Capacity	0.30	0.32	0.16	0.19	0.51	
Queue Length 95th (ft)	32	0	0	0	66	
Control Delay (s)	10.3	0.0	0.0	0.0	34.6	
Lane LOS	B				D	
Approach Delay (s)	3.6		0.0		34.6	
Approach LOS					D	
Intersection Summary						
Average Delay			4.7			
Intersection Capacity Utilization			42.2%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	419	15	26	335	0	66	42	81	1	22	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00
Satd. Flow (prot)	1770	3521		1770	3539			1725			1858	1583
Flt Permitted	0.50	1.00		0.44	1.00			0.88			0.98	1.00
Satd. Flow (perm)	930	3521		821	3539			1543			1831	1583
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	21	544	19	34	435	0	100	64	123	2	38	47
RTOR Reduction (vph)	0	3	0	0	0	0	0	31	0	0	0	29
Lane Group Flow (vph)	21	560	0	34	435	0	0	256	0	0	40	18
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	13.2	13.2		13.2	13.2			13.4			13.4	13.4
Effective Green, g (s)	13.2	13.2		13.2	13.2			13.4			13.4	13.4
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	342	1298		302	1304			577			685	592
v/s Ratio Prot		c0.16			0.12							
v/s Ratio Perm	0.02			0.04				c0.17			0.02	0.01
v/c Ratio	0.06	0.43		0.11	0.33			0.44			0.06	0.03
Uniform Delay, d1	7.3	8.5		7.4	8.1			8.4			7.2	7.1
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.2		0.2	0.2			0.5			0.0	0.0
Delay (s)	7.4	8.7		7.6	8.3			8.9			7.2	7.1
Level of Service	A	A		A	A			A			A	A
Approach Delay (s)		8.7			8.2			8.9			7.1	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.5		HCM 2000 Level of Service				A			
HCM 2000 Volume to Capacity ratio			0.44									
Actuated Cycle Length (s)			35.8		Sum of lost time (s)				9.2			
Intersection Capacity Utilization			46.8%		ICU Level of Service				A			
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	504	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	548	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			552		548	548
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			552		548	548
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1018		498	536
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	548	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	525			
Volume to Capacity	0.32	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.0			
Lane LOS			B			
Approach Delay (s)	0.0		12.0			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.5%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑↑↑	↑	↑	↑	↑	↑	↑	↑
Volume (vph)	21	700	36	23	2207	44	171	37	1900	91	46	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5048		1770	5070			3326			3364	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5048		1770	5070			3326			3364	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	833	43	25	2425	48	206	45	61	111	56	30
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	873	0	25	2472	0	0	300	0	0	189	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2235		118	2160			646			654	
v/s Ratio Prot	0.01	c0.17		c0.01	c0.49			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.17	0.39		0.21	1.14			0.46			0.29	
Uniform Delay, d1	76.7	33.8		79.5	51.6			64.2			61.9	
Progression Factor	1.00	1.00		1.17	0.90			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.6	69.3			0.5			0.2	
Delay (s)	77.3	34.3		93.8	116.0			64.7			62.1	
Level of Service	E	C		F	F			E			E	
Approach Delay (s)		35.5			115.7			64.7			62.1	
Approach LOS		D			F			E			E	
Intersection Summary												
HCM 2000 Control Delay		90.5			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		80.7%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	
Volume (vph)	2	934	35	20	2383	12	18	4	31	55	11	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5058		1770	5081			1687		1770	1704	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5058		1770	5081			1542		1231	1704	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	1049	39	23	2708	14	25	5	42	79	16	21
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	18	0
Lane Group Flow (vph)	2	1086	0	23	2722	0	0	44	0	79	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			257		205	284	
v/s Ratio Prot	0.00	0.21		c0.01	c0.54						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.31		0.19	0.73			0.17		0.39	0.07	
Uniform Delay, d1	86.1	11.2		79.4	14.0			64.3		66.8	63.2	
Progression Factor	1.69	0.26		1.43	0.37			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.3	0.5			0.3		1.2	0.1	
Delay (s)	146.4	3.1		113.7	5.7			64.6		68.0	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.4			6.6			64.6			66.5	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.5			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		79.7%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

28: 13th St & SR-75 (Palm Ave)













MILCON_NorthOp Year 2022 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰	↰	↰↰	
Volume (vph)	3	1004	65	97	2230	52	153	19	92	171	36	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5039		1770	5085	1583		1783	1583		3373	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5039		1770	5085	1583		1783	1583		3373	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1128	73	117	2687	63	172	21	103	228	48	20
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	85	0	3	0
Lane Group Flow (vph)	3	1197	0	117	2687	33	0	193	18	0	293	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		580	
v/s Ratio Prot	0.00	0.24		c0.07	c0.53			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.54		0.60	0.99	0.04		0.63	0.07		0.50	
Uniform Delay, d1	86.2	36.7		76.2	41.9	20.2		69.2	62.4		67.5	
Progression Factor	1.23	0.62		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.9		4.8	16.0	0.1		4.0	0.1		0.7	
Delay (s)	106.7	23.5		81.0	57.8	20.3		73.2	62.5		68.2	
Level of Service	F	C		F	E	C		E	E		E	
Approach Delay (s)		23.7			58.0			69.4			68.2	
Approach LOS		C			E			E			E	
Intersection Summary												
HCM 2000 Control Delay		50.5			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		97.0%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												













NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	14	1274	26	44	2361	12	16	6	49	38	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1670			1723	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.78	
Satd. Flow (perm)	1770	5070		1770	5081			1562			1377	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	15	1385	28	51	2745	14	19	7	58	50	3	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	46	0	0	22	0
Lane Group Flow (vph)	15	1412	0	51	2759	0	0	38	0	0	59	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.8		2.8	39.9			15.1			15.1	
Effective Green, g (s)	0.7	37.8		2.8	39.9			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2684		69	2839			330			291	
v/s Ratio Prot	0.01	0.28		c0.03	c0.54							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.88	0.53		0.74	0.97			0.12			0.20	
Uniform Delay, d1	35.3	11.0		33.9	15.2			22.8			23.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	159.7	0.2		33.5	11.1			0.2			0.3	
Delay (s)	195.0	11.1		67.4	26.3			22.9			23.5	
Level of Service	F	B		E	C			C			C	
Approach Delay (s)		13.1			27.0			22.9			23.5	
Approach LOS		B			C			C			C	
Intersection Summary												
HCM 2000 Control Delay		22.4			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		71.4			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		62.8%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	93	1287	31	249	2294	219	82	74	786	239	94	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Flt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1750	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5067		1770	5085	1583	1770	1549	1504	3433	1750	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	108	1497	36	265	2440	233	91	82	873	285	112	93
RTOR Reduction (vph)	0	2	0	0	0	67	0	153	181	0	2	60
Lane Group Flow (vph)	108	1531	0	265	2440	166	91	331	290	285	119	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.4	30.6	30.6	10.4	32.6	32.6
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.4	30.6	30.6	10.4	32.6	32.6
Actuated g/C Ratio	0.05	0.30		0.15	0.41	0.41	0.07	0.26	0.26	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	177	1537		273	2064	642	128	408	396	307	491	422
v/s Ratio Prot	0.03	0.30		c0.15	c0.48		0.05	c0.21		c0.08	0.07	
v/s Ratio Perm						0.10			0.19			0.02
v/c Ratio	0.61	1.00		0.97	1.18	0.26	0.71	0.81	0.73	0.93	0.24	0.06
Uniform Delay, d1	53.9	40.3		48.8	34.5	22.9	52.6	40.0	39.0	52.4	32.2	30.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.1	21.9		46.2	87.3	0.2	17.0	11.6	6.8	32.8	0.3	0.1
Delay (s)	59.9	62.2		95.0	121.7	23.1	69.6	51.6	45.8	85.3	32.4	30.5
Level of Service	E	E		F	F	C	E	D	D	F	C	C
Approach Delay (s)		62.0			111.5			50.5			62.8	
Approach LOS		E			F			D			E	
Intersection Summary												
HCM 2000 Control Delay		83.9			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.05										
Actuated Cycle Length (s)		116.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		93.6%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2022 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕	↕↕
Volume (vph)	0	290	1255	0	158	1510
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	326	1349	0	176	1678
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	326	1349	0	176	1675
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.38		0.10	c0.60
v/s Ratio Perm						
v/c Ratio		0.12	1.16		0.85	1.09
Uniform Delay, d1		2.5	26.8		34.6	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	80.2		26.8	53.0
Delay (s)		2.5	107.0		61.4	71.0
Level of Service		A	F		E	E
Approach Delay (s)		2.5	107.0		70.1	
Approach LOS		A	F		E	
Intersection Summary						
HCM 2000 Control Delay			78.0		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			1.19			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			75.5%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕		↕	↕		↕	↕	↕
Volume (vph)	0	449	0	0	444	534	914	1	146	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.96				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3250		1681	1636				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3250		1681	1636				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	516	0	0	483	580	993	1	159	0	0	0
RTOR Reduction (vph)	0	0	0	0	366	0	0	25	0	0	0	0
Lane Group Flow (vph)	0	516	0	0	697	0	586	542	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		17.5			17.5		22.0	22.0				
Effective Green, g (s)		17.5			17.5		22.0	22.0				
Actuated g/C Ratio		0.37			0.37		0.46	0.46				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1303			1197		778	757				
v/s Ratio Prot		0.15			c0.21							
v/s Ratio Perm							c0.35	0.33				
v/c Ratio		0.40			0.58		0.75	0.72				
Uniform Delay, d1		11.1			12.1		10.5	10.2				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		4.2	3.2				
Delay (s)		11.3			12.8		14.7	13.5				
Level of Service		B			B		B	B				
Approach Delay (s)		11.3			12.8		14.1				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					13.0		HCM 2000 Level of Service			B		
HCM 2000 Volume to Capacity ratio					0.68							
Actuated Cycle Length (s)					47.5		Sum of lost time (s)			8.0		
Intersection Capacity Utilization					72.6%		ICU Level of Service			C		
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰		↰	↰	↰	↰
Volume (veh/h)	0	3	4	66	13	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	92	32	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	134	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	134	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	856	1042	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	97	32			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	1042	1581	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			16.7%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
1: Glorietta Blvd & Fourth St

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰
Volume (veh/h)	0	4195	17	0	1838	244	0	0	909	0	0	55
Sign Control	Free	Free		Free	Free		Stop	Stop		Stop	Stop	
Grade	0%			0%			0%	0%		0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4370	18	0	1895	252	0	0	1010	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2166			4408			5134	6565	1505	3517	6448	797
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2166			4408			5134	6565	1505	3517	6448	797
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	46	100	100	74
cM capacity (veh/h)	239			29			0	0	1860	1	0	318
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1748	1748	892	758	758	631	1010	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	252	1010	83				
cSH	1700	1700	1700	1700	1700	1700	1860	318				
Volume to Capacity	1.03	1.03	0.52	0.45	0.45	0.37	0.54	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	86	26				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.2	20.3				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.2	20.3				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.4								
Intersection Capacity Utilization				146.3%						H		
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

	→	↗	↖	←	↙	↘	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↗	
Volume (veh/h)	4025	130	0	1875	0	207	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	4149	134	0	1953	0	252	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4304		4908	1490	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4304		4908	1490	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			32		0	109	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1660	1660	964	651	651	651	252
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	134	0	0	0	252
cSH	1700	1700	1700	1700	1700	1700	109
Volume to Capacity	0.98	0.98	0.57	0.38	0.38	0.38	2.31
Queue Length 95th (ft)	0	0	0	0	0	0	555
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	682.8
Lane LOS							F
Approach Delay (s)	0.0			0.0			682.8
Approach LOS							F
Intersection Summary							
Average Delay			26.6				
Intersection Capacity Utilization			102.1%		ICU Level of Service		G
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

	↗	→	↘	↖	←	↙	↘	↑	↗	↖	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↗	↑↑↑		↗	↑↑↑			↑↑↑	
Volume (vph)	0	0	0	1001	635	109	122	252	0	0	862	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3528	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3528	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1054	668	115	126	260	0	0	889	16
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	527	1298	0	126	260	0	0	903	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1432		98	1989			1568	
v/s Ratio Prot				c0.35	0.28		c0.07	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.12	1.00dl		1.29	0.13			0.58	
Uniform Delay, d1				31.1	29.9		42.5	9.3			18.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				79.0	8.5		185.8	0.0			0.5	
Delay (s)				110.1	38.4		228.3	9.3			19.2	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			59.0			80.8			19.2	
Approach LOS		A			E			F			B	
Intersection Summary												
HCM 2000 Control Delay			50.1				HCM 2000 Level of Service				D	
HCM 2000 Volume to Capacity ratio			0.83									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)				17.2	
Intersection Capacity Utilization		136.1%					ICU Level of Service				H	
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔↔	
Volume (vph)	7	2112	113	0	0	0	0	374	641	761	1125	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.97	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.93	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3063	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3063	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2321	124	0	0	0	0	435	745	793	1172	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2329	95	0	0	0	0	802	343	793	1172	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					929	409	865	2022	
v/s Ratio Prot		c0.46						c0.26		c0.23	0.33	
v/s Ratio Perm			0.06						0.25			
v/c Ratio		1.27	0.17					0.86	0.84	0.92	0.58	
Uniform Delay, d1		55.8	37.9					57.5	56.9	63.7	24.0	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		123.8	0.1					8.4	13.9	14.2	0.4	
Delay (s)		179.6	38.0					65.9	70.8	77.9	24.4	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		172.4			0.0			67.5			46.0	
Approach LOS		F			A			E			D	
Intersection Summary												
HCM 2000 Control Delay		105.9									F	
HCM 2000 Volume to Capacity ratio		1.04										
Actuated Cycle Length (s)		175.0							14.4			
Intersection Capacity Utilization		136.1%							H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔		↔↔			↔↔
Volume (vph)	176	12	1143	706	0	1281
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1584		3295			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1584		3295			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	226	15	1284	793	0	1377
RTOR Reduction (vph)	2	0	45	0	0	0
Lane Group Flow (vph)	239	0	2032	0	0	1377
Confl. Peds. (#/hr)	20	20		20	20	
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	297		2489			2540
v/s Ratio Prot	c0.15		c0.62			0.41
v/s Ratio Perm						
v/c Ratio	0.81		0.82			0.54
Uniform Delay, d1	62.2		12.5			8.1
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	14.7		3.1			0.8
Delay (s)	76.9		15.6			8.9
Level of Service	E		B			A
Approach Delay (s)	76.9		15.6			8.9
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay			17.1			HCM 2000 Level of Service B
HCM 2000 Volume to Capacity ratio			0.83			
Actuated Cycle Length (s)			160.0			Sum of lost time (s) 12.1
Intersection Capacity Utilization			87.5%			ICU Level of Service E
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↲	↰	↱	↲	↰	↱	↲	↰	↱	↲
Volume (vph)	146	10	29	26	10	25	23	1764	50	68	1509	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1724		1770	3525		1770	3490	
Flt Permitted	0.68	0.68	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1201	1202	1583		1459		1770	3525		1770	3490	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	187	13	37	41	16	39	25	1897	54	74	1640	167
RTOR Reduction (vph)	0	0	31	0	22	0	0	1	0	0	2	0
Lane Group Flow (vph)	99	101	6	0	74	0	25	1950	0	74	1805	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	19.1	19.1	19.1		19.1		3.1	71.9		8.1	76.9	
Effective Green, g (s)	19.1	19.1	19.1		19.1		3.1	71.9		8.1	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	201	201	265		244		48	2225		125	2356	
v/s Ratio Prot							0.01	c0.55		c0.04	0.52	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.49	0.50	0.02		0.30		0.52	0.88		0.59	0.77	
Uniform Delay, d1	43.0	43.1	39.6		41.6		54.7	17.3		51.3	12.4	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.9	2.0	0.0		0.7		9.8	4.2		7.3	1.5	
Delay (s)	44.9	45.1	39.6		42.2		64.5	21.6		58.6	14.0	
Level of Service	D	D	D		D		E	C		E	B	
Approach Delay (s)		44.1			42.2			22.1			15.7	
Approach LOS		D			D			C			B	
Intersection Summary												
HCM 2000 Control Delay		21.0			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		113.9			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		76.5%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰			↰			↰		↰	↰	
Volume (vph)	0	0	0	8	0	147	0	1567	0	32	1650	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	12	0	213	0	1667	0	34	1774	0
RTOR Reduction (vph)	0	0	0	0	173	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	52	0	0	1667	0	34	1774	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.0			45.1		1.7	51.0	
Effective Green, g (s)					14.0			45.1		1.7	51.0	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					301			2125		40	2403	
v/s Ratio Prot					c0.03			c0.47		0.02	c0.50	
v/s Ratio Perm												
v/c Ratio					0.17			0.78		0.85	0.74	
Uniform Delay, d1					25.7			11.3		36.6	7.8	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			2.0		84.3	1.2	
Delay (s)					25.9			13.3		120.9	9.0	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			25.9			13.3			11.1	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					13.0			HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio					0.72							
Actuated Cycle Length (s)					75.1			Sum of lost time (s)		18.9		
Intersection Capacity Utilization					63.6%			ICU Level of Service		B		
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱
Volume (vph)	325	56	130	6	75	479	28	786	2	141	1470	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1514		1855	1509	1770	3539	1343	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1514		1855	1509	1770	3539	1343	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	428	74	171	7	82	521	31	864	2	150	1564	71
RTOR Reduction (vph)	0	0	139	0	0	192	0	0	1	0	2	0
Lane Group Flow (vph)	428	74	32	0	89	329	31	864	1	150	1633	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.6	27.6	27.6		27.6	27.6	4.0	56.0	56.0	17.5	69.5	
Effective Green, g (s)	27.6	27.6	27.6		27.6	27.6	4.0	56.0	56.0	17.5	69.5	
Actuated g/C Ratio	0.19	0.19	0.19		0.19	0.19	0.03	0.38	0.38	0.12	0.47	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	329	347	282		345	281	47	1338	507	209	1648	
v/s Ratio Prot	c0.24	0.04			0.05		0.02	0.24		c0.08	c0.46	
v/s Ratio Perm			0.02			c0.22			0.00			
v/c Ratio	1.30	0.21	0.11		0.26	1.17	0.66	0.65	0.00	0.72	0.99	
Uniform Delay, d1	60.2	51.1	50.1		51.5	60.2	71.4	37.9	28.7	62.9	39.0	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	155.9	0.3	0.2		0.4	108.1	28.7	2.4	0.0	11.2	20.1	
Delay (s)	216.2	51.4	50.3		51.9	168.3	100.1	40.3	28.7	74.1	59.1	
Level of Service	F	D	D		D	F	F	D	C	E	E	
Approach Delay (s)		155.9			151.3			42.3			60.3	
Approach LOS		F			F			D			E	
Intersection Summary												
HCM 2000 Control Delay		86.5								F		
HCM 2000 Volume to Capacity ratio		1.10										
Actuated Cycle Length (s)		148.1				Sum of lost time (s)		19.4				
Intersection Capacity Utilization		84.0%				ICU Level of Service		E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰	↱	↰	↱
Volume (veh/h)	349	558	3	61	182	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	388	620	4	86	207	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type		None			None	
Median storage (veh)						
Upstream signal (ft)		915			600	
pX, platoon unblocked						
vC, conflicting volume	464	47			90	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	464	47			90	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	19	39			86	
cM capacity (veh/h)	480	1022			1505	
Direction, Lane #						
Volume Total	1008	90	210			
Volume Left	388	0	207			
Volume Right	620	86	0			
cSH	926	1700	1505			
Volume to Capacity	1.09	0.05	0.14			
Queue Length 95th (ft)	630	0	12			
Control Delay (s)	76.7	0.0	7.7			
Lane LOS	F		A			
Approach Delay (s)	76.7	0.0	7.7			
Approach LOS	F					
Intersection Summary						
Average Delay		60.3				
Intersection Capacity Utilization		45.1%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	351	7	822	64	0	1599
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	444	9	913	71	0	1797
RTOR Reduction (vph)	1	0	0	41	0	0
Lane Group Flow (vph)	452	0	913	30	0	1797
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.26		0.26			c0.51
v/s Ratio Perm				0.02		
v/c Ratio	0.54		0.60	0.05		1.18
Uniform Delay, d1	19.4		23.0	17.4		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.7		0.7	0.0		89.1
Delay (s)	20.0		23.7	17.5		119.0
Level of Service	C		C	B		F
Approach Delay (s)	20.0		23.3			119.0
Approach LOS	C		C			F
Intersection Summary						
HCM 2000 Control Delay			76.0		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			0.84			
Actuated Cycle Length (s)			105.0		Sum of lost time (s)	9.9
Intersection Capacity Utilization			94.1%		ICU Level of Service	F
Analysis Period (min)			15			

c Critical Lane Group

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (veh/h)	4	6	682	3	15	1569
Sign Control	Stop		Free		Free	Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	12	793	3	16	1724
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1690	398			797	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1690	398			797	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	90	98			98	
cM capacity (veh/h)	83	601			821	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	20	529	268	16	862	862
Volume Left	8	0	0	16	0	0
Volume Right	12	0	3	0	0	0
cSH	171	1700	1700	821	1700	1700
Volume to Capacity	0.12	0.31	0.16	0.02	0.51	0.51
Queue Length 95th (ft)	10	0	0	2	0	0
Control Delay (s)	28.8	0.0	0.0	9.5	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	28.8	0.0		0.1		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			53.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2022 Alt 3north

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	30	57	627	12	104	1470
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	33	62	712	14	114	1615
RTOR Reduction (vph)	0	46	0	7	0	0
Lane Group Flow (vph)	33	16	712	7	114	1615
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	9.4	21.7	28.0	28.0	7.2	44.0
Effective Green, g (s)	9.4	16.6	28.0	28.0	7.2	44.0
Actuated g/C Ratio	0.15	0.26	0.45	0.45	0.11	0.70
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	265	419	1580	706	203	2483
v/s Ratio Prot	c0.02	0.01	0.20		0.06	c0.46
v/s Ratio Perm				0.00		
v/c Ratio	0.12	0.04	0.45	0.01	0.56	0.65
Uniform Delay, d1	23.1	17.1	12.0	9.6	26.3	5.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.2	0.0	3.5	0.6
Delay (s)	23.3	17.2	12.2	9.6	29.8	5.7
Level of Service	C	B	B	A	C	A
Approach Delay (s)	19.3		12.2			7.3
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			9.2		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.67			
Actuated Cycle Length (s)			62.7		Sum of lost time (s)	18.1
Intersection Capacity Utilization			52.6%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave







MILCON_NorthOp Year 2022 Alt 3north

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↕	↕			↕
Volume (veh/h)	0	23	618	18	0	1500
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	31	710	21	0	1630
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1536	366			731	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1536	366			731	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	107	631			869	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	31	474	257	815	815	
Volume Left	0	0	0	0	0	
Volume Right	31	0	21	0	0	
cSH	631	1700	1700	1700	1700	
Volume to Capacity	0.05	0.28	0.15	0.48	0.48	
Queue Length 95th (ft)	4	0	0	0	0	
Control Delay (s)	11.0	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	11.0	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			44.8%		ICU Level of Service	A
Analysis Period (min)			15			





NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	30	26	611	18	23	1476
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	42	36	650	19	25	1622
RTOR Reduction (vph)	0	32	0	8	0	0
Lane Group Flow (vph)	42	4	650	11	25	1622
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	5.7	27.0	27.0	3.1	37.6
Effective Green, g (s)	2.6	5.7	27.0	27.0	3.1	37.6
Actuated g/C Ratio	0.06	0.12	0.58	0.58	0.07	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	98	192	2041	913	117	2843
v/s Ratio Prot	c0.02	0.00	0.18		0.01	c0.46
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.43	0.02	0.32	0.01	0.21	0.57
Uniform Delay, d1	21.4	18.1	5.1	4.2	20.7	1.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.0	0.1	0.0	0.9	0.3
Delay (s)	24.4	18.1	5.2	4.2	21.6	1.9
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.5		5.2			2.2
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.7		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.69			
Actuated Cycle Length (s)			46.8		Sum of lost time (s)	14.1
Intersection Capacity Utilization			51.7%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	11	14	85	8	0	180	13	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	11	15	110	10	0	202	15	0	0
Direction, Lane #										
Volume Total (vph)	11	15	121	217						
Volume Left (vph)	0	0	110	0						
Volume Right (vph)	0	15	0	15						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.19						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.2							
Level of Service			A							
Intersection Capacity Utilization			Err%		ICU Level of Service				H	
Analysis Period (min)			15							

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2022 Alt 3north

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑		↰	↑	↰	↰	↑	↰			
Volume (vph)	10	187	0	0	82	139	12	531	69	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1297	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	11	212	0	0	94	160	13	584	76	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	120	0	41	0	0	0	0
Lane Group Flow (vph)	11	212	0	0	94	40	13	584	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.5	8.5			8.5	8.5	18.3	18.3	18.3			
Effective Green, g (s)	8.5	8.5			8.5	8.5	18.3	18.3	18.3			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.46	0.46	0.46			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	274	393			393	334	805	1611	720			
v/s Ratio Prot		c0.11			0.05		0.01	c0.17				
v/s Ratio Perm	0.01					0.03		0.02				
v/c Ratio	0.04	0.54			0.24	0.12	0.02	0.36	0.05			
Uniform Delay, d1	12.6	14.1			13.2	12.8	6.0	7.1	6.1			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.4			0.3	0.2	0.0	0.1	0.0			
Delay (s)	12.7	15.5			13.5	13.0	6.0	7.3	6.1			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.4			13.2		7.1			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.1			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.42										
Actuated Cycle Length (s)		40.2			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		42.9%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd









MILCON_NorthOp Year 2022 Alt 3north

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↰	↰	↑	↰	↑	↰
Volume (veh/h)	207	637	96	470	0	1593	52
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	828	2548	109	534	0	1770	58
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2284	914	1828		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2284	914	1828		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	0	67		0		
cM capacity (veh/h)	22	276	330		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	3376	109	267	267	1180	648	0
Volume Left	828	109	0	0	0	0	0
Volume Right	2548	0	0	0	0	58	0
cSH	73	330	1700	1700	1700	1700	1700
Volume to Capacity	46.30	0.33	0.16	0.16	0.69	0.38	0.00
Queue Length 95th (ft)	Err	35	0	0	0	0	0
Control Delay (s)	Err	21.2	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C					
Approach Delay (s)	Err	3.6			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			5773.8				
Intersection Capacity Utilization			111.7%		ICU Level of Service		
Analysis Period (min)			15				H










NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	88	0	68	1	1	0	73	419	12	1	1774	201
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3525		1770	3485	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3525		1770	3485	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	117	0	91	2	2	0	80	460	13	1	1971	223
RTOR Reduction (vph)	0	73	0	0	0	0	0	1	0	0	6	0
Lane Group Flow (vph)	117	18	0	2	2	0	80	472	0	1	2188	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	17.9	17.9		0.8	0.8		5.8	52.1		0.8	47.1	
Effective Green, g (s)	17.9	17.9		0.8	0.8		5.8	52.1		0.8	47.1	
Actuated g/C Ratio	0.20	0.20		0.01	0.01		0.06	0.58		0.01	0.52	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	350	313		15	16		113	2029		15	1813	
v/s Ratio Prot	c0.07	0.01		c0.00	0.00		c0.05	0.13		0.00	c0.63	
v/s Ratio Perm												
v/c Ratio	0.33	0.06		0.13	0.12		0.71	0.23		0.07	1.21	
Uniform Delay, d1	31.2	29.5		44.5	44.5		41.5	9.4		44.5	21.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.1		4.0	3.5		18.3	0.1		1.9	98.5	
Delay (s)	31.7	29.5		48.5	48.0		59.8	9.5		46.4	120.2	
Level of Service	C	C		D	D		E	A		D	F	
Approach Delay (s)		30.8			48.3			16.7			120.2	
Approach LOS		C			D			B			F	
Intersection Summary												
HCM 2000 Control Delay		94.5							F			
HCM 2000 Volume to Capacity ratio		0.94										
Actuated Cycle Length (s)		90.5			Sum of lost time (s)			18.9				
Intersection Capacity Utilization		80.6%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	57	1722	65	0	455	35	14	40		4	24	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6				5.6
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00				1.00
Flt	1.00	0.99			0.99		1.00	0.99				0.96
Flt Protected	0.95	1.00			1.00		0.95	1.00				0.98
Satd. Flow (prot)	1770	5058			5031		1770	1836				1759
Flt Permitted	0.95	1.00			1.00		0.70	1.00				0.16
Satd. Flow (perm)	1770	5058			5031		1308	1836				284
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.70	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	65	1957	74	0	484	37	20	57	6	28	31	25
RTOR Reduction (vph)	0	2	0	0	5	0	0	2	0	0	8	0
Lane Group Flow (vph)	65	2029	0	0	516	0	20	61	0	0	76	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1913			2043		254	357			47	
v/s Ratio Prot	c0.04	c0.40			c0.10			c0.03				
v/s Ratio Perm							0.02				c0.27	
v/c Ratio	0.33	1.06			0.25		0.08	0.17			1.61	
Uniform Delay, d1	73.8	56.0			35.4		59.3	60.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	38.8			0.3		0.1	0.2			353.1	
Delay (s)	74.8	94.7			35.7		59.4	60.6			428.1	
Level of Service	E	F			D		E	E			F	
Approach Delay (s)		94.1			35.7		60.3				428.1	
Approach LOS		F			D		E				F	
Intersection Summary												
HCM 2000 Control Delay		92.2							F			
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			22.3				
Intersection Capacity Utilization		73.1%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑	↑↑↑↑
Volume (vph)	0	1752	0	504	493	38	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3502							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3502							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1969	0	536	524	40	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1969	0	536	564	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3182							609
v/s Ratio Prot		c0.39		c0.16	c0.16							
v/s Ratio Perm												0.00
v/c Ratio		1.02		0.28	0.18							0.00
Uniform Delay, d1		56.0		20.6	0.9							34.8
Progression Factor		0.34		1.00	1.00							1.00
Incremental Delay, d2		13.6		0.1	0.0							0.0
Delay (s)		32.5		20.7	0.9							34.9
Level of Service		C		C	A							C
Approach Delay (s)		32.5			10.6		0.0				34.9	
Approach LOS		C			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		24.7				HCM 2000 Level of Service		C				
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		57.9%				ICU Level of Service		B				
Analysis Period (min)		15										
c Critical Lane Group												




















NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑↑				↑↑
Volume (veh/h)	3	214	0	0	312	40	0	0	0	104	0	8
Sign Control		Free			Free			Stop				Stop
Grade		0%			0%			0%				0%
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	249	0	0	355	45	0	0	0	158	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	400			249			645	656	249	633	633	377
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	400			249			645	656	249	633	633	377
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	60	100	98
cM capacity (veh/h)	1159			1317			377	384	790	391	396	669
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	252	400	0	170								
Volume Left	3	0	0	158								
Volume Right	0	45	0	12								
cSH	1159	1317	1700	403								
Volume to Capacity	0.00	0.00	0.00	0.42								
Queue Length 95th (ft)	0	0	0	51								
Control Delay (s)	0.1	0.0	0.0	20.3								
Lane LOS	A		A	C								
Approach Delay (s)	0.1	0.0	0.0	20.3								
Approach LOS			A	C								
Intersection Summary												
Average Delay		4.2										
Intersection Capacity Utilization		31.8%				ICU Level of Service		A				
Analysis Period (min)		15										











NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop			Stop				Stop			Stop	
Volume (vph)	7	296	12	85	326	24	14	38	68	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	379	15	96	366	27	25	67	119	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	395	96	393	211	161						
Volume Left (vph)	9	0	96	0	25	61						
Volume Right (vph)	0	15	0	27	119	28						
Hadj (s)	0.53	0.01	0.53	-0.01	-0.28	0.00						
Departure Headway (s)	7.2	6.7	7.1	6.6	6.7	7.1						
Degree Utilization, x	0.02	0.73	0.19	0.72	0.39	0.32						
Capacity (veh/h)	470	517	483	527	475	433						
Control Delay (s)	9.2	24.8	10.6	23.3	13.8	13.4						
Approach Delay (s)	24.5		20.8		13.8	13.4						
Approach LOS	C		C		B	B						
Intersection Summary												
Delay			19.9									
Level of Service			C									
Intersection Capacity Utilization			41.7%		ICU Level of Service		A					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	74	423	457	39	53	147
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	76	436	531	45	62	173
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	577				1143	288
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	577				1143	288
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	92				65	76
cM capacity (veh/h)	993				179	708
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	76	436	354	222	235	
Volume Left	76	0	0	0	62	
Volume Right	0	0	0	45	173	
cSH	993	1700	1700	1700	397	
Volume to Capacity	0.08	0.26	0.21	0.13	0.59	
Queue Length 95th (ft)	6	0	0	0	92	
Control Delay (s)	8.9	0.0	0.0	0.0	26.4	
Lane LOS	A				D	
Approach Delay (s)	1.3		0.0		26.4	
Approach LOS					D	
Intersection Summary						
Average Delay			5.2			
Intersection Capacity Utilization			40.9%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↱		↰	↰↱			↱		↰	↰↱	↱
Volume (vph)	28	433	29	31	459	3	55	20	22	12	47	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3536			1755			1844	1583
Flt Permitted	0.47	1.00		0.45	1.00			0.78			0.91	1.00
Satd. Flow (perm)	867	3505		831	3536			1409			1688	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	515	35	34	504	3	67	24	27	16	62	39
RTOR Reduction (vph)	0	7	0	0	1	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	543	0	34	506	0	0	97	0	0	78	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Effective Green, g (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	413	1671		396	1686			307			368	345
v/s Ratio Prot		c0.15			0.14							
v/s Ratio Perm	0.04			0.04				c0.07			0.05	0.01
v/c Ratio	0.08	0.32		0.09	0.30			0.32			0.21	0.02
Uniform Delay, d1	4.3	4.9		4.3	4.8			9.9			9.7	9.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.6			0.3	0.0
Delay (s)	4.4	5.0		4.4	4.9			10.5			10.0	9.3
Level of Service	A	A		A	A			B			A	A
Approach Delay (s)		5.0			4.9			10.5			9.7	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		30.2			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		44.8%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↰			↰	↰
Volume (veh/h)	733	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	894	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			904		894	894
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			904		894	894
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	99
cM capacity (veh/h)			752		312	340
Direction, Lane #						
Volume Total	EB 1	EB 2	NB 1			
Volume Left	894	10	12			
Volume Right	0	0	9			
cSH	0	10	3			
cSH	1700	1700	318			
Volume to Capacity	0.53	0.01	0.04			
Queue Length 95th (ft)	0	0	3			
Control Delay (s)	0.0	0.0	16.8			
Lane LOS			C			
Approach Delay (s)	0.0		16.8			
Approach LOS			C			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			48.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	42	2043	132	59	880	132	99	91	63	175	80	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Flt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5039		1770	4986			3342			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5039		1770	4986			3342			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	45	2173	140	60	889	133	109	100	69	197	90	29
RTOR Reduction (vph)	0	4	0	0	11	0	0	18	0	0	4	0
Lane Group Flow (vph)	45	2309	0	60	1011	0	0	260	0	0	312	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2007		196	1986			649			658	
v/s Ratio Prot	0.03	c0.46		c0.03	0.20			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.23	1.15		0.31	0.51			0.40			0.47	
Uniform Delay, d1	73.0	54.1		73.6	40.9			63.3			64.3	
Progression Factor	1.00	1.00		1.23	0.81			1.00			1.00	
Incremental Delay, d2	0.6	73.9		0.8	0.9			0.4			0.5	
Delay (s)	73.6	128.1		91.3	34.1			63.8			64.9	
Level of Service	E	F		F	C			E			E	
Approach Delay (s)		127.1			37.3			63.8			64.9	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		93.7			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		119.1%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	20	2329	58	49	1291	55	21	11	35	64	13	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5			5.5	5.5
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	1.00
Flt	1.00	1.00		1.00	0.99			0.93			1.00	0.92
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.95	1.00
Satd. Flow (prot)	1770	5067		1770	5054			1704			1770	1719
Flt Permitted	0.95	1.00		0.95	1.00			0.90			0.62	1.00
Satd. Flow (perm)	1770	5067		1770	5054			1554			1156	1719
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2377	59	51	1331	57	25	13	42	75	15	16
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	14	0
Lane Group Flow (vph)	20	2435	0	51	1386	0	0	57	0	75	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3563		157	3666			191		142	212	
v/s Ratio Prot	0.01	c0.48		c0.03	c0.27						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.68		0.32	0.38			0.30		0.53	0.08	
Uniform Delay, d1	79.3	15.3		76.9	9.3			71.8		74.0	69.9	
Progression Factor	1.46	0.23		1.55	0.28			1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		1.0	0.2			0.9		3.5	0.2	
Delay (s)	116.0	3.6		120.6	2.8			72.7		77.5	70.0	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		4.5			7.0			72.7			75.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.6			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.63										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		66.0%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰		↰↰	
Volume (vph)	27	2133	207	159	1365	82	131	41	129	156	45	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5018		1770	5085	1583		1795	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5018		1770	5085	1583		1795	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	29	2269	220	164	1407	85	142	45	140	211	61	27
RTOR Reduction (vph)	0	6	0	0	0	37	0	0	116	0	4	0
Lane Group Flow (vph)	29	2483	0	164	1407	48	0	187	24	0	295	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2				4			
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2221		192	2364	736		306	269		575	
v/s Ratio Prot	0.02	c0.49		c0.09	c0.28			c0.10			c0.09	
v/s Ratio Perm						0.03			0.02			
v/c Ratio	0.18	1.12		0.85	0.60	0.07		0.61	0.09		0.51	
Uniform Delay, d1	76.0	50.1		78.8	35.6	26.6		69.1	62.9		67.9	
Progression Factor	0.98	1.08		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.4	58.3		29.0	1.1	0.2		8.8	0.7		3.2	
Delay (s)	74.6	112.4		107.8	36.7	26.7		77.9	63.5		71.1	
Level of Service	E	F		F	D	C		E	E		E	
Approach Delay (s)		112.0			43.3			71.8			71.1	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		83.0			HCM 2000 Level of Service					F		
HCM 2000 Volume to Capacity ratio		0.87										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)					19.3		
Intersection Capacity Utilization		109.7%			ICU Level of Service					H		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰↰	
Volume (vph)	10	2336	50	173	1668	16	39	9	82	23	11	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Flt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1770	5069		1770	5078			1680			1756	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.84	
Satd. Flow (perm)	1770	5069		1770	5078			1515			1514	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.95	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	11	2596	56	182	1756	17	46	11	96	28	14	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	76	0	0	11	0
Lane Group Flow (vph)	11	2650	0	182	1772	0	0	77	0	0	45	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4					
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.3			17.3	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.3			17.3	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2417		234	3046			310			309	
v/s Ratio Prot	0.01	c0.52		c0.10	0.35							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.69	1.10		0.78	0.58			0.25			0.15	
Uniform Delay, d1	41.7	22.1		35.4	10.4			28.1			27.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	80.1	50.7		14.9	0.3			0.4			0.2	
Delay (s)	121.8	72.8		50.4	10.7			28.6			27.8	
Level of Service	F	E		D	B			C			C	
Approach Delay (s)		73.0			14.4			28.6			27.8	
Approach LOS		E			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		47.3			HCM 2000 Level of Service					D		
HCM 2000 Volume to Capacity ratio		0.83										
Actuated Cycle Length (s)		84.5			Sum of lost time (s)					15.7		
Intersection Capacity Utilization		77.2%			ICU Level of Service					D		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	192	2270	32	334	1675	566	67	180	543	599	243	232
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5075		1770	5085	1583	1770	1631	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5075		1770	5085	1583	1770	1631	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	202	2389	34	359	1801	609	71	191	578	651	264	252
RTOR Reduction (vph)	0	1	0	0	0	85	0	26	278	0	2	128
Lane Group Flow (vph)	202	2422	0	359	1801	524	71	373	92	651	287	99
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases					2				4			8
Actuated Green, G (s)	11.4	36.4		45.0	70.0	70.0	8.7	37.9	37.9	11.8	41.0	41.0
Effective Green, g (s)	11.4	36.4		45.0	70.0	70.0	8.7	37.9	37.9	11.8	41.0	41.0
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1207		520	2326	724	100	404	372	264	468	403
v/s Ratio Prot	0.06	c0.48		c0.20	c0.35		0.04	c0.23		c0.19	c0.16	
v/s Ratio Perm					0.33			0.06				0.07
v/c Ratio	0.79	2.01		0.69	0.77	0.72	0.71	0.92	0.25	2.47	0.61	0.25
Uniform Delay, d1	69.6	58.3		47.8	34.9	33.7	70.9	56.2	46.1	70.6	49.0	43.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.4	456.0		3.9	1.7	3.6	20.6	26.6	0.3	670.9	2.4	0.3
Delay (s)	85.0	514.3		51.8	36.5	37.3	91.5	82.8	46.5	741.5	51.4	44.2
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		481.3			38.7			67.5			435.0	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		261.4			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.30										
Actuated Cycle Length (s)		153.0			Sum of lost time (s)				21.9			
Intersection Capacity Utilization		133.4%			ICU Level of Service				H			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑		↑	↑↑↑
Volume (vph)	0	526	885	0	448	1697
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	591	941	0	492	1865
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	591	941	0	492	1862
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.17	c0.27		0.28	c0.67
v/s Ratio Perm						
v/c Ratio		0.33	1.10		0.74	1.05
Uniform Delay, d1		11.8	30.3		21.6	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	60.6		4.5	35.3
Delay (s)		11.9	90.9		26.1	49.8
Level of Service		B	F		C	D
Approach Delay (s)		11.9	90.9		44.8	
Approach LOS		B	F		D	
Intersection Summary						
HCM 2000 Control Delay		51.0		HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio		1.14				
Actuated Cycle Length (s)		80.0		Sum of lost time (s)		14.2
Intersection Capacity Utilization		88.6%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑↑				
Volume (vph)	0	968	0	0	539	255	456	2	109	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3369		1681	1616				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3369		1681	1616				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1008	0	0	606	287	490	2	117	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	32	0	0	0	0
Lane Group Flow (vph)	0	1008	0	0	795	0	314	263	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.7			19.7		14.8	14.8				
Effective Green, g (s)		19.7			19.7		14.8	14.8				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1640			1561		585	562				
v/s Ratio Prot		0.28			0.24							
v/s Ratio Perm							0.19	0.16				
v/c Ratio		0.61			0.51		0.54	0.47				
Uniform Delay, d1		8.6			8.0		11.1	10.8				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.7			0.3		1.0	0.6				
Delay (s)		9.2			8.3		12.1	11.4				
Level of Service		A			A		B	B				
Approach Delay (s)		9.2			8.3		11.7			0.0		
Approach LOS		A			A		B			A		
Intersection Summary												
HCM 2000 Control Delay		9.5			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		42.5			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		49.4%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

















NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2022 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	3	36	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	3	52	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	73	52	52			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	73	52	52			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	926	1015	1554			
Direction, Lane #						
Volume Total	16	12	52			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	1015	1554	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.3	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.3	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.5				
Intersection Capacity Utilization		17.2%		ICU Level of Service		
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St













MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1421	34	0	4033	553	0	0	477	0	0	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.92	0.92	0.92	0.80	0.80	0.80	0.75	0.75	0.75
Hourly flow rate (vph)	0	1712	41	0	4384	601	0	0	596	0	0	12
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	5005			1773			3246	6757	631	5295	6477	1802
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	5005			1773			3246	6757	631	5295	6477	1802
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	56	100	100	82
cM capacity (veh/h)	16			341			3	0	1359	0	0	67
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	685	685	383	1753	1753	1478	596	12				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	41	0	0	601	596	12				
cSH	1700	1700	1700	1700	1700	1700	1359	67				
Volume to Capacity	0.40	0.40	0.23	1.03	1.03	0.87	0.44	0.18				
Queue Length 95th (ft)	0	0	0	0	0	0	57	15				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.7	70.5				
Lane LOS							A	F				
Approach Delay (s)	0.0			0.0			9.7	70.5				
Approach LOS							A	F				
Intersection Summary												
Average Delay				0.9								
Intersection Capacity Utilization				105.3%	ICU Level of Service			G				
Analysis Period (min)				15								

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	  			  			
Volume (veh/h)	1287	202	0	3932	0	232	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92	
Hourly flow rate (vph)	1462	230	0	4369	0	252	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None		None				
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			1712	3074		642	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			1712	3074		642	
tC, single (s)			4.1	6.8		6.9	
tC, 2 stage (s)							
tF (s)			2.2	3.5		3.3	
p0 queue free %			100	100		37	
cM capacity (veh/h)			360	9		403	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	585	585	522	1456	1456	1456	252
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	230	0	0	0	252
cSH	1700	1700	1700	1700	1700	1700	403
Volume to Capacity	0.34	0.34	0.31	0.86	0.86	0.86	0.63
Queue Length 95th (ft)	0	0	0	0	0	0	103
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	27.8
Lane LOS							D
Approach Delay (s)	0.0			0.0			27.8
Approach LOS							D
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Utilization			90.8%	ICU Level of Service		E	
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1793	1947	343	109	102	0	0	278	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			5.6	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.98		1.00	1.00			0.99	
Flt Protected				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4636		1770	3539			3507	
Flt Permitted				0.95	0.99		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4636		1770	3539			3507	
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.74	0.74	0.74	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	1928	2094	369	147	138	0	0	320	14
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	1080	3303	0	147	138	0	0	332	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				131.2	131.2		20.0	46.7			21.5	
Effective Green, g (s)				131.2	131.2		20.0	46.7			21.5	
Actuated g/C Ratio				0.69	0.69		0.11	0.25			0.11	
Clearance Time (s)				6.0	6.0		5.2	5.6			5.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				1053	3209		186	872			397	
v/s Ratio Prot				0.71	c0.71		c0.08	0.04			c0.09	
v/s Ratio Perm												
v/c Ratio				1.03	1.03		0.79	0.16			0.84	
Uniform Delay, d1				29.2	29.2		82.7	56.0			82.3	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				34.4	24.0		20.0	0.1			14.2	
Delay (s)				63.6	53.2		102.7	56.1			96.5	
Level of Service				E	D		F	E			F	
Approach Delay (s)		0.0			55.7			80.1			96.5	
Approach LOS		A			E			F			F	
Intersection Summary												
HCM 2000 Control Delay				59.8			HCM 2000 Level of Service				E	
HCM 2000 Volume to Capacity ratio				0.98								
Actuated Cycle Length (s)				189.5			Sum of lost time (s)				16.8	
Intersection Capacity Utilization				201.0%			ICU Level of Service				H	
Analysis Period (min)				15								
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	584	106	0	0	0	0	201	224	452	1676	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frt		1.00	0.85					0.96	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5085	1583					3243	1441	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5085	1583					3243	1441	3433	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.86	0.92	0.92	0.96	0.92
Adj. Flow (vph)	1	635	115	0	0	0	0	234	243	491	1746	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	23	48	0	0	0
Lane Group Flow (vph)	0	636	86	0	0	0	0	306	100	491	1746	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		60.0	60.0					63.2	63.2	35.2	101.2	
Effective Green, g (s)		60.0	60.0					63.2	63.2	35.2	101.2	
Actuated g/C Ratio		0.35	0.35					0.37	0.37	0.20	0.59	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1765	549					1186	527	699	2072	
v/s Ratio Prot								0.09		0.14	c0.49	
v/s Ratio Perm		0.13	0.05						0.07			
v/c Ratio		0.36	0.16					0.26	0.19	0.70	0.84	
Uniform Delay, d1		42.1	38.9					38.4	37.3	63.9	29.3	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.1					0.1	0.2	3.2	3.3	
Delay (s)		42.2	39.1					38.5	37.5	67.1	32.6	
Level of Service		D	D					D	D	E	C	
Approach Delay (s)		41.7			0.0			38.2			40.2	
Approach LOS		D			A			D			D	
Intersection Summary												
HCM 2000 Control Delay		40.2						HCM 2000 Level of Service			D	
HCM 2000 Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		172.8						Sum of lost time (s)			14.4	
Intersection Capacity Utilization		201.0%						ICU Level of Service			H	
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus MILCON_NorthOp Year 2023 Alt 3north
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave Timing Plan: AM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	W	W	W	W	W
Volume (vph)	222	7	1202	617	0	1423
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Flpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	1.00		0.95			1.00
Flt Protected	0.95		1.00			1.00
Satd. Flow (prot)	1591		3318			3362
Flt Permitted	0.95		1.00			1.00
Satd. Flow (perm)	1591		3318			3362
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	258	8	1292	663	0	1498
RTOR Reduction (vph)	1	0	51	0	0	0
Lane Group Flow (vph)	265	0	1904	0	0	1498
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA		NA	
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	19.0		46.3			46.3
Effective Green, g (s)	19.0		46.3			46.3
Actuated g/C Ratio	0.26		0.62			0.62
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	406		2064			2092
v/s Ratio Prot	c0.17		c0.57			0.45
v/s Ratio Perm						
v/c Ratio	0.65		0.92			0.72
Uniform Delay, d1	24.7		12.5			9.6
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	3.7		7.5			1.2
Delay (s)	28.5		19.9			10.8
Level of Service	C		B			B
Approach Delay (s)	28.5		19.9			10.8
Approach LOS	C		B			B
Intersection Summary						
HCM 2000 Control Delay			16.8		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.88			
Actuated Cycle Length (s)			74.4		Sum of lost time (s)	12.1
Intersection Capacity Utilization			79.5%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus MILCON_NorthOp Year 2023 Alt 3north
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas Timing Plan: AM PEAK

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	W	W	W	W	W	W	W	W	W	W	W	W
Volume (vph)	48	2	10	8	0	5	20	1423	26	40	1568	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	1.00	
Flt Protected	0.95	0.96	1.00		0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1691	1583		1713		1770	3530		1770	3527	
Flt Permitted	0.74	0.77	1.00		0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1310	1371	1583		1512		1770	3530		1770	3527	
Peak-hour factor, PHF	0.86	0.86	0.86	0.50	0.50	0.50	0.84	0.84	0.84	0.92	0.92	0.92
Adj. Flow (vph)	56	2	12	16	0	10	24	1694	31	43	1704	40
RTOR Reduction (vph)	0	0	10	0	22	0	0	1	0	0	1	0
Lane Group Flow (vph)	29	29	2	0	4	0	24	1724	0	43	1743	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								
Actuated Green, G (s)	15.5	15.5	15.5		15.5		2.8	66.5		3.9	67.6	
Effective Green, g (s)	15.5	15.5	15.5		15.5		2.8	66.5		3.9	67.6	
Actuated g/C Ratio	0.16	0.16	0.16		0.16		0.03	0.66		0.04	0.68	
Clearance Time (s)	4.6	4.6	4.6		4.6		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	203	212	245		234		49	2347		69	2384	
v/s Ratio Prot							0.01	0.49		c0.02	c0.49	
v/s Ratio Perm	c0.02	0.02	0.00		0.00							
v/c Ratio	0.14	0.14	0.01		0.02		0.49	0.73		0.62	0.73	
Uniform Delay, d1	36.5	36.5	35.7		35.8		47.9	11.0		47.3	10.4	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.3	0.0		0.0		7.5	1.2		16.2	1.2	
Delay (s)	36.8	36.8	35.8		35.8		55.4	12.2		63.5	11.6	
Level of Service	D	D	D		D		E	B		E	B	
Approach Delay (s)		36.6			35.8			12.8			12.8	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			13.4				HCM 2000 Level of Service			B		
HCM 2000 Volume to Capacity ratio			0.63									
Actuated Cycle Length (s)			100.0				Sum of lost time (s)			14.1		
Intersection Capacity Utilization			64.9%				ICU Level of Service			C		
Analysis Period (min)			15									
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	0	23	0	1366	8	437	1122	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5	5.5	4.2	5.5	
Lane Util. Factor					1.00			0.95	1.00	1.00	0.95	
Flt					0.86			1.00	0.85	1.00	1.00	
Flt Protected					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1611			3539	1583	1770	3539	
Flt Permitted					1.00			1.00	1.00	0.95	1.00	
Satd. Flow (perm)					1611			3539	1583	1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.66	0.66	0.91	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	0	0	35	0	1501	9	446	1145	0
RTOR Reduction (vph)	0	0	0	0	32	0	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	0	0	3	0	0	1501	4	446	1145	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases								2				
Actuated Green, G (s)					12.6			68.1	68.1	50.0	122.3	
Effective Green, g (s)					12.6			68.1	68.1	50.0	122.3	
Actuated g/C Ratio					0.09			0.47	0.47	0.34	0.84	
Clearance Time (s)					4.6			5.5	5.5	4.2	5.5	
Vehicle Extension (s)					3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					139			1662	743	610	2984	
v/s Ratio Prot					c0.00			c0.42		c0.25	0.32	
v/s Ratio Perm								0.00				
v/c Ratio					0.02			0.90	0.01	0.73	0.38	
Uniform Delay, d1					60.6			35.4	20.4	41.6	2.6	
Progression Factor					1.00			0.37	1.00	1.00	1.00	
Incremental Delay, d2					0.1			5.3	0.0	4.5	0.4	
Delay (s)					60.6			18.4	20.5	46.1	3.0	
Level of Service					E			B	C	D	A	
Approach Delay (s)		0.0			60.6			18.4			15.1	
Approach LOS		A			E			B			B	
Intersection Summary												
HCM 2000 Control Delay		17.2			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.78										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				18.9			
Intersection Capacity Utilization		87.6%			ICU Level of Service				E			
Analysis Period (min)		15										
c Critical Lane Group												











NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	54	14	1	69	135	146	1196	5	339	492	332
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flrpb, ped/bikes	1.00	1.00	0.90		1.00	0.95	1.00	1.00	0.85	1.00	0.99	
Flrpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3285	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1429		1862	1510	1770	3539	1347	1770	3285	
Peak-hour factor, PHF	0.65	0.65	0.65	0.88	0.88	0.88	0.90	0.90	0.90	0.87	0.87	0.87
Adj. Flow (vph)	52	83	22	1	78	153	162	1329	6	390	566	382
RTOR Reduction (vph)	0	0	20	0	0	129	0	0	3	0	81	0
Lane Group Flow (vph)	52	83	2	0	79	24	162	1329	3	390	867	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Effective Green, g (s)	10.0	10.0	10.0		23.0	23.0	45.0	64.6	64.6	28.0	47.6	
Actuated g/C Ratio	0.07	0.07	0.07		0.16	0.16	0.31	0.45	0.45	0.19	0.33	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	122	128	98		295	239	549	1576	600	341	1078	
v/s Ratio Prot	0.03	c0.04			c0.04		0.09	c0.38		c0.22	0.26	
v/s Ratio Perm			0.00			0.02		0.00				
v/c Ratio	0.43	0.65	0.02		0.27	0.10	0.30	0.84	0.00	1.14	0.80	
Uniform Delay, d1	64.7	65.8	62.9		53.6	52.2	38.0	35.7	22.3	58.5	44.4	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.96	0.93	
Incremental Delay, d2	2.4	10.8	0.1		0.5	0.2	0.3	5.7	0.0	92.8	6.2	
Delay (s)	67.1	76.6	63.0		54.1	52.4	38.3	41.4	22.3	148.8	47.5	
Level of Service	E	E	E		D	D	D	D	C	F	D	
Approach Delay (s)		71.5			52.9			41.0			77.1	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		58.3			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		145.0			Sum of lost time (s)				19.4			
Intersection Capacity Utilization		91.9%			ICU Level of Service				F			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	54	206	4	106	377	9
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.80	0.80	0.92	0.92
Hourly flow rate (vph)	64	242	5	132	410	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked	1.00					
vC, conflicting volume	901	71			138	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	898	71			138	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	71	76			72	
cM capacity (veh/h)	221	991			1446	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	306	138	420			
Volume Left	64	0	410			
Volume Right	242	132	0			
cSH	1065	1700	1446			
Volume to Capacity	0.29	0.08	0.28			
Queue Length 95th (ft)	30	0	29			
Control Delay (s)	13.5	0.0	8.3			
Lane LOS	B		A			
Approach Delay (s)	13.5	0.0	8.3			
Approach LOS	B					
Intersection Summary						
Average Delay		8.8				
Intersection Capacity Utilization		38.0%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖↗		↑↑	↖↗		↑↑
Volume (vph)	57	3	1359	436	0	467
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.96		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	0.99		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1758		3539	1520		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1758		3539	1520		3539
Peak-hour factor, PHF	0.75	0.75	0.95	0.95	0.64	0.64
Adj. Flow (vph)	76	4	1431	459	0	730
RTOR Reduction (vph)	4	0	0	141	0	0
Lane Group Flow (vph)	76	0	1431	318	0	730
Confl. Peds. (#/hr)	20	20		20	20	
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	3.1		29.3	29.3		29.3
Effective Green, g (s)	3.1		29.3	29.3		29.3
Actuated g/C Ratio	0.07		0.69	0.69		0.69
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	128		2451	1052		2451
v/s Ratio Prot	c0.04		c0.40			0.21
v/s Ratio Perm				0.21		
v/c Ratio	0.60		0.58	0.30		0.30
Uniform Delay, d1	19.0		3.4	2.5		2.5
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	7.3		0.4	0.2		0.1
Delay (s)	26.3		3.7	2.7		2.6
Level of Service	C		A	A		A
Approach Delay (s)	26.3		3.5			2.6
Approach LOS	C		A			A
Intersection Summary						
HCM 2000 Control Delay			3.9		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.58			
Actuated Cycle Length (s)			42.3		Sum of lost time (s)	9.9
Intersection Capacity Utilization			50.0%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2023 Alt 3north

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑		↘	↑↑
Volume (veh/h)	0	15	2218	5	5	530
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.58	0.58	0.93	0.93	0.68	0.68
Hourly flow rate (vph)	0	26	2385	5	7	779
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2792	1195			2390	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2792	1195			2390	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			96	
cM capacity (veh/h)	14	179			198	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	1590	800	7	390	390
Volume Left	0	0	0	7	0	0
Volume Right	26	0	5	0	0	0
cSH	179	1700	1700	198	1700	1700
Volume to Capacity	0.14	0.94	0.47	0.04	0.23	0.23
Queue Length 95th (ft)	12	0	0	3	0	0
Control Delay (s)	28.5	0.0	0.0	23.8	0.0	0.0
Lane LOS	D			C		
Approach Delay (s)	28.5	0.0		0.2		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			71.5%		ICU Level of Service	C
Analysis Period (min)			15			

NBC Coastal Campus
12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2023 Alt 3north

Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	17	88	2130	12	38	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.81	0.81	0.93	0.93	0.69	0.69
Adj. Flow (vph)	21	109	2290	13	55	710
RTOR Reduction (vph)	0	3	0	1	0	0
Lane Group Flow (vph)	21	106	2290	12	55	710
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	15.9	26.0	68.2	68.2	5.0	82.0
Effective Green, g (s)	15.9	20.9	68.2	68.2	5.0	82.0
Actuated g/C Ratio	0.15	0.19	0.64	0.64	0.05	0.76
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	262	308	2251	1007	82	2707
v/s Ratio Prot	0.01	c0.07	c0.65		c0.03	0.20
v/s Ratio Perm				0.01		
v/c Ratio	0.08	0.34	1.02	0.01	0.67	0.26
Uniform Delay, d1	39.3	37.2	19.5	7.1	50.3	3.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7	23.4	0.0	19.4	0.1
Delay (s)	39.5	37.9	42.9	7.2	69.7	3.8
Level of Service	D	D	D	A	E	A
Approach Delay (s)	38.2		42.7			8.5
Approach LOS	D		D			A
Intersection Summary						
HCM 2000 Control Delay			34.4		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.88			
Actuated Cycle Length (s)			107.2		Sum of lost time (s)	18.1
Intersection Capacity Utilization			75.2%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus
13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↑↑			↑↑
Volume (veh/h)	0	33	2107	26	0	507
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.62	0.62	0.95	0.95	0.74	0.74
Hourly flow rate (vph)	0	53	2218	27	0	685
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2574	1123			2245	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2574	1123			2245	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	73			100	
cM capacity (veh/h)	21	200			227	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	53	1479	767	343	343	
Volume Left	0	0	0	0	0	
Volume Right	53	0	27	0	0	
cSH	200	1700	1700	1700	1700	
Volume to Capacity	0.27	0.87	0.45	0.20	0.20	
Queue Length 95th (ft)	26	0	0	0	0	
Control Delay (s)	29.4	0.0	0.0	0.0	0.0	
Lane LOS	D					
Approach Delay (s)	29.4	0.0		0.0		
Approach LOS	D					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		69.1%		ICU Level of Service	C	
Analysis Period (min)		15				

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Volume (vph)	10	7	2133	33	15	483
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.62	0.62	0.96	0.96	0.81	0.81
Adj. Flow (vph)	16	11	2222	34	19	596
RTOR Reduction (vph)	0	4	0	8	0	0
Lane Group Flow (vph)	16	7	2222	26	19	596
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	1.4	3.5	59.5	59.5	2.1	69.1
Effective Green, g (s)	1.4	3.5	59.5	59.5	2.1	69.1
Actuated g/C Ratio	0.02	0.05	0.77	0.77	0.03	0.90
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	32	71	2731	1221	48	3171
v/s Ratio Prot	c0.01	0.00	c0.63		c0.01	0.17
v/s Ratio Perm		0.00		0.02		
v/c Ratio	0.50	0.10	0.81	0.02	0.40	0.19
Uniform Delay, d1	37.5	35.3	5.4	2.0	36.9	0.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.8	0.6	2.0	0.0	5.3	0.0
Delay (s)	49.3	35.9	7.4	2.0	42.2	0.5
Level of Service	D	D	A	A	D	A
Approach Delay (s)	43.8		7.3			1.8
Approach LOS	D		A			A
Intersection Summary						
HCM 2000 Control Delay		6.5		HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio		0.79				
Actuated Cycle Length (s)		77.1		Sum of lost time (s)	14.1	
Intersection Capacity Utilization		71.8%		ICU Level of Service	C	
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus MILCON_NorthOp Year 2023 Alt 3north
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations		↑	↑		↑		↑	↑		
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	2	0	46	1	0	45	2	0	0
Peak Hour Factor	0.25	0.25	0.25	0.54	0.54	0.54	0.63	0.63	0.25	0.25
Hourly flow rate (vph)	0	8	0	85	2	0	71	3	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2					
Volume Total (vph)	8	0	87	71	3					
Volume Left (vph)	0	0	85	0	0					
Volume Right (vph)	0	0	0	0	3					
Hadj (s)	0.03	0.00	0.23	0.03	-0.57					
Departure Headway (s)	4.2	3.2	4.3	4.1	3.2					
Degree Utilization, x	0.01	0.00	0.10	0.08	0.00					
Capacity (veh/h)	831	1121	815	839	1121					
Control Delay (s)	7.2	6.2	7.8	7.5	6.2					
Approach Delay (s)	7.2		7.8	7.5						
Approach LOS	A		A	A						
Intersection Summary										
Delay			7.6							
Level of Service			A							
Intersection Capacity Utilization			19.3%		ICU Level of Service				A	
Analysis Period (min)			15							

NBC Coastal Campus MILCON_NorthOp Year 2023 Alt 3north
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd Timing Plan: AM PEAK








Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑	↑		↑	↑			
Volume (vph)	2	37	0	0	33	230	3	1934	51	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.73	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1354	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.75	0.75	0.75	0.72	0.72	0.72	0.94	0.94	0.94	0.25	0.25	0.25
Adj. Flow (vph)	3	49	0	0	46	319	3	2057	54	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	56	0	2	22	0	0	0
Lane Group Flow (vph)	3	49	0	0	46	263	3	2057	32	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	16.7	16.7			16.7	16.7	47.7	43.6	43.6			
Effective Green, g (s)	16.7	16.7			16.7	16.7	47.7	43.6	43.6			
Actuated g/C Ratio	0.23	0.23			0.23	0.23	0.65	0.59	0.59			
Clearance Time (s)	5.1	5.1			5.1	5.1	4.2	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	306	422			422	358	1145	2093	936			
v/s Ratio Prot		0.03			0.02		0.00	c0.58				
v/s Ratio Perm	0.00					c0.17			0.02			
v/c Ratio	0.01	0.12			0.11	0.74	0.00	0.98	0.03			
Uniform Delay, d1	22.1	22.6			22.6	26.5	4.6	14.7	6.3			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.1			0.1	7.6	0.0	15.7	0.0			
Delay (s)	22.1	22.8			22.7	34.1	4.6	30.4	6.3			
Level of Service	C	C			C	C	A	C	A			
Approach Delay (s)		22.7			32.7			29.7			0.0	
Approach LOS		C			C			C			A	
Intersection Summary												
HCM 2000 Control Delay		30.0						HCM 2000 Level of Service		C		
HCM 2000 Volume to Capacity ratio		0.91										
Actuated Cycle Length (s)		73.7				Sum of lost time (s)			13.4			
Intersection Capacity Utilization		87.3%				ICU Level of Service			E			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

17: SR-75 (Silver Strand Blvd) & Hooper Blvd

MILCON_NorthOp Year 2023 Alt 3north

Timing Plan: AM PEAK













Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (veh/h)	30	54	494	1700	0	184	267
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.96	0.96	0.92	0.79	0.79
Hourly flow rate (vph)	120	216	515	1771	0	233	338
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None			None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2316	285	571		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2316	285	571		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	70	48		0		
cM capacity (veh/h)	15	711	998		0		
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	336	515	885	885	155	416	0
Volume Left	120	515	0	0	0	0	0
Volume Right	216	0	0	0	0	338	0
cSH	41	998	1700	1700	1700	1700	1700
Volume to Capacity	8.12	0.52	0.52	0.52	0.09	0.24	0.00
Queue Length 95th (ft)	Err	76	0	0	0	0	0
Control Delay (s)	Err	12.4	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B					
Approach Delay (s)	Err	2.8			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay		1054.4					
Intersection Capacity Utilization		65.3%		ICU Level of Service		C	
Analysis Period (min)		15					

NBC Coastal Campus

18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2023 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	408	0	39	2	1	2	26	2064	0	0	191	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.90		1.00	1.00			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583		1770	1676		1770	3539			3436	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1770	1583		1770	1676		1770	3539			3436	
Peak-hour factor, PHF	0.88	0.88	0.88	0.31	0.31	0.31	0.95	0.95	0.95	0.69	0.69	0.69
Adj. Flow (vph)	464	0	44	6	3	6	27	2173	0	0	277	67
RTOR Reduction (vph)	0	31	0	0	6	0	0	0	0	0	18	0
Lane Group Flow (vph)	464	13	0	6	3	0	27	2173	0	0	326	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	26.4	26.4		1.7	1.7		1.9	43.4			37.3	
Effective Green, g (s)	26.4	26.4		1.7	1.7		1.9	43.4			37.3	
Actuated g/C Ratio	0.31	0.31		0.02	0.02		0.02	0.50			0.43	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	542	484		34	33		39	1781			1486	
v/s Ratio Prot	c0.26	0.01		c0.00	0.00		0.02	c0.61			0.09	
v/s Ratio Perm												
v/c Ratio	0.86	0.03		0.18	0.09		0.69	1.22			0.22	
Uniform Delay, d1	28.1	20.9		41.6	41.5		41.9	21.4			15.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	12.6	0.0		2.5	1.2		41.8	104.4			0.1	
Delay (s)	40.7	20.9		44.0	42.7		83.7	125.8			15.4	
Level of Service	D	C		D	D		F	F			B	
Approach Delay (s)		39.0			43.3			125.2			15.4	
Approach LOS		D			D			F			B	
Intersection Summary												
HCM 2000 Control Delay		98.2						HCM 2000 Level of Service		F		
HCM 2000 Volume to Capacity ratio		1.13										
Actuated Cycle Length (s)		86.2						Sum of lost time (s)		18.9		
Intersection Capacity Utilization		94.7%						ICU Level of Service		F		
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰			↰↰↰		↰	↰			↰↰	
Volume (vph)	8	240	15	0	1913	17	47	23	1	20	41	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00			1.00	
Flt	1.00	0.99			1.00		1.00	0.99			0.94	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1770	5040			5078		1770	1853			1731	
Flt Permitted	0.95	1.00			1.00		0.66	1.00			0.18	
Satd. Flow (perm)	1770	5040			5078		1236	1853			307	
Peak-hour factor, PHF	0.89	0.89	0.89	0.91	0.91	0.84	0.84	0.84	0.84	0.77	0.77	0.77
Adj. Flow (vph)	9	270	17	0	2102	19	56	27	1	26	53	68
RTOR Reduction (vph)	0	4	0	0	1	0	0	1	0	0	18	0
Lane Group Flow (vph)	9	283	0	0	2120	0	56	27	0	0	130	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2		4				3	
Permitted Phases							4			3		
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1906			2062		240	360			51	
v/s Ratio Prot	c0.01	0.06			c0.42			0.01				
v/s Ratio Perm							c0.05				c0.42	
v/c Ratio	0.05	0.15			1.03		0.23	0.08			2.54	
Uniform Delay, d1	71.5	36.9			53.5		61.2	59.3			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.1	0.2			25.8		0.5	0.1			746.7	
Delay (s)	71.6	37.0			79.3		61.7	59.4			821.7	
Level of Service	E	D			E		E	E			F	
Approach Delay (s)		38.1			79.3			60.9			821.7	
Approach LOS		D			E			E			F	
Intersection Summary												
HCM 2000 Control Delay		115.3			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.01										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		75.8%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↰↰		↰↰	↰↰							↰
Volume (vph)	0	259	0	400	1921	9	0	0	0	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.2	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Flt		1.00		1.00	1.00							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3537							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3537							1611
Peak-hour factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94	0.25	0.25	0.25	0.75	0.75	0.75
Adj. Flow (vph)	0	316	0	426	2044	10	0	0	0	0	0	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	316	0	426	2054	0	0	0	0	0	0	6
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		101.2	180.0							68.1
Effective Green, g (s)		68.1		90.0	163.6							68.1
Actuated g/C Ratio		0.38		0.50	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1716	3214							609
v/s Ratio Prot		0.06		0.12	c0.58							
v/s Ratio Perm												0.00
v/c Ratio		0.16		0.25	0.64							0.01
Uniform Delay, d1		37.1		25.7	1.8							34.9
Progression Factor		0.38		1.00	1.00							1.00
Incremental Delay, d2		0.2		0.1	0.4							0.0
Delay (s)		14.3		25.8	2.2							35.0
Level of Service		B		C	A							C
Approach Delay (s)		14.3			6.3		0.0				35.0	
Approach LOS		B			A		A				C	
Intersection Summary												
HCM 2000 Control Delay		7.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		75.1%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	9	242	0	0	129	104	0	0	0	48	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.25	0.25	0.25	0.91	0.91	0.91
Hourly flow rate (vph)	11	288	0	0	139	112	0	0	0	53	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	251			288			509	560	288	504	504	195
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	251			288			509	560	288	504	504	195
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	89	100	99
cM capacity (veh/h)	1315			1274			470	433	751	475	466	847
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	299	251	0	57								
Volume Left	11	0	0	53								
Volume Right	0	112	0	4								
cSH	1315	1274	1700	492								
Volume to Capacity	0.01	0.00	0.00	0.12								
Queue Length 95th (ft)	1	0	0	10								
Control Delay (s)	0.4	0.0	0.0	13.3								
Lane LOS	A			B								
Approach Delay (s)	0.4	0.0	0.0	13.3								
Approach LOS				B								
Intersection Summary												
Average Delay				1.4								
Intersection Capacity Utilization				30.0%								A
Analysis Period (min)				15								

NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	280	4	26	210	24	11	14	126	11	10	14
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.81	0.81	0.81	0.80	0.80	0.80
Hourly flow rate (vph)	8	326	5	28	226	26	14	17	156	14	12	18
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	8	330	28	252	186	44						
Volume Left (vph)	8	0	28	0	14	14						
Volume Right (vph)	0	5	0	26	156	18						
Hadj (s)	0.53	0.02	0.53	-0.04	-0.45	-0.14						
Departure Headway (s)	6.0	5.5	6.1	5.5	5.1	5.7						
Degree Utilization, x	0.01	0.50	0.05	0.38	0.26	0.07						
Capacity (veh/h)	578	635	564	629	632	544						
Control Delay (s)	7.9	12.7	8.2	10.7	9.9	9.1						
Approach Delay (s)	12.6		10.4		9.9	9.1						
Approach LOS	B		B		A	A						
Intersection Summary												
Delay				11.1								
Level of Service				B								
Intersection Capacity Utilization				37.8%								A
Analysis Period (min)				15								


























NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱	↰↱		↰	↱
Volume (veh/h)	235	427	334	153	17	70
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.82	0.82	0.71	0.71
Hourly flow rate (vph)	297	541	407	187	24	99
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)			908			
pX, platoon unblocked						
vC, conflicting volume	594				1636	297
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	594				1636	297
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	70				62	86
cM capacity (veh/h)	978				64	699
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	297	541	272	322	123	
Volume Left	297	0	0	0	24	
Volume Right	0	0	0	187	99	
cSH	978	1700	1700	1700	237	
Volume to Capacity	0.30	0.32	0.16	0.19	0.52	
Queue Length 95th (ft)	32	0	0	0	67	
Control Delay (s)	10.3	0.0	0.0	0.0	35.4	
Lane LOS	B				E	
Approach Delay (s)	3.6		0.0		35.4	
Approach LOS					E	
Intersection Summary						
Average Delay			4.8			
Intersection Capacity Utilization			42.4%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

															
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR			
Lane Configurations															
Volume (vph)	16	420	15	26	335	0	66	44	81	1	22	27			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6			
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00			
Frt	1.00	0.99		1.00	1.00			0.94			1.00	0.85			
Flt Protected	0.95	1.00		0.95	1.00			0.98			1.00	1.00			
Satd. Flow (prot)	1770	3521		1770	3539			1726			1858	1583			
Flt Permitted	0.50	1.00		0.44	1.00			0.88			0.98	1.00			
Satd. Flow (perm)	930	3521		820	3539			1545			1831	1583			
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.66	0.66	0.66	0.58	0.58	0.58			
Adj. Flow (vph)	21	545	19	34	435	0	100	67	123	2	38	47			
RTOR Reduction (vph)	0	3	0	0	0	0	0	31	0	0	0	29			
Lane Group Flow (vph)	21	561	0	34	435	0	0	259	0	0	40	18			
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm			
Protected Phases		2			6			8			4				
Permitted Phases	2			6			8			4		4			
Actuated Green, G (s)	13.3	13.3		13.3	13.3			13.4			13.4	13.4			
Effective Green, g (s)	13.3	13.3		13.3	13.3			13.4			13.4	13.4			
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.37			0.37	0.37			
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6			
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0			
Lane Grp Cap (vph)	344	1304		303	1311			576			683	590			
v/s Ratio Prot		c0.16			0.12										
v/s Ratio Perm	0.02			0.04				c0.17			0.02	0.01			
v/c Ratio	0.06	0.43		0.11	0.33			0.45			0.06	0.03			
Uniform Delay, d1	7.3	8.5		7.4	8.1			8.5			7.2	7.1			
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00			
Incremental Delay, d2	0.1	0.2		0.2	0.1			0.6			0.0	0.0			
Delay (s)	7.4	8.7		7.6	8.3			9.0			7.2	7.2			
Level of Service	A	A		A	A			A			A	A			
Approach Delay (s)		8.6			8.2			9.0			7.2				
Approach LOS		A			A			A			A				
Intersection Summary															
HCM 2000 Control Delay			8.5			HCM 2000 Level of Service				A					
HCM 2000 Volume to Capacity ratio			0.44												
Actuated Cycle Length (s)			35.9			Sum of lost time (s)				9.2					
Intersection Capacity Utilization			46.9%			ICU Level of Service				A					
Analysis Period (min)			15												
c Critical Lane Group															

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑			↑	↑
Volume (veh/h)	505	4	0	0	2	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	549	4	0	0	2	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			553		549	549
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			553		549	549
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1017		497	536
Direction, Lane #	EB 1	EB 2	NB 1			
Volume Total	549	4	8			
Volume Left	0	0	2			
Volume Right	0	4	5			
cSH	1700	1700	524			
Volume to Capacity	0.32	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	12.0			
Lane LOS			B			
Approach Delay (s)	0.0		12.0			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.6%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑↑↑	↑	↑	↑	↑	↑	↑	↑
Volume (vph)	21	716	36	24	2056	44	174	38	52	91	46	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (prot)	1770	5049		1770	5069			3325			3364	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.97	
Satd. Flow (perm)	1770	5049		1770	5069			3325			3364	
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	25	852	43	26	2259	48	210	46	63	111	56	30
RTOR Reduction (vph)	0	3	0	0	1	0	0	12	0	0	8	0
Lane Group Flow (vph)	25	892	0	26	2306	0	0	307	0	0	189	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Effective Green, g (s)	15.0	79.7		12.0	76.7			35.0			35.0	
Actuated g/C Ratio	0.08	0.44		0.07	0.43			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	147	2235		118	2159			646			654	
v/s Ratio Prot	0.01	c0.18		c0.01	c0.45			c0.09			c0.06	
v/s Ratio Perm												
v/c Ratio	0.17	0.40		0.22	1.07			0.48			0.29	
Uniform Delay, d1	76.7	33.9		79.6	51.6			64.3			61.9	
Progression Factor	1.00	1.00		1.20	0.84			1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.7	38.4			0.6			0.2	
Delay (s)	77.3	34.5		96.5	81.8			64.9			62.1	
Level of Service	E	C		F	F			E			E	
Approach Delay (s)		35.6			82.0			64.9			62.1	
Approach LOS		D			F			E			E	
Intersection Summary												
HCM 2000 Control Delay		68.2			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		77.8%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰		↰	↰	
Volume (vph)	2	952	35	20	2233	12	18	4	31	56	11	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Flt	1.00	0.99		1.00	1.00			0.92		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5058		1770	5081			1687		1770	1704	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.66	1.00	
Satd. Flow (perm)	1770	5058		1770	5081			1542		1231	1704	
Peak-hour factor, PHF	0.89	0.89	0.89	0.88	0.88	0.88	0.73	0.73	0.73	0.70	0.70	0.70
Adj. Flow (vph)	2	1070	39	23	2538	14	25	5	42	80	16	21
RTOR Reduction (vph)	0	2	0	0	0	0	0	28	0	0	18	0
Lane Group Flow (vph)	2	1107	0	23	2552	0	0	44	0	80	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Effective Green, g (s)	4.0	123.7		12.0	131.7			30.0		30.0	30.0	
Actuated g/C Ratio	0.02	0.69		0.07	0.73			0.17		0.17	0.17	
Clearance Time (s)	4.2	5.5		4.2	5.5			4.6		4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	3475		118	3717			257		205	284	
v/s Ratio Prot	0.00	0.22		c0.01	c0.50						0.01	
v/s Ratio Perm								0.03		c0.06		
v/c Ratio	0.05	0.32		0.19	0.69			0.17		0.39	0.07	
Uniform Delay, d1	86.1	11.3		79.4	13.0			64.3		66.8	63.2	
Progression Factor	1.69	0.26		1.42	0.37			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.4	0.5			0.3		1.2	0.1	
Delay (s)	145.9	3.1		112.8	5.3			64.6		68.1	63.3	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.4			6.2			64.6			66.6	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		8.3			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			14.3				
Intersection Capacity Utilization		76.8%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												










NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰		↰	↰	
Volume (vph)	3	1022	65	98	2077	53	156	19	92	172	37	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Flt	1.00	0.99		1.00	0.91	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (prot)	1770	5040		1770	5085	1583		1783	1583		3374	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.96	
Satd. Flow (perm)	1770	5040		1770	5085	1583		1783	1583		3374	
Peak-hour factor, PHF	0.89	0.89	0.89	0.83	0.83	0.83	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	3	1148	73	118	2502	64	175	21	103	229	49	20
RTOR Reduction (vph)	0	4	0	0	0	30	0	0	85	0	3	0
Lane Group Flow (vph)	3	1217	0	118	2502	34	0	196	18	0	295	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			
Actuated Green, G (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Effective Green, g (s)	4.0	79.7		20.0	95.7	95.7		31.0	31.0		31.0	
Actuated g/C Ratio	0.02	0.44		0.11	0.53	0.53		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.2	4.9	4.9		4.6	4.6		4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	39	2231		196	2703	841		307	272		581	
v/s Ratio Prot	0.00	0.24		c0.07	c0.49			c0.11			c0.09	
v/s Ratio Perm						0.02			0.01			
v/c Ratio	0.08	0.55		0.60	0.93	0.04		0.64	0.07		0.51	
Uniform Delay, d1	86.2	36.8		76.2	38.9	20.2		69.3	62.4		67.6	
Progression Factor	1.22	0.61		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.8	0.9		5.1	6.9	0.1		4.3	0.1		0.7	
Delay (s)	106.3	23.4		81.3	45.7	20.3		73.6	62.5		68.3	
Level of Service	F	C		F	D	C		E	E		E	
Approach Delay (s)		23.6			46.7			69.8			68.3	
Approach LOS		C			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		43.4			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		94.0%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												












NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	14	1293	26	44	2209	12	16	6	49	39	2	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5070		1770	5081			1670			1723	
Flt Permitted	0.95	1.00		0.95	1.00			0.92			0.77	
Satd. Flow (perm)	1770	5070		1770	5081			1561			1374	
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.84	0.84	0.84	0.76	0.76	0.76
Adj. Flow (vph)	15	1405	28	51	2569	14	19	7	58	51	3	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	46	0	0	22	0
Lane Group Flow (vph)	15	1432	0	51	2583	0	0	38	0	0	60	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	0.7	37.9		2.8	40.0			15.1			15.1	
Effective Green, g (s)	0.7	37.9		2.8	40.0			15.1			15.1	
Actuated g/C Ratio	0.01	0.53		0.04	0.56			0.21			0.21	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	17	2687		69	2842			329			290	
v/s Ratio Prot	0.01	0.28		c0.03	c0.51							
v/s Ratio Perm								0.02			c0.04	
v/c Ratio	0.88	0.53		0.74	0.91			0.12			0.21	
Uniform Delay, d1	35.4	11.0		34.0	14.1			22.8			23.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	159.7	0.2		33.5	4.7			0.2			0.4	
Delay (s)	195.1	11.2		67.5	18.9			23.0			23.6	
Level of Service	F	B		E	B			C			C	
Approach Delay (s)		13.1			19.8			23.0			23.6	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		17.7			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		71.5			Sum of lost time (s)			15.7				
Intersection Capacity Utilization		60.1%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	93	1307	31	250	2141	220	84	74	791	241	95	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.88	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583	1770	1549	1504	3433	1750	1504
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.90	0.90	0.90	0.90	0.84	0.84	0.84
Adj. Flow (vph)	108	1520	36	266	2278	234	93	82	879	287	113	93
RTOR Reduction (vph)	0	2	0	0	0	67	0	154	181	0	2	60
Lane Group Flow (vph)	108	1554	0	266	2278	167	93	332	294	287	120	24
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	6.0	35.2		17.9	47.1	47.1	8.5	30.7	30.7	10.4	32.6	32.6
Effective Green, g (s)	6.0	35.2		17.9	47.1	47.1	8.5	30.7	30.7	10.4	32.6	32.6
Actuated g/C Ratio	0.05	0.30		0.15	0.41	0.41	0.07	0.26	0.26	0.09	0.28	0.28
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	177	1536		272	2062	642	129	409	397	307	491	422
v/s Ratio Prot	0.03	0.31		c0.15	c0.45		0.05	c0.21		c0.08	0.07	
v/s Ratio Perm						0.11			0.20			0.02
v/c Ratio	0.61	1.01		0.98	1.10	0.26	0.72	0.81	0.74	0.93	0.24	0.06
Uniform Delay, d1	53.9	40.4		48.9	34.5	22.9	52.6	40.0	39.1	52.5	32.2	30.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.1	25.9		47.9	55.0	0.2	17.9	11.7	7.3	34.4	0.3	0.1
Delay (s)	60.0	66.3		96.8	89.5	23.1	70.6	51.7	46.3	86.9	32.5	30.6
Level of Service	E	E		F	F	C	E	D	D	F	C	C
Approach Delay (s)		65.9			84.6			50.9			63.8	
Approach LOS		E			F			D			E	
Intersection Summary												
HCM 2000 Control Delay		71.8			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		1.01										
Actuated Cycle Length (s)		116.1			Sum of lost time (s)			21.9				
Intersection Capacity Utilization		90.8%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus

31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2023 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕	↕↕
Volume (vph)	0	293	1232	0	159	1383
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Flt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.93	0.93	0.90	0.90
Adj. Flow (vph)	0	329	1325	0	177	1537
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	329	1325	0	177	1534
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		61.0	26.4		9.4	44.0
Effective Green, g (s)		61.0	26.4		9.4	44.0
Actuated g/C Ratio		0.76	0.33		0.12	0.55
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		2698	1167		207	1532
v/s Ratio Prot		0.09	c0.37		0.10	c0.55
v/s Ratio Perm						
v/c Ratio		0.12	1.14		0.86	1.00
Uniform Delay, d1		2.5	26.8		34.6	18.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	71.9		27.4	23.3
Delay (s)		2.5	98.7		62.1	41.3
Level of Service		A	F		E	D
Approach Delay (s)		2.5	98.7		43.4	
Approach LOS		A	F		D	
Intersection Summary						
HCM 2000 Control Delay			61.2		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			1.12			
Actuated Cycle Length (s)			80.0		Sum of lost time (s)	14.2
Intersection Capacity Utilization			71.1%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

32: I-5 NB Ramps & SR-75 (Palm Ave)







MILCON_NorthOp Year 2023 Alt 3north

Timing Plan: AM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕		↕	↕		↕	↕	↕
Volume (vph)	0	453	0	0	449	537	887	1	147	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.92		1.00	0.96				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3250		1681	1635				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3250		1681	1635				
Peak-hour factor, PHF	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	521	0	0	488	584	964	1	160	0	0	0
RTOR Reduction (vph)	0	0	0	0	367	0	0	26	0	0	0	0
Lane Group Flow (vph)	0	521	0	0	705	0	569	530	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		17.5			17.5		21.7	21.7				
Effective Green, g (s)		17.5			17.5		21.7	21.7				
Actuated g/C Ratio		0.37			0.37		0.46	0.46				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1312			1204		772	751				
v/s Ratio Prot		0.15			c0.22							
v/s Ratio Perm							c0.34	0.32				
v/c Ratio		0.40			0.59		0.74	0.71				
Uniform Delay, d1		11.0			11.9		10.4	10.2				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.2			0.7		3.7	3.0				
Delay (s)		11.2			12.7		14.1	13.2				
Level of Service		B			B		B	B				
Approach Delay (s)		11.2			12.7		13.7				0.0	
Approach LOS		B			B		B				A	
Intersection Summary												
HCM 2000 Control Delay					12.8					HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio					0.67							
Actuated Cycle Length (s)					47.2					Sum of lost time (s)	8.0	
Intersection Capacity Utilization					72.1%					ICU Level of Service	C	
Analysis Period (min)					15							
c Critical Lane Group												













NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: AM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	3	4	66	13	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.72	0.72	0.41	0.41
Hourly flow rate (vph)	0	12	6	92	32	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	134	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	134	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	856	1042	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	12	97	32			
Volume Left	0	6	0			
Volume Right	12	0	0			
cSH	1042	1581	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.5	0.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.5	0.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization		16.7%		ICU Level of Service	A	
Analysis Period (min)		15				

NBC Coastal Campus
1: Glorietta Blvd & Fourth St







MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	4235	17	0	1860	244	0	0	910	0	0	55
Sign Control	Free	Free			Free			Stop			Stop	
Grade	0%				0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97	0.90	0.90	0.90	0.66	0.66	0.66
Hourly flow rate (vph)	0	4411	18	0	1918	252	0	0	1011	0	0	83
Pedestrians		20			20			20			20	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2189			4449			5183	6629	1519	3554	6512	805
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2189			4449			5183	6629	1519	3554	6512	805
tC, single (s)	4.1			4.1			7.5	6.5	*0.1	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	46	100	100	74
cM capacity (veh/h)	234			28			0	0	1869	1	0	315
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	1765	1765	900	767	767	635	1011	83				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	0	0	18	0	0	252	1011	83				
cSH	1700	1700	1700	1700	1700	1700	1869	315				
Volume to Capacity	1.04	1.04	0.53	0.45	0.45	0.37	0.54	0.26				
Queue Length 95th (ft)	0	0	0	0	0	0	86	26				
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.2	20.5				
Lane LOS							A	C				
Approach Delay (s)	0.0			0.0			9.2	20.5				
Approach LOS							A	C				
Intersection Summary												
Average Delay				1.4								
Intersection Capacity Utilization			147.2%				ICU Level of Service	H				
Analysis Period (min)			15									

* User Entered Value

NBC Coastal Campus
2: Pomona Ave & Fourth St

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

							
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	↑↑↑			↑↑↑		↑	
Volume (veh/h)	4043	131	0	1897	0	205	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.97	0.97	0.96	0.96	0.82	0.82	
Hourly flow rate (vph)	4168	135	0	1976	0	250	
Pedestrians	20			20	20		
Lane Width (ft)	12.0			12.0	12.0		
Walking Speed (ft/s)	4.0			4.0	4.0		
Percent Blockage	2			2	2		
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			4323		4934	1497	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			4323		4934	1497	
tC, single (s)			4.1		6.8	6.9	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			100		100	0	
cM capacity (veh/h)			32		0	108	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	1667	1667	969	659	659	659	250
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	135	0	0	0	250
cSH	1700	1700	1700	1700	1700	1700	108
Volume to Capacity	0.98	0.98	0.57	0.39	0.39	0.39	2.32
Queue Length 95th (ft)	0	0	0	0	0	0	550
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	684.5
Lane LOS							F
Approach Delay (s)	0.0			0.0			684.5
Approach LOS							F
Intersection Summary							
Average Delay			26.2				
Intersection Capacity Utilization			102.4%		ICU Level of Service		G
Analysis Period (min)			15				

NBC Coastal Campus
3: Orange Ave & Third St

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↑	↑↑↑		↑	↑↑			↑↑	↑
Volume (vph)	0	0	0	1023	635	109	128	252			862	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0		5.2	5.6			6.0	
Lane Util. Factor				0.86	0.86		1.00	0.95			0.95	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flt Protected				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (prot)				1522	4635		1770	3539			3528	
Flt Permitted				0.95	0.98		0.95	1.00			1.00	
Satd. Flow (perm)				1522	4635		1770	3539			3528	
Peak-hour factor, PHF	0.25	0.25	0.25	0.95	0.95	0.95	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	1077	668	115	132	260	0	0	889	16
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	0	0	538	1310	0	132	260	0	0	903	0
Confl. Peds. (#/hr)	20					20				20		20
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				6	6		3	8			4	
Permitted Phases												
Actuated Green, G (s)				27.8	27.8		5.0	50.6			40.0	
Effective Green, g (s)				27.8	27.8		5.0	50.6			40.0	
Actuated g/C Ratio				0.31	0.31		0.06	0.56			0.44	
Clearance Time (s)				6.0	6.0		5.2	5.6			6.0	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)				470	1431		98	1989			1568	
v/s Ratio Prot				c0.35	0.28		c0.07	0.07			c0.26	
v/s Ratio Perm												
v/c Ratio				1.14	1.02dl		1.35	0.13			0.58	
Uniform Delay, d1				31.1	30.0		42.5	9.3			18.7	
Progression Factor				1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2				87.6	9.4		209.3	0.0			0.5	
Delay (s)				118.7	39.3		251.8	9.3			19.2	
Level of Service				F	D		F	A			B	
Approach Delay (s)		0.0			62.3			91.0			19.2	
Approach LOS		A			E			F			B	
Intersection Summary												
HCM 2000 Control Delay			53.5			HCM 2000 Level of Service		D				
HCM 2000 Volume to Capacity ratio			0.85									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)		17.2				
Intersection Capacity Utilization		136.4%				ICU Level of Service		H				
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

NBC Coastal Campus
4: Orange Ave & Fourth St

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↔↔↔	↔					↔↔↔	↔↔↔	↔↔↔	↔↔↔	
Volume (vph)	7	2113	116	0	0	0	0	380	659	762	1146	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Lane Util. Factor		0.91	1.00					0.91	0.91	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					0.97	0.94	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.93	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5084	1583					3061	1349	3433	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		5084	1583					3061	1349	3433	3539	
Peak-hour factor, PHF	0.91	0.91	0.91	0.25	0.25	0.25	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	8	2322	127	0	0	0	0	442	766	794	1194	0
RTOR Reduction (vph)	0	0	29	0	0	0	0	6	29	0	0	0
Lane Group Flow (vph)	0	2330	98	0	0	0	0	819	354	794	1194	0
Confl. Peds. (#/hr)				20					20			
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Effective Green, g (s)		63.4	63.4					53.1	53.1	44.1	100.0	
Actuated g/C Ratio		0.36	0.36					0.30	0.30	0.25	0.57	
Clearance Time (s)		5.6	5.6					4.6	4.6	4.2	6.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1841	573					928	409	865	2022	
v/s Ratio Prot		c0.46						c0.27		c0.23	0.34	
v/s Ratio Perm			0.06						0.26			
v/c Ratio		1.27	0.17					0.88	0.86	0.92	0.59	
Uniform Delay, d1		55.8	37.9					58.0	57.6	63.7	24.3	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		124.0	0.1					9.9	17.1	14.3	0.5	
Delay (s)		179.8	38.1					67.9	74.6	78.0	24.7	
Level of Service		F	D					E	E	E	C	
Approach Delay (s)		172.5			0.0			70.1			46.0	
Approach LOS		F			A			E			D	
Intersection Summary												
HCM 2000 Control Delay		106.1									F	
HCM 2000 Volume to Capacity ratio		1.04										
Actuated Cycle Length (s)		175.0							14.4			
Intersection Capacity Utilization		136.4%							H			
Analysis Period (min)		15										
c Critical Lane Group												













NBC Coastal Campus
5: SR-75 (Silver Strand Blvd)/Orange Ave & Pomona Ave

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔		↔↔			↔↔
Volume (vph)	177	12	1175	709	0	1315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1		5.0			5.0
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	1.00		0.99			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.99		0.94			1.00
Flt Protected	0.96		1.00			1.00
Satd. Flow (prot)	1584		3298			3362
Flt Permitted	0.96		1.00			1.00
Satd. Flow (perm)	1584		3298			3362
Peak-hour factor, PHF	0.78	0.78	0.89	0.89	0.93	0.93
Adj. Flow (vph)	227	15	1320	797	0	1414
RTOR Reduction (vph)	2	0	43	0	0	0
Lane Group Flow (vph)	240	0	2074	0	0	1414
Confl. Peds. (#/hr)	20	20		20		20
Parking (#/hr)	0	0			0	0
Turn Type	NA		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Actuated Green, G (s)	30.0		120.9			120.9
Effective Green, g (s)	30.0		120.9			120.9
Actuated g/C Ratio	0.19		0.76			0.76
Clearance Time (s)	4.1		5.0			5.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	297		2492			2540
v/s Ratio Prot	c0.15		c0.63			0.42
v/s Ratio Perm						
v/c Ratio	0.81		0.83			0.56
Uniform Delay, d1	62.3		12.9			8.2
Progression Factor	1.00		1.00			1.00
Incremental Delay, d2	14.9		3.4			0.9
Delay (s)	77.2		16.3			9.1
Level of Service	E		B			A
Approach Delay (s)	77.2		16.3			9.1
Approach LOS	E		B			A
Intersection Summary						
HCM 2000 Control Delay		17.5				B
HCM 2000 Volume to Capacity ratio		0.84				
Actuated Cycle Length (s)		160.0				12.1
Intersection Capacity Utilization		88.5%				E
Analysis Period (min)		15				
c Critical Lane Group						







NBC Coastal Campus
6: SR-75 (Silver Strand Blvd) & Avenida De Las Arenas

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	147	10	29	26	10	25	23	1800	50	69	1545	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	
Flt	1.00	1.00	0.85		0.95		1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1696	1583		1724		1770	3525		1770	3490	
Flt Permitted	0.68	0.68	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1201	1202	1583		1459		1770	3525		1770	3490	
Peak-hour factor, PHF	0.78	0.78	0.78	0.64	0.64	0.64	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	188	13	37	41	16	39	25	1935	54	75	1679	170
RTOR Reduction (vph)	0	0	31	0	22	0	0	1	0	0	2	0
Lane Group Flow (vph)	100	101	6	0	74	0	25	1988	0	75	1847	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	19.1	19.1	19.1		19.1		3.1	71.9		8.1	76.9	
Effective Green, g (s)	19.1	19.1	19.1		19.1		3.1	71.9		8.1	76.9	
Actuated g/C Ratio	0.17	0.17	0.17		0.17		0.03	0.63		0.07	0.68	
Clearance Time (s)	5.3	5.3	5.3		5.3		4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	201	201	265		244		48	2225		125	2356	
v/s Ratio Prot							0.01	c0.56		c0.04	0.53	
v/s Ratio Perm	0.08	c0.08	0.00		0.05							
v/c Ratio	0.50	0.50	0.02		0.30		0.52	0.89		0.60	0.78	
Uniform Delay, d1	43.0	43.1	39.6		41.6		54.7	17.8		51.3	12.8	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.9	2.0	0.0		0.7		9.8	5.1		7.5	1.8	
Delay (s)	45.0	45.1	39.6		42.2		64.5	22.8		58.9	14.5	
Level of Service	D	D	D		D		E	C		E	B	
Approach Delay (s)		44.2			42.2			23.3			16.3	
Approach LOS		D			D			C			B	
Intersection Summary												
HCM 2000 Control Delay		21.7			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		113.9			Sum of lost time (s)			14.8				
Intersection Capacity Utilization		77.6%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
7: SR-75 (Silver Strand Blvd) & Rendova Rd

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	8	0	148	0	1601	0	33	1687	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.6			5.5		4.2	5.5	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Flt					0.87			1.00		1.00	1.00	
Flt Protected					1.00			1.00		0.95	1.00	
Satd. Flow (prot)					1620			3539		1770	3539	
Flt Permitted					1.00			1.00		0.95	1.00	
Satd. Flow (perm)					1620			3539		1770	3539	
Peak-hour factor, PHF	0.25	0.25	0.25	0.69	0.69	0.94	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	12	0	214	0	1703	0	35	1814	0
RTOR Reduction (vph)	0	0	0	0	174	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	52	0	0	1703	0	35	1814	0
Turn Type	Split			Split	NA			NA	Perm	Prot	NA	
Protected Phases	3	3		4	4			2		1	6	
Permitted Phases									2			
Actuated Green, G (s)					14.0			45.1		1.7	51.0	
Effective Green, g (s)					14.0			45.1		1.7	51.0	
Actuated g/C Ratio					0.19			0.60		0.02	0.68	
Clearance Time (s)					4.6			5.5		4.2	5.5	
Vehicle Extension (s)					3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)					301			2125		40	2403	
v/s Ratio Prot					c0.03			c0.48		0.02	c0.51	
v/s Ratio Perm												
v/c Ratio					0.17			0.80		0.88	0.75	
Uniform Delay, d1					25.7			11.6		36.6	7.9	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					0.3			2.3		93.6	1.4	
Delay (s)					26.0			13.8		130.2	9.3	
Level of Service					C			B		F	A	
Approach Delay (s)		0.0			26.0			13.8			11.6	
Approach LOS		A			C			B			B	
Intersection Summary												
HCM 2000 Control Delay					13.5			HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio					0.73							
Actuated Cycle Length (s)					75.1			Sum of lost time (s)		18.9		
Intersection Capacity Utilization					64.6%			ICU Level of Service		C		
Analysis Period (min)					15							
c Critical Lane Group												

NBC Coastal Campus
8: SR-75 (Silver Strand Blvd) & Tarawa Rd

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱
Volume (vph)	318	55	128	7	75	466	29	843	2	154	1492	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Flpb, ped/bikes	1.00	1.00	0.96		1.00	0.95	1.00	1.00	0.85	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1514		1855	1509	1770	3539	1343	1770	3512	
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1863	1514		1855	1509	1770	3539	1343	1770	3512	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	418	72	168	8	82	507	32	926	2	164	1587	74
RTOR Reduction (vph)	0	0	137	0	0	190	0	0	1	0	2	0
Lane Group Flow (vph)	418	72	31	0	90	317	32	926	1	164	1659	0
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			
Actuated Green, G (s)	27.6	27.6	27.6		27.6	27.6	4.0	55.2	55.2	18.3	69.5	
Effective Green, g (s)	27.6	27.6	27.6		27.6	27.6	4.0	55.2	55.2	18.3	69.5	
Actuated g/C Ratio	0.19	0.19	0.19		0.19	0.19	0.03	0.37	0.37	0.12	0.47	
Clearance Time (s)	4.6	4.6	4.6		4.6	4.6	4.2	6.0	6.0	4.2	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	329	347	282		345	281	47	1319	500	218	1648	
v/s Ratio Prot	c0.24	0.04			0.05		0.02	0.26		c0.09	c0.47	
v/s Ratio Perm			0.02			c0.21		0.00				
v/c Ratio	1.27	0.21	0.11		0.26	1.13	0.68	0.70	0.00	0.75	1.01	
Uniform Delay, d1	60.2	51.0	50.1		51.5	60.2	71.4	39.5	29.2	62.7	39.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	143.5	0.3	0.2		0.4	93.2	33.6	3.1	0.0	13.6	23.8	
Delay (s)	203.8	51.3	50.2		51.9	153.5	105.0	42.6	29.2	76.3	63.1	
Level of Service	F	D	D		D	F	F	D	C	E	E	
Approach Delay (s)		147.9			138.2			44.7			64.3	
Approach LOS		F			F			D			E	
Intersection Summary												
HCM 2000 Control Delay		84.2			HCM 2000 Level of Service			F				
HCM 2000 Volume to Capacity ratio		1.09										
Actuated Cycle Length (s)		148.1			Sum of lost time (s)			19.4				
Intersection Capacity Utilization		84.4%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
9: Strand Wy & Guadalcanal Rd

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰	↱	↰	↱
Volume (veh/h)	345	543	3	71	195	3
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.71	0.71	0.88	0.88
Hourly flow rate (vph)	383	603	4	100	222	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		2				
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			915			600
pX, platoon unblocked						
vC, conflicting volume	501	54			104	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	501	54			104	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	15	40			85	
cM capacity (veh/h)	451	1013			1487	
Direction, Lane #						
Volume Total	987	104	225			
Volume Left	383	0	222			
Volume Right	603	100	0			
cSH	842	1700	1487			
Volume to Capacity	1.17	0.06	0.15			
Queue Length 95th (ft)	758	0	13			
Control Delay (s)	109.3	0.0	7.7			
Lane LOS	F		A			
Approach Delay (s)	109.3	0.0	7.7			
Approach LOS	F					
Intersection Summary						
Average Delay		83.3				
Intersection Capacity Utilization		44.8%		ICU Level of Service		A
Analysis Period (min)		15				

NBC Coastal Campus
10: SR-75 (Silver Strand Blvd) & Tulagi Rd

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (vph)	347	8	880	74	0	1623
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6		5.3	5.3		5.3
Lane Util. Factor	1.00		0.95	1.00		0.95
Flpb, ped/bikes	1.00		1.00	0.93		1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00
Frt	1.00		1.00	0.85		1.00
Flt Protected	0.95		1.00	1.00		1.00
Satd. Flow (prot)	1770		3539	1474		3539
Flt Permitted	0.95		1.00	1.00		1.00
Satd. Flow (perm)	1770		3539	1474		3539
Peak-hour factor, PHF	0.79	0.79	0.90	0.90	0.89	0.89
Adj. Flow (vph)	439	10	978	82	0	1824
RTOR Reduction (vph)	1	0	0	47	0	0
Lane Group Flow (vph)	448	0	978	35	0	1824
Confl. Peds. (#/hr)	20	20		20		20
Turn Type	NA		NA	Perm		NA
Protected Phases	8		2			6
Permitted Phases				2		
Actuated Green, G (s)	50.0		45.1	45.1		45.1
Effective Green, g (s)	50.0		45.1	45.1		45.1
Actuated g/C Ratio	0.48		0.43	0.43		0.43
Clearance Time (s)	4.6		5.3	5.3		5.3
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	842		1520	633		1520
v/s Ratio Prot	c0.25		0.28			c0.52
v/s Ratio Perm				0.02		
v/c Ratio	0.53		0.64	0.06		1.20
Uniform Delay, d1	19.3		23.6	17.5		29.9
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.7		0.9	0.0		96.6
Delay (s)	20.0		24.6	17.5		126.6
Level of Service	B		C	B		F
Approach Delay (s)	20.0		24.0			126.6
Approach LOS	B		C			F
Intersection Summary						
HCM 2000 Control Delay		79.6		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio		0.85				
Actuated Cycle Length (s)		105.0		Sum of lost time (s)		9.9
Intersection Capacity Utilization		94.8%		ICU Level of Service		F
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
11: SR-75 (Silver Strand Blvd) & Fiddler's Cove Dwy

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↕	↕	↔	↔
Volume (veh/h)	4	7	748	3	15	1585
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	8	14	870	3	16	1742
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1775	437			873	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1775	437			873	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	98			98	
cM capacity (veh/h)	72	568			768	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	22	580	293	16	871	871
Volume Left	8	0	0	16	0	0
Volume Right	14	0	3	0	0	0
cSH	163	1700	1700	768	1700	1700
Volume to Capacity	0.14	0.34	0.17	0.02	0.51	0.51
Queue Length 95th (ft)	11	0	0	2	0	0
Control Delay (s)	30.6	0.0	0.0	9.8	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	30.6	0.0		0.1		
Approach LOS	D					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			53.8%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus

12: SR-75 (Silver Strand Blvd) & Leyte Rd

MILCON_NorthOp Year 2023 Alt 3north

Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↩	↩	↕	↕	↩	↕
Volume (vph)	30	58	693	12	104	1485
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	4.7	8.3	8.3	4.7	4.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.91	0.91
Adj. Flow (vph)	33	63	788	14	114	1632
RTOR Reduction (vph)	0	45	0	6	0	0
Lane Group Flow (vph)	33	18	788	8	114	1632
Turn Type	NA	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	1 8	2		1	5
Permitted Phases			2			
Actuated Green, G (s)	11.3	23.2	28.4	28.4	6.8	44.0
Effective Green, g (s)	11.3	18.1	28.4	28.4	6.8	44.0
Actuated g/C Ratio	0.17	0.28	0.44	0.44	0.11	0.68
Clearance Time (s)	5.1		8.3	8.3	4.7	4.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	309	443	1555	695	186	2410
v/s Ratio Prot	c0.02	0.01	0.22		0.06	c0.46
v/s Ratio Perm			0.00			
v/c Ratio	0.11	0.04	0.51	0.01	0.61	0.68
Uniform Delay, d1	22.4	16.9	13.1	10.2	27.6	6.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.3	0.0	5.9	0.8
Delay (s)	22.6	17.0	13.3	10.2	33.5	6.9
Level of Service	C	B	B	B	C	A
Approach Delay (s)	18.9		13.3			8.6
Approach LOS	B		B			A
Intersection Summary						
HCM 2000 Control Delay			10.4		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.67			
Actuated Cycle Length (s)			64.6		Sum of lost time (s)	18.1
Intersection Capacity Utilization			53.0%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

NBC Coastal Campus

13: SR-75 (Silver Strand Blvd) & Attu Ave

MILCON_NorthOp Year 2023 Alt 3north







Timing Plan: PM PEAK

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↕	↕			↕
Volume (veh/h)	0	23	683	18	0	1515
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.87	0.87	0.92	0.92
Hourly flow rate (vph)	0	31	785	21	0	1647
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1619	403			806	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1619	403			806	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	94	597			815	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	31	523	282	823	823	
Volume Left	0	0	0	0	0	
Volume Right	31	0	21	0	0	
cSH	597	1700	1700	1700	1700	
Volume to Capacity	0.05	0.31	0.17	0.48	0.48	
Queue Length 95th (ft)	4	0	0	0	0	
Control Delay (s)	11.4	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	11.4	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			45.2%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
14: SR-75 (Silver Strand Blvd) & Coronado Bay Rd

MILCON_NorthOp Year 2023 Alt 3north

Timing Plan: PM PEAK





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	30	26	676	18	23	1490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Flt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.72	0.72	0.94	0.94	0.91	0.91
Adj. Flow (vph)	42	36	719	19	25	1637
RTOR Reduction (vph)	0	32	0	8	0	0
Lane Group Flow (vph)	42	4	719	11	25	1637
Turn Type	NA	pm+ov	NA	Perm	Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	2.6	5.7	27.1	27.1	3.1	37.7
Effective Green, g (s)	2.6	5.7	27.1	27.1	3.1	37.7
Actuated g/C Ratio	0.06	0.12	0.58	0.58	0.07	0.80
Clearance Time (s)	4.1	3.7	6.3	6.3	3.7	2.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	98	192	2044	914	116	2844
v/s Ratio Prot	c0.02	0.00	0.20		0.01	c0.46
v/s Ratio Perm		0.00		0.01		
v/c Ratio	0.43	0.02	0.35	0.01	0.22	0.58
Uniform Delay, d1	21.4	18.1	5.2	4.2	20.7	1.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.0	0.1	0.0	0.9	0.3
Delay (s)	24.4	18.2	5.4	4.2	21.7	2.0
Level of Service	C	B	A	A	C	A
Approach Delay (s)	21.6		5.3			2.3
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	3.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	46.9	Sum of lost time (s)	14.1
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NBC Coastal Campus
15: SB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2023 Alt 3north

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Sign Control		Stop			Yield		Stop		Stop	
Volume (vph)	0	11	14	86	8	0	182	13	0	0
Peak Hour Factor	0.96	0.96	0.96	0.77	0.77	0.77	0.89	0.89	0.25	0.25
Hourly flow rate (vph)	0	11	15	112	10	0	204	15	0	0
Direction, Lane #	EB 1	EB 2	WB 1	SB 1						
Volume Total (vph)	11	15	122	219						
Volume Left (vph)	0	0	112	0						
Volume Right (vph)	0	15	0	15						
Hadj (s)	0.03	-0.57	0.22	-0.01						
Departure Headway (s)	4.0	3.2	4.1	3.2						
Degree Utilization, x	0.01	0.01	0.14	0.19						
Capacity (veh/h)	871	1121	860	1121						
Control Delay (s)	7.1	6.2	7.8	7.0						
Approach Delay (s)	6.6		7.8	7.0						
Approach LOS	A		A	A						

Intersection Summary			
Delay	7.2		
Level of Service	A		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

NBC Coastal Campus
16: NB SR-75 (Silver Strand Blvd) & Coronado Cays Blvd

MILCON_NorthOp Year 2023 Alt 3north

Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑		↰	↑	↰	↰	↑	↰			
Volume (vph)	10	188	0	0	83	140	12	596	70	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	1863			1863	1583	1770	3539	1583			
Flt Permitted	0.70	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1295	1863			1863	1583	1770	3539	1583			
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	11	214	0	0	95	161	13	655	77	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	93	0	42	0	0	0	0
Lane Group Flow (vph)	11	214	0	0	95	68	13	655	35	0	0	0
Turn Type	Perm	NA			NA	Perm	Prot	NA	Perm			
Protected Phases		4			8		5	2				
Permitted Phases	4					8			2			
Actuated Green, G (s)	8.6	8.6			8.6	8.6	18.2	18.2	18.2			
Effective Green, g (s)	8.6	8.6			8.6	8.6	18.2	18.2	18.2			
Actuated g/C Ratio	0.21	0.21			0.21	0.21	0.45	0.45	0.45			
Clearance Time (s)	5.1	5.1			5.1	5.1	8.3	8.3	8.3			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	277	398			398	338	801	1602	716			
v/s Ratio Prot		c0.11			0.05		0.01	c0.19				
v/s Ratio Perm	0.01					0.04		0.02				
v/c Ratio	0.04	0.54			0.24	0.20	0.02	0.41	0.05			
Uniform Delay, d1	12.5	14.0			13.1	13.0	6.1	7.4	6.2			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.1	1.4			0.3	0.3	0.0	0.2	0.0			
Delay (s)	12.6	15.4			13.4	13.3	6.1	7.6	6.2			
Level of Service	B	B			B	B	A	A	A			
Approach Delay (s)		15.3			13.3		7.4			0.0		
Approach LOS		B			B		A			A		
Intersection Summary												
HCM 2000 Control Delay		10.1			HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio		0.45										
Actuated Cycle Length (s)		40.2			Sum of lost time (s)				13.4			
Intersection Capacity Utilization		44.7%			ICU Level of Service				A			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
17: SR-75 (Silver Strand Blvd) & Hooper Blvd









MILCON_NorthOp Year 2023 Alt 3north

Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↰	↰	↰	↑	↰	↑	↰
Volume (veh/h)	264	489	122	479	0	1595	66
Sign Control	Stop			Free		Free	
Grade	0%			0%		0%	
Peak Hour Factor	0.25	0.25	0.88	0.88	0.92	0.90	0.90
Hourly flow rate (vph)	1056	1956	139	544	0	1772	73
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None		None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2358	923	1846		0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2358	923	1846		0		
tC, single (s)	6.8	6.9	4.1		0.0		
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2		0.0		
p0 queue free %	0	0	57		0		
cM capacity (veh/h)	17	272	325		0		
Direction, Lane #							
Volume Total	3012	139	272	272	1181	664	0
Volume Left	1056	139	0	0	0	0	0
Volume Right	1956	0	0	0	0	73	0
cSH	43	325	1700	1700	1700	1700	1700
Volume to Capacity	69.25	0.43	0.16	0.16	0.69	0.39	0.00
Queue Length 95th (ft)	Err	51	0	0	0	0	0
Control Delay (s)	Err	24.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C					
Approach Delay (s)	Err	4.9			0.0		
Approach LOS	F						
Intersection Summary							
Average Delay			5436.4				
Intersection Capacity Utilization			107.6%		ICU Level of Service		
Analysis Period (min)			15				G









NBC Coastal Campus
18: SR-75 (Silver Strand Blvd) & Rainbow Dr

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	0	69	1	1	0	74	453	12	1	1624	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.85		1.00	1.00		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1583		1770	1863		1770	3526		1770	3480	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1583		1770	1863		1770	3526		1770	3480	
Peak-hour factor, PHF	0.75	0.75	0.75	0.50	0.50	0.50	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	120	0	92	2	2	0	81	498	13	1	1804	228
RTOR Reduction (vph)	0	74	0	0	0	0	0	1	0	0	7	0
Lane Group Flow (vph)	120	18	0	2	2	0	81	510	0	1	2025	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	18.0	18.0		0.8	0.8		5.8	51.8		0.8	46.8	
Effective Green, g (s)	18.0	18.0		0.8	0.8		5.8	51.8		0.8	46.8	
Actuated g/C Ratio	0.20	0.20		0.01	0.01		0.06	0.57		0.01	0.52	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.2	5.5		4.2	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	352	315		15	16		113	2022		15	1803	
v/s Ratio Prot	c0.07	0.01		c0.00	0.00		c0.05	0.14		0.00	c0.58	
v/s Ratio Perm												
v/c Ratio	0.34	0.06		0.13	0.12		0.72	0.25		0.07	1.12	
Uniform Delay, d1	31.1	29.3		44.4	44.4		41.4	9.6		44.4	21.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.1		4.0	3.5		19.4	0.1		1.9	63.3	
Delay (s)	31.6	29.4		48.4	47.9		60.8	9.7		46.3	85.1	
Level of Service	C	C		D	D		E	A		D	F	
Approach Delay (s)		30.6			48.2			16.7			85.0	
Approach LOS		C			D			B			F	
Intersection Summary												
HCM 2000 Control Delay		66.7										
HCM 2000 Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		90.3										
Intersection Capacity Utilization		79.2%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
19: 7th St & SR-75 (Silver Strand Blvd)

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	58	1572	68	0	489	35	15	40		4	24	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.5			5.5		5.6	5.6				5.6
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00				1.00
Flt	1.00	0.99			0.99		1.00	0.99				0.96
Flt Protected	0.95	1.00			1.00		0.95	1.00				0.98
Satd. Flow (prot)	1770	5054			5035		1770	1836				1759
Flt Permitted	0.95	1.00			1.00		0.70	1.00				0.16
Satd. Flow (perm)	1770	5054			5035		1308	1836				284
Peak-hour factor, PHF	0.88	0.88	0.88	0.94	0.94	0.94	0.70	0.70	0.70	0.85	0.85	0.85
Adj. Flow (vph)	66	1786	77	0	520	37	21	57	6	28	31	25
RTOR Reduction (vph)	0	2	0	0	4	0	0	2	0	0	8	0
Lane Group Flow (vph)	66	1861	0	0	553	0	21	61	0	0	76	0
Turn Type	Prot	NA			NA		Perm	NA		Perm	NA	
Protected Phases	1	6			2			4			3	
Permitted Phases							4				3	
Actuated Green, G (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Effective Green, g (s)	20.0	68.1			73.1		35.0	35.0			30.0	
Actuated g/C Ratio	0.11	0.38			0.41		0.19	0.19			0.17	
Clearance Time (s)	5.2	5.5			5.5		5.6	5.6			5.6	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	196	1912			2044		254	357			47	
v/s Ratio Prot	c0.04	c0.37			c0.11			c0.03				
v/s Ratio Perm							0.02				c0.27	
v/c Ratio	0.34	0.97			0.27		0.08	0.17			1.61	
Uniform Delay, d1	73.9	55.0			35.7		59.4	60.4			75.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	1.0	15.1			0.3		0.1	0.2			353.1	
Delay (s)	74.9	70.2			36.0		59.5	60.6			428.1	
Level of Service	E	E			D		E	E			F	
Approach Delay (s)		70.3			36.0			60.3			428.1	
Approach LOS		E			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		74.1										
HCM 2000 Volume to Capacity ratio		0.81										
Actuated Cycle Length (s)		180.0										
Intersection Capacity Utilization		70.3%										
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
20: SR-75 (Silver Strand Blvd) & Delaware St

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←	←←←←
Volume (vph)	0	1602	0	508	527	38	0	0	0	0	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5		5.6	5.5							5.5
Lane Util. Factor		0.91		0.97	0.95							1.00
Frt		1.00		1.00	0.99							0.86
Flt Protected		1.00		0.95	1.00							1.00
Satd. Flow (prot)		5085		3433	3504							1611
Flt Permitted		1.00		0.95	1.00							1.00
Satd. Flow (perm)		5085		3433	3504							1611
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.25	0.25	0.25	0.38	0.38	0.38
Adj. Flow (vph)	0	1800	0	540	561	40	0	0	0	0	0	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	1800	0	540	601	0	0	0	0	0	0	3
Turn Type		NA		Prot	NA							custom
Protected Phases		6		5 3 4	2 1 3 4							
Permitted Phases												6
Actuated Green, G (s)		68.1		100.8	180.0							68.1
Effective Green, g (s)		68.1		100.8	163.6							68.1
Actuated g/C Ratio		0.38		0.56	0.91							0.38
Clearance Time (s)		5.5										5.5
Vehicle Extension (s)		3.0										3.0
Lane Grp Cap (vph)		1923		1922	3184							609
v/s Ratio Prot		c0.35		c0.16	c0.17							
v/s Ratio Perm												0.00
v/c Ratio		0.94		0.28	0.19							0.00
Uniform Delay, d1		53.9		20.7	0.9							34.8
Progression Factor		0.29		1.00	1.00							1.00
Incremental Delay, d2		3.3		0.1	0.0							0.0
Delay (s)		19.1		20.8	0.9							34.9
Level of Service		B		C	A							C
Approach Delay (s)		19.1			10.3		0.0				34.9	
Approach LOS		B			B		A				C	
Intersection Summary												
HCM 2000 Control Delay		15.8				HCM 2000 Level of Service		B				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		180.0				Sum of lost time (s)		22.3				
Intersection Capacity Utilization		55.9%				ICU Level of Service		B				
Analysis Period (min)		15										
c Critical Lane Group												




















NBC Coastal Campus
21: Dwy/Silver Strand Blvd & Palm Ave

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		←←←←			←←←←			←←←←			←←←←	
Volume (veh/h)	3	215	0	0	315	40	0	0	0	104	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.88	0.88	0.88	0.25	0.25	0.25	0.66	0.66	0.66
Hourly flow rate (vph)	3	250	0	0	358	45	0	0	0	158	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	403			250			650	660	250	638	638	381
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	403			250			650	660	250	638	638	381
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	59	100	98
cM capacity (veh/h)	1155			1316			375	382	789	389	393	666
Direction, Lane #												
Volume Total	253	403	0	170								
Volume Left	3	0	0	158								
Volume Right	0	45	0	12								
cSH	1155	1316	1700	401								
Volume to Capacity	0.00	0.00	0.00	0.42								
Queue Length 95th (ft)	0	0	0	51								
Control Delay (s)	0.1	0.0	0.0	20.4								
Lane LOS	A			A			C					
Approach Delay (s)	0.1	0.0	0.0	20.4								
Approach LOS				A			C					
Intersection Summary												
Average Delay		4.2										
Intersection Capacity Utilization		31.9%				ICU Level of Service		A				
Analysis Period (min)		15										











NBC Coastal Campus
22: 3rd St & Palm Ave

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop				Stop			Stop			Stop	
Volume (vph)	7	297	12	85	329	24	14	38	68	28	33	13
Peak Hour Factor	0.78	0.78	0.78	0.89	0.89	0.89	0.57	0.57	0.57	0.46	0.46	0.46
Hourly flow rate (vph)	9	381	15	96	370	27	25	67	119	61	72	28
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	9	396	96	397	211	161						
Volume Left (vph)	9	0	96	0	25	61						
Volume Right (vph)	0	15	0	27	119	28						
Hadj (s)	0.53	0.01	0.53	-0.01	-0.28	0.00						
Departure Headway (s)	7.2	6.7	7.1	6.6	6.7	7.1						
Degree Utilization, x	0.02	0.74	0.19	0.72	0.39	0.32						
Capacity (veh/h)	469	517	483	527	474	432						
Control Delay (s)	9.2	25.1	10.6	23.8	13.9	13.4						
Approach Delay (s)	24.7		21.2		13.9	13.4						
Approach LOS	C		C		B	B						
Intersection Summary												
Delay			20.1									
Level of Service			C									
Intersection Capacity Utilization			41.8%		ICU Level of Service		A					
Analysis Period (min)			15									

NBC Coastal Campus
23: Palm Ave & Rainbow Dr

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	75	424	457	39	53	150
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.97	0.97	0.86	0.86	0.85	0.85
Hourly flow rate (vph)	77	437	531	45	62	176
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)	908					
pX, platoon unblocked						
vC, conflicting volume	577			1146	288	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	577			1146	288	
tC, single (s)	4.1			6.8	6.9	
tC, 2 stage (s)						
tF (s)	2.2			3.5	3.3	
p0 queue free %	92			65	75	
cM capacity (veh/h)	993			178	708	
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	77	437	354	222	239	
Volume Left	77	0	0	0	62	
Volume Right	0	0	0	45	176	
cSH	993	1700	1700	1700	398	
Volume to Capacity	0.08	0.26	0.21	0.13	0.60	
Queue Length 95th (ft)	6	0	0	0	95	
Control Delay (s)	8.9	0.0	0.0	0.0	26.7	
Lane LOS	A					D
Approach Delay (s)	1.3			0.0	26.7	
Approach LOS					D	
Intersection Summary						
Average Delay			5.3			
Intersection Capacity Utilization			41.2%		ICU Level of Service	
Analysis Period (min)			15		A	

NBC Coastal Campus
24: 7th St & Palm Ave

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↱		↰	↰↱			↱		↰	↰↱	↱
Volume (vph)	28	433	29	31	459	3	55	21	22	12	49	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	1.00
Flt	1.00	0.99		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	1.00
Satd. Flow (prot)	1770	3505		1770	3536			1757			1844	1583
Flt Permitted	0.47	1.00		0.45	1.00			0.78			0.91	1.00
Satd. Flow (perm)	867	3505		831	3536			1413			1691	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.82	0.82	0.82	0.76	0.76	0.76
Adj. Flow (vph)	33	515	35	34	504	3	67	26	27	16	64	39
RTOR Reduction (vph)	0	7	0	0	1	0	0	21	0	0	0	30
Lane Group Flow (vph)	33	543	0	34	506	0	0	99	0	0	80	9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Effective Green, g (s)	14.4	14.4		14.4	14.4			6.6			6.6	6.6
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.22			0.22	0.22
Clearance Time (s)	4.6	4.6		4.6	4.6			4.6			4.6	4.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	413	1671		396	1686			308			369	345
v/s Ratio Prot		c0.15			0.14							
v/s Ratio Perm	0.04			0.04				c0.07			0.05	0.01
v/c Ratio	0.08	0.32		0.09	0.30			0.32			0.22	0.02
Uniform Delay, d1	4.3	4.9		4.3	4.8			9.9			9.7	9.3
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		0.1	0.1			0.6			0.3	0.0
Delay (s)	4.4	5.0		4.4	4.9			10.5			10.0	9.3
Level of Service	A	A		A	A			B			A	A
Approach Delay (s)		5.0			4.9			10.5			9.8	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM 2000 Control Delay		5.8			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		30.2			Sum of lost time (s)			9.2				
Intersection Capacity Utilization		44.9%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
25: Delaware St & Palm Ave

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰	↰			↰	↰
Volume (veh/h)	481	8	0	0	6	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.82	0.82	0.25	0.25	0.67	0.67
Hourly flow rate (vph)	587	10	0	0	9	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				767		
pX, platoon unblocked						
vC, conflicting volume			596		587	587
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			596		587	587
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			980		472	510
Direction, Lane #						
Volume Total	587	10	12			
Volume Left	0	0	9			
Volume Right	0	10	3			
cSH	1700	1700	481			
Volume to Capacity	0.35	0.01	0.02			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	12.7			
Lane LOS			B			
Approach Delay (s)	0.0		12.7			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			35.3%		ICU Level of Service	A
Analysis Period (min)			15			

NBC Coastal Campus
26: 9th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	42	1891	135	59	914	133	101	91	63	176	81	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	5034		1770	4989			3342			3385	
Flt Permitted	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (perm)	1770	5034		1770	4989			3342			3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	45	2012	144	60	923	134	111	100	69	198	91	29
RTOR Reduction (vph)	0	4	0	0	10	0	0	18	0	0	4	0
Lane Group Flow (vph)	45	2152	0	60	1047	0	0	262	0	0	314	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases												
Actuated Green, G (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Effective Green, g (s)	20.0	71.7		20.0	71.7			35.0			35.0	
Actuated g/C Ratio	0.11	0.40		0.11	0.40			0.19			0.19	
Clearance Time (s)	4.2	4.9		4.2	4.9			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	196	2005		196	1987			649			658	
v/s Ratio Prot	0.03	c0.43		c0.03	0.21			c0.08			c0.09	
v/s Ratio Perm												
v/c Ratio	0.23	1.07		0.31	0.53			0.40			0.48	
Uniform Delay, d1	73.0	54.1		73.6	41.2			63.4			64.4	
Progression Factor	1.00	1.00		1.23	0.84			1.00			1.00	
Incremental Delay, d2	0.6	43.0		0.8	0.9			0.4			0.5	
Delay (s)	73.6	97.2		91.0	35.6			63.8			64.9	
Level of Service	E	F		F	D			E			E	
Approach Delay (s)		96.7			38.6			63.8			64.9	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		75.2			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			18.3				
Intersection Capacity Utilization		119.1%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
27: Florida St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰↰			↰↰	
Volume (vph)	20	2179	58	49	1328	56	21	11	35	64	13	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.93		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	5066		1770	5054			1704		1770	1719	
Flt Permitted	0.95	1.00		0.95	1.00			0.90		0.62	1.00	
Satd. Flow (perm)	1770	5066		1770	5054			1554		1156	1719	
Peak-hour factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97	0.83	0.83	0.83	0.85	0.85	0.85
Adj. Flow (vph)	20	2223	59	51	1369	58	25	13	42	75	15	16
RTOR Reduction (vph)	0	1	0	0	2	0	0	23	0	0	14	0
Lane Group Flow (vph)	20	2281	0	51	1425	0	0	57	0	75	17	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4			8		
Actuated Green, G (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Effective Green, g (s)	12.0	126.6		16.0	130.6			22.2		22.2	22.2	
Actuated g/C Ratio	0.07	0.70		0.09	0.73			0.12		0.12	0.12	
Clearance Time (s)	4.2	5.5		4.2	5.5			5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	118	3563		157	3666			191		142	212	
v/s Ratio Prot	0.01	c0.45		c0.03	c0.28						0.01	
v/s Ratio Perm								0.04		c0.06		
v/c Ratio	0.17	0.64		0.32	0.39			0.30		0.53	0.08	
Uniform Delay, d1	79.3	14.4		76.9	9.4			71.8		74.0	69.9	
Progression Factor	1.45	0.14		1.54	0.27			1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.2		1.0	0.2			0.9		3.5	0.2	
Delay (s)	115.5	2.3		119.7	2.8			72.7		77.5	70.0	
Level of Service	F	A		F	A			E		E	E	
Approach Delay (s)		3.3			6.9			72.7			75.3	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay		7.9			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)			15.2				
Intersection Capacity Utilization		63.1%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
28: 13th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰	↰		↰	↰		↰↰	
Volume (vph)	27	2053	210	160	1402	83	133	41	130	157	45	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00		0.95	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (prot)	1770	5015		1770	5085	1583		1794	1583		3372	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.96	1.00		0.97	
Satd. Flow (perm)	1770	5015		1770	5085	1583		1794	1583		3372	
Peak-hour factor, PHF	0.94	0.94	0.94	0.97	0.97	0.97	0.92	0.92	0.92	0.74	0.74	0.74
Adj. Flow (vph)	29	2184	223	165	1445	86	145	45	141	212	61	27
RTOR Reduction (vph)	0	7	0	0	0	37	0	0	117	0	4	0
Lane Group Flow (vph)	29	2400	0	165	1445	49	0	190	24	0	296	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases					2			4				
Actuated Green, G (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Effective Green, g (s)	16.0	79.7		19.6	83.7	83.7		30.7	30.7		30.7	
Actuated g/C Ratio	0.09	0.44		0.11	0.47	0.47		0.17	0.17		0.17	
Clearance Time (s)	4.2	4.9		4.6	4.9	4.9		4.9	4.9		4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	157	2220		192	2364	736		305	269		575	
v/s Ratio Prot	0.02	c0.48		c0.09	c0.28			c0.11			c0.09	
v/s Ratio Perm					0.03			0.02				
v/c Ratio	0.18	1.08		0.86	0.61	0.07		0.62	0.09		0.51	
Uniform Delay, d1	76.0	50.1		78.8	36.0	26.6		69.3	62.9		67.9	
Progression Factor	1.00	1.04		1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.5	43.8		29.6	1.2	0.2		9.2	0.7		3.3	
Delay (s)	76.3	95.7		108.5	37.2	26.8		78.5	63.5		71.1	
Level of Service	E	F		F	D	C		E	E		E	
Approach Delay (s)		95.5			43.6			72.1			71.1	
Approach LOS		F			D			E			E	
Intersection Summary												
HCM 2000 Control Delay		73.9			HCM 2000 Level of Service				E			
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		180.0			Sum of lost time (s)				19.3			
Intersection Capacity Utilization		108.3%			ICU Level of Service				G			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
29: 16th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰↰		↰	↰↰↰			↰			↰↰	
Volume (vph)	10	2183	50	174	1707	16	40	9	83	24	11	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.92			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1770	5068		1770	5078			1679			1757	
Flt Permitted	0.95	1.00		0.95	1.00			0.89			0.83	
Satd. Flow (perm)	1770	5068		1770	5078			1512			1496	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	0.95	0.85	0.85	0.85	0.85	0.81	0.81	0.81
Adj. Flow (vph)	11	2426	56	183	1797	17	47	11	98	30	14	14
RTOR Reduction (vph)	0	2	0	0	1	0	0	78	0	0	11	0
Lane Group Flow (vph)	11	2480	0	183	1813	0	0	78	0	0	47	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			4	
Permitted Phases							4				4	
Actuated Green, G (s)	0.8	40.3		11.2	50.7			17.3			17.3	
Effective Green, g (s)	0.8	40.3		11.2	50.7			17.3			17.3	
Actuated g/C Ratio	0.01	0.48		0.13	0.60			0.20			0.20	
Clearance Time (s)	5.2	4.9		5.2	4.9			5.6			5.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	16	2417		234	3046			309			306	
v/s Ratio Prot	0.01	c0.49		c0.10	0.36							
v/s Ratio Perm								c0.05			0.03	
v/c Ratio	0.69	1.03		0.78	0.60			0.25			0.15	
Uniform Delay, d1	41.7	22.1		35.5	10.5			28.2			27.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	80.1	25.3		15.5	0.3			0.4			0.2	
Delay (s)	121.8	47.4		51.0	10.8			28.6			27.8	
Level of Service	F	D		D	B			C			C	
Approach Delay (s)		47.7			14.5			28.6			27.8	
Approach LOS		D			B			C			C	
Intersection Summary												
HCM 2000 Control Delay		32.7			HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		84.5			Sum of lost time (s)				15.7			
Intersection Capacity Utilization		74.4%			ICU Level of Service				D			
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
30: Saturn Blvd/19th St & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	193	2116	34	336	1714	569	69	182	547	603	245	233
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	0.97	0.95	0.95
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.92	0.85	1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5073		1770	5085	1583	1770	1632	1504	3433	1747	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5073		1770	5085	1583	1770	1632	1504	3433	1747	1504
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	203	2227	36	361	1843	612	73	194	582	655	266	253
RTOR Reduction (vph)	0	1	0	0	0	83	0	26	279	0	2	126
Lane Group Flow (vph)	203	2262	0	361	1843	529	73	378	93	655	289	102
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases						2			4			8
Actuated Green, G (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.2	38.2	11.8	41.3	41.3
Effective Green, g (s)	11.4	36.3		45.0	69.9	69.9	8.7	38.2	38.2	11.8	41.3	41.3
Actuated g/C Ratio	0.07	0.24		0.29	0.46	0.46	0.06	0.25	0.25	0.08	0.27	0.27
Clearance Time (s)	5.2	5.9		5.2	5.9	5.9	5.2	5.6	5.6	5.2	5.6	5.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1202		519	2320	722	100	406	375	264	470	405
v/s Ratio Prot	0.06	c0.45		c0.20	c0.36		0.04	c0.23		c0.19	c0.17	
v/s Ratio Perm						0.33		0.06				0.07
v/c Ratio	0.80	1.88		0.70	0.79	0.73	0.73	0.93	0.25	2.48	0.61	0.25
Uniform Delay, d1	69.8	58.4		48.0	35.5	34.0	71.1	56.2	46.0	70.7	49.0	43.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.7	400.1		4.0	2.0	3.8	23.2	28.2	0.3	677.7	2.4	0.3
Delay (s)	85.4	458.5		52.1	37.5	37.9	94.3	84.4	46.3	748.4	51.4	44.2
Level of Service	F	F		D	D	D	F	F	D	F	D	D
Approach Delay (s)		427.8			39.4			68.6			438.9	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM 2000 Control Delay		238.1										F
HCM 2000 Volume to Capacity ratio		1.27										
Actuated Cycle Length (s)		153.2				Sum of lost time (s)		21.9				
Intersection Capacity Utilization		131.5%				ICU Level of Service		H				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
31: SR-75 (Palm Ave) & I-5 SB Exit Ramp

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Volume (vph)	0	531	899	0	451	1726
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		4.6	4.6
Lane Util. Factor		0.95	0.95		1.00	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3539	3539		1770	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		3539	3539		1770	2787
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.91	0.91
Adj. Flow (vph)	0	597	956	0	496	1897
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	597	956	0	496	1894
Turn Type		NA	NA		NA	custom
Protected Phases		6	2		8	1 8
Permitted Phases						
Actuated Green, G (s)		40.4	19.4		30.0	51.0
Effective Green, g (s)		40.4	19.4		30.0	51.0
Actuated g/C Ratio		0.50	0.24		0.38	0.64
Clearance Time (s)		5.0	5.0		4.6	
Vehicle Extension (s)		3.0	3.0		3.0	
Lane Grp Cap (vph)		1787	858		663	1776
v/s Ratio Prot		0.17	c0.27		0.28	c0.68
v/s Ratio Perm						
v/c Ratio		0.33	1.11		0.75	1.07
Uniform Delay, d1		11.8	30.3		21.7	14.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	67.1		4.6	41.6
Delay (s)		11.9	97.4		26.3	56.1
Level of Service		B	F		C	E
Approach Delay (s)		11.9	97.4		49.9	
Approach LOS		B	F		D	
Intersection Summary						
HCM 2000 Control Delay		55.7				HCM 2000 Level of Service E
HCM 2000 Volume to Capacity ratio		1.15				
Actuated Cycle Length (s)		80.0			Sum of lost time (s)	14.2
Intersection Capacity Utilization		89.7%			ICU Level of Service	E
Analysis Period (min)		15				
c Critical Lane Group						

NBC Coastal Campus
32: I-5 NB Ramps & SR-75 (Palm Ave)

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑↑				
Volume (vph)	0	975	0	0	542	257	467	2	110	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.95	0.95				
Flt		1.00			0.95		1.00	0.94				
Flt Protected		1.00			1.00		0.95	0.97				
Satd. Flow (prot)		3539			3368		1681	1618				
Flt Permitted		1.00			1.00		0.95	0.97				
Satd. Flow (perm)		3539			3368		1681	1618				
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25	0.25
Adj. Flow (vph)	0	1016	0	0	609	289	502	2	118	0	0	0
RTOR Reduction (vph)	0	0	0	0	98	0	0	31	0	0	0	0
Lane Group Flow (vph)	0	1016	0	0	800	0	316	275	0	0	0	0
Turn Type		NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases							2					
Actuated Green, G (s)		19.7			19.7		14.9	14.9				
Effective Green, g (s)		19.7			19.7		14.9	14.9				
Actuated g/C Ratio		0.46			0.46		0.35	0.35				
Clearance Time (s)		4.0			4.0		4.0	4.0				
Vehicle Extension (s)		3.0			3.0		3.0	3.0				
Lane Grp Cap (vph)		1636			1557		587	565				
v/s Ratio Prot		0.29			0.24							
v/s Ratio Perm							0.19	0.17				
v/c Ratio		0.62			0.51		0.54	0.49				
Uniform Delay, d1		8.6			8.1		11.1	10.9				
Progression Factor		1.00			1.00		1.00	1.00				
Incremental Delay, d2		0.7			0.3		1.0	0.7				
Delay (s)		9.4			8.4		12.0	11.5				
Level of Service		A			A		B	B				
Approach Delay (s)		9.4			8.4		11.8				0.0	
Approach LOS		A			A		B				A	
Intersection Summary												
HCM 2000 Control Delay		9.6			HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio		0.58										
Actuated Cycle Length (s)		42.6			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		50.0%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

NBC Coastal Campus
33: Silver Strand Blvd & YMCA Dwy

MILCON_NorthOp Year 2023 Alt 3north
Timing Plan: PM PEAK

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑			↑	↑	
Volume (veh/h)	0	10	8	3	36	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.62	0.62	0.92	0.92	0.69	0.69
Hourly flow rate (vph)	0	16	9	3	52	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	73	52	52			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	73	52	52			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	926	1015	1554			
Direction, Lane #						
Volume Total	16	12	52			
Volume Left	0	9	0			
Volume Right	16	0	0			
cSH	1015	1554	1700			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	8.6	5.3	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	5.3	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		2.5				
Intersection Capacity Utilization		17.2%		ICU Level of Service		
Analysis Period (min)		15				

APPENDIX E

AGENCY CONSULTATIONS

**E1 – U.S. FISH & WILDLIFE
INFORMAL CONSULTATION DETERMINATION**



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008



In Reply Refer To:
FWS-SDG-14B0200-14I0295

SEP 12 2014

Captain C. E. Sund
Commanding Officer
Naval Base Coronado
P.O. Box 357033
San Diego, California 92135-7033

Attention: Tiffany Shepherd

Subject: Informal Section 7 Consultation on the Coastal Campus Project at Silver Strand Training Complex South, Naval Base Coronado, San Diego County, California

Dear Captain Sund:

This is in response to your April 23, 2014, letter requesting consultation pursuant to section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*) regarding the possible effects of the proposed Coastal Campus project (project) on the federally endangered salt marsh bird's beak (*Chloropyron maritimum* ssp. *maritimum*, bird's beak), San Diego fairy shrimp (*Branchinecta sandiegonensis*, fairy shrimp), light-footed clapper rail (*Rallus longirostris levipes*), rail¹; and threatened western snowy plover (*Charadrius nivosus nivosus*, plover) and its designated critical habitat. Based upon review of the information you provided and discussions with your staff, we determined that an informal consultation would satisfy the interagency consultation requirements of section 7 of the Act. This determination is based on the site and species information described below and the U.S. Department of the Navy's (Navy) commitment to implement specific conservation measures (Enclosure).

The project will be constructed on the Silver Strand Training Complex South (SSTC-South) bordered by the City of Coronado to the north, the City of Imperial Beach to the south, State Route (SR) 75 and San Diego Bay to the east, and the Pacific Ocean to the west (Figure 1). The purpose of the project is to provide adequate training facilities to: (1) support mandated force growth for Naval Special Warfare Command (NSWC) on the west coast and (2) maintain the required levels of operational readiness of special warfare forces. The project will consolidate NSWC training facilities to one location on SSTC-South.

¹ Please note that the American Ornithologists' Union now recognizes the clapper rail as the light-footed Ridgway's rail (*Rallus obsoletus levipes*) (Chesser et al. 2014).

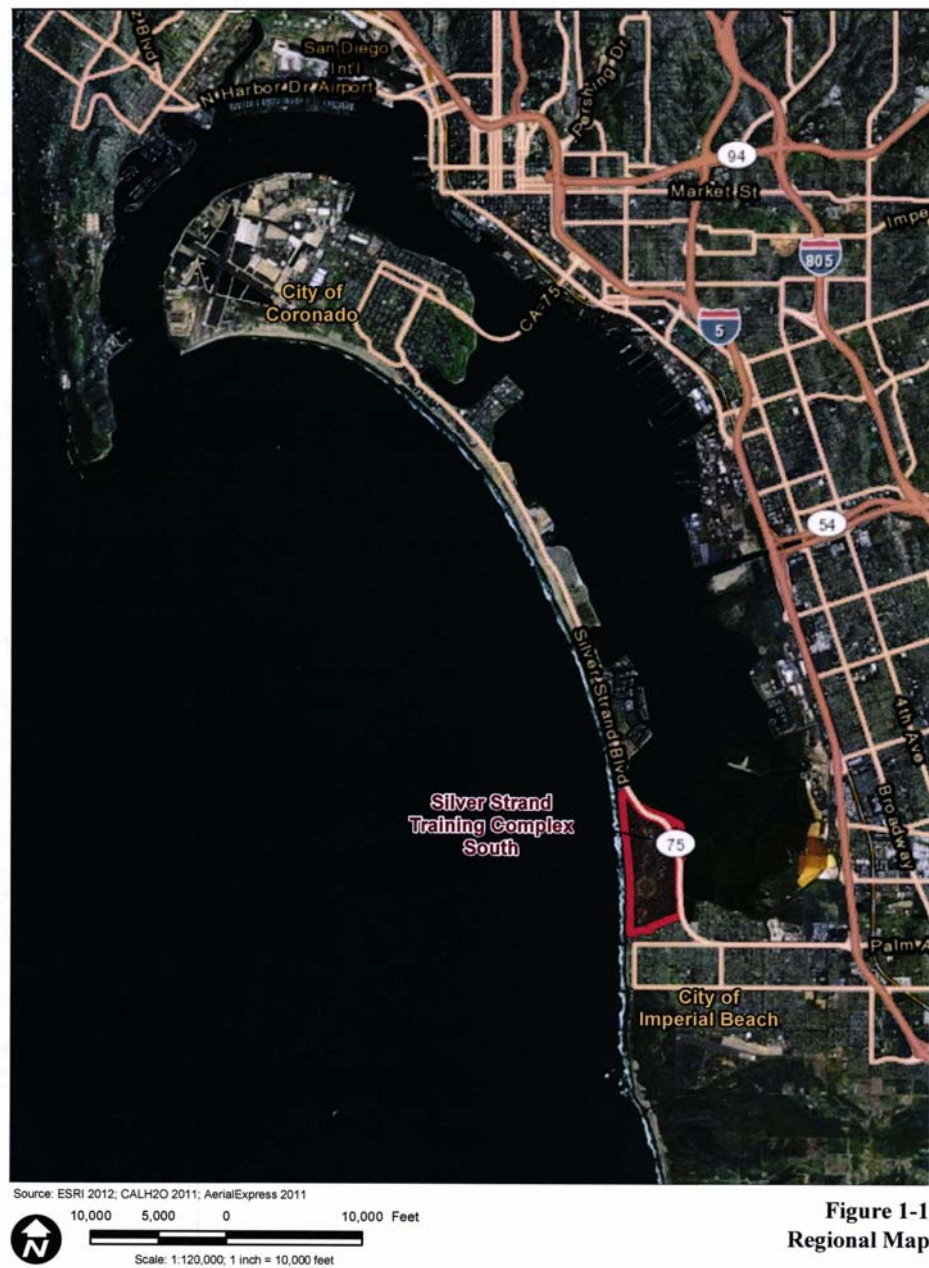


Figure 1. Location of Coastal Campus project in San Diego County, California.

DESCRIPTION OF THE PROPOSED ACTION

The project will include construction of buildings, training facilities and associated infrastructure (i.e., fencing, utilities, storm water systems, roads, walkways, and parking lots) (Figure 1). With the exception of 120-foot tall parachute drying tower (paraloft), the height of all buildings will be limited to 45 feet. The paraloft will be located nearly 1,100 feet east of beach habitat on SSTC-South. Prior to the initiation of construction, geotechnical borings may be conducted within the project footprint. A detailed description of each project component is provided in the Biological Assessment (BA) for the project (Navy 2014).

Project construction will include demolition of an existing military bunker, Building 99, and up to 20 other existing structures (Figure 2). Demolition will be done with small commercial explosives (Building 99 only), diamond saws, excavators and/or hydraulic pavement breakers (e.g., hoe-rams). Demolished concrete and steel will either be reused for project construction or removed to a local landfill. Demolition debris will be stockpiled adjacent to the demolition site until it is reused or removed.

New utilities and improvements to existing utilities (water, wastewater, electrical, and natural gas) will also be constructed to serve the Coastal Campus. The Navy is proposing two options for constructing a new water line to connect to an existing water line (Figure 2). Under Option 1, a new 16-inch diameter water line will be constructed just east of the SSTC-South beach for about 9,876 feet from near the northern SSTC-South boundary to the southern boundary of the YMCA Camp Surf then extend east to connect back to the existing water line. Option 2 will follow Option 1 to about the midpoint of SSTC-South then extend east through the project footprint to connect with the existing water line. Replaced portions of the existing waterline will be abandoned in place. For both options, water line construction along the western SSTC-South boundary will occur inside of the perimeter fence within a 30-foot utility easement. No new construction is being proposed along the portion of the existing water line extending from the Coastal Campus footprint to the southern SSTC-South boundary.

Primary access to the project site during construction and operation will be from SR-75. The existing northern access road will be realigned and widened up to 72 feet, including additional turn lanes and improved ingress and egress from and to SR-75 in California Department of Transportation (Caltrans) right-of-way (ROW). In addition, the existing northern access gate (currently gated and locked, allowing for limited authorized access only) will be improved, including a 600-square foot sentry house and permanent visual and noise barriers, to serve as the new entry control point (P-947) (Figure 2).

Project construction is expected to begin in 2015 and be completed by 2024, with about 10 percent construction occurring each year. Upon project completion, 3,045 additional personnel are anticipated to relocate from Naval Amphibious Base (NAB) Coronado to SSTC-South, increasing the total number of personnel currently onsite from approximately 300 to about 3,300.



Figure 5-1
Proposed Action Area Effects

Figure 2. Coastal Campus project footprint.

During operation of the Coastal Campus, all training will be confined to buildings and training facilities constructed as part of the project. Maintenance will be conducted regularly on the buildings, training facilities, and the associated infrastructure (i.e., gates, fencing, roads, walkways, parking facilities, storm water facilities, and landscaped areas) in the Coastal Campus footprint. Routine maintenance within the existing and proposed utility easements (water, wastewater, and natural gas) will include regular vegetation trimming and mowing. Any replacement of vegetation associated with maintenance will not include the use of nonnative invasive plant species.

All maintenance activities, including staging areas for vehicle and equipment parking, vehicle refueling, materials storage, and general personnel support will be conducted within established roads (paved and unpaved) in the Coastal Campus footprint and utility easements. In addition, vehicles/equipment will be transported to the site using established roads. Therefore, routine maintenance is not anticipated to result in additional impacts beyond those anticipated during construction activities.

The project has a goal of zero storm water discharge (capture 100 percent of the discharge). However, if this goal cannot be achieved, runoff during construction and operation will be minimized and treated site design and/or structural BMPs.

ENVIRONMENTAL BASELINE/EFFECTS OF THE ACTION

Most of the project site consists of disturbed habitat and urban/developed area with existing buildings, training facilities and a radar array which are surrounded by a fence (Table 1, Figure 2). With the exception of the access/traffic improvements along SR-75, construction, operation, and maintenance of the project will stay within the existing perimeter fence, and permanently impact about 114.81 acres of vegetation and temporarily impact about 2.05 acres or 4.89 acres of vegetation depending on the chosen water line option. No federally listed species, and only 0.15 acre of plover critical habitat, occur in the project impact footprint. However, bird's beak, fairy shrimp, rails and plovers occur adjacent to the project impact footprint as described below (Figure 2).

Table 1. Temporary and permanent direct impacts (acres) from the Coastal Campus project.

Plant Communities and Other Cover Types	Permanent Impacts (Coastal Campus)	Temporary Impacts (Water Line)	
		Option 1	Option 2
Southern Coastal Salt Marsh	0	0.03	0
Diegan Coastal Sage Scrub	0.35	0	0
Nonnative Grassland	0.02	0.13	0
Southern Foredunes	0.38 ¹	2.61	0.18
Disturbed Habitat	114.06	2.12	1.87
Urban/Developed	52.04	1.9	1.49
Totals	166.85	6.79	3.54

¹ Includes 0.15 acre of plover critical habitat.

Bird's Beak

Although project-specific surveys were not conducted, bird's beak was observed in 2012 in an area of a known historical occurrence at the YMCA Camp Surf, immediately south of the project footprint (Figure 2). While potential habitat for this species occurs on SSTC-South, none of it occurs in the project footprint. Water line Option 1 will be constructed inside of the existing fence and pass through the back side of southern foredunes, approximately 100 feet west of the know bird's beak locations. The water line footprint is periodically disturbed by vehicles and does not contain suitable bird's beak habitat.

Although no direct impacts are expected, increased dust, runoff, erosion, sedimentation, and introduction of new invasive plant species from construction and maintenance of water line Option 1 could indirectly impact bird's beak. To minimize indirect impacts to the bird's beak during construction and maintenance of water line Option 1, the Navy will implement conservation measures including: ensuring a project biologist familiar with the species is onsite during construction activities to ensure compliance with all avoidance and minimization measures; ensuring all construction personnel receive environmental training before commencing work; implementing standard best management practices (BMPs) to minimize runoff, erosion, and sedimentation from the project footprint into the species' occupied habitat; washing and cleaning all equipment and vehicles prior to entering the project footprint to prevent the introduction of new invasive plants; and restoring temporary impact areas.

Fairy Shrimp

The southern half of SSTC-South supports 59 vernal pools, road ruts, drainage channels, and other features that pond water (referred to collectively as basins) (Figure 2). Fairy shrimp were detected in 29 basins on SSTC-South during surveys in 2010/2011. However, none of these fairy shrimp-occupied basins are within the project footprint.

Water line Option 2 includes maintenance of an existing water line that is immediately adjacent to a vernal pool, and crosses a drainage ditch, occupied by fairy shrimp. However, no maintenance of the existing water line will occur in the vernal pool (or its watershed) or drainage ditch as part of the project. If maintenance is necessary in the vernal pool (or its watershed) or drainage ditch, the Navy will reinitiate consultation to address any potential impacts to fairy shrimp.

Although no direct impacts are expected, increased dust, runoff, erosion, sedimentation, and introduction of new invasive plant species from project construction and maintenance of water line Option 2 could indirectly impact fairy shrimp. To minimize indirect impacts to fairy shrimp during construction, the Navy will implement conservation measures including ensuring a project biologist familiar with the species is onsite during construction to ensure compliance with all conservation measures; installing fencing around the outer perimeter of the project limits to reduce human disturbance, as needed; ensuring all construction personnel receive environmental training before commencing work; implementing BMPs to minimize runoff,

erosion, and sedimentation from the project footprint into the vernal pool watersheds; washing and cleaning all equipment and vehicles prior to entering the project footprint to prevent the introduction of new invasive plants; and restoring areas temporarily impacted by construction and maintenance to minimize the spread of invasive plants and prevent blowing dust.

All construction, including staging areas for vehicle and equipment parking, vehicle refueling, materials storage, and general personnel support will be conducted within the project footprint as identified and outside of the vernal pool watersheds. All maintenance activities, including staging areas for vehicle and equipment parking, vehicle refueling, materials storage, and general personnel support will be conducted within established roads (paved and unpaved) in the Coastal Campus footprint and utility easements but outside of the vernal pool watersheds and will not result in additional ground disturbance beyond the areas disturbed during construction.

While maintenance (i.e., vegetation trimming and mowing) will not result in additional ground disturbance, maintenance along the existing and proposed utilities easements could result in the introduction of new invasive plant species into adjacent fairy shrimp habitat. However, this impact will be minimized since maintenance personnel will receive environmental training before commencing work and all maintenance equipment and vehicles will be washed and cleaned prior to entering SSTC-South.

In addition, to avoid and minimize impacts to vernal pools and their watersheds resulting from unauthorized trespass during construction, operation, and maintenance, the Navy will install permanent signs and/or gates at all locations that could provide access (i.e., dirt access roads or foot paths) to the vernal pool watersheds prior to the initiation of construction and maintain signs and/or gates for the life of the project.

Plover

Although not known or expected to occur on the project site, plovers are known to nest on the SSTC-South beach west of the project site (Figure 2). Based on surveys from 2011 to 2013, there has been an average of six breeding pairs of plovers, and 20 nests and 13 fledges, per nesting season on the SSTC-South beach. From 2011 to 2013, the closest nest was approximately 310 feet to the west of the project footprint; however, nests generally occur about 450 feet west of the project footprint.

Although no direct impacts are expected, increased human disturbance (i.e., noise, lighting, and unauthorized trespass) and predation associated with project construction, operation, and maintenance could indirectly impact plovers. Loud, irregular sounds during project construction may cause plovers to spend more time away from their nests, thereby increasing the potential for eggs to cool and for eggs and chicks to be predated. Artificial lighting during project construction and operation may cause disorientation, startling, disruption of inter-specific interactions, and increased predation of plovers (Longcore and Rich 2004). However, southern foredunes between the project footprint and plover nesting areas along the western fence line are about 6 to 12 feet higher than the plover nesting area and are expected to attenuate much of the noise and light from

project construction, operation and maintenance. In addition, project construction, operation and maintenance noise levels reaching the nesting areas are expected to be similar to or less than the relatively high ambient noise levels from ocean surf.

To minimize impacts to plovers, construction within 300 feet of plover nesting areas will be avoided during the nesting season to the maximum extent feasible. Where the nesting season cannot be avoided, NBC Natural Resources Office (NRO), in coordination with the Service, will determine the locations to construct noise and visual attenuation barriers to mitigate any potential temporary noise and visual effects to nesting plovers. In addition, temporary construction and permanent outdoor lighting will be shielded and directed away from plover nesting areas.

Project construction and operation could also provide additional perching habitat (i.e., towers, tall buildings, utility poles, trees, fences) for avian predators (e.g., hawks, falcons, and ravens and crows), which may lead to increased plover predation. To minimize the availability of perching habitat during construction, the Navy will stage and store construction equipment that may allow for perching at least 500 feet away from plover nesting areas when not in use. To minimize the availability of perching habitat during operation, the Navy will: install anti-perching materials on light poles, rooftops, and other perching locations; locate the 120-foot-tall parachute drying tower about 1,100 feet east of plover nesting areas; ensure no net increase in the number of trees on SSTC-South (trees removed during construction will be replaced at the same ratio with native trees); trim and prune tree branches to open up the canopy of the trees to prevent avian predator nesting; space trees to prevent touching when full grown; place trees as far back from beach habitat as possible; and coordinate landscaping with NBC NRO to reduce the potential for use by avian predators.

Project construction and operation could also increase populations of mammalian and avian predators at SSTC-South by providing supplemental food (through trash). However, these impacts will be minimized by ensuring that all trash generated from project construction and operation is contained within covered, secured trash bins that are inaccessible to wildlife, and emptied on a regular basis/ prevented from overflowing. In addition, to minimize mammalian and avian predation on plovers, the Navy will continue predator control in occupied plover habitat along Silver Strand beaches, as required by the biological opinion on the Navy's SSTC Operations (FWS-SDG-08B0503-09F0517), which are anticipated to minimize any increases in predation associated with the project.

Project construction and operation could also increase human disturbance in the plover nesting areas. To minimize these impacts, the existing gate along the western perimeter fence allowing beach access will remain locked, and project personnel will not be allowed beach access during the plover nesting season.

Plover Critical Habitat

Approximately 0.15 acre of plover critical habitat (Subunit CA 55F) will be directly impacted by construction of the new access road in Caltrans ROW along SR-75 (Figure 2). Of the four primary constituent elements (PCEs) outlined in the final critical habitat designation (Service 2012), PCEs 1 to 3 are related to habitat required by the plover for feeding, breeding, and sheltering, and PCE 4 relates to the plover's requirement for habitat with minimal human disturbance for survival and reproduction. The 0.15-acre impact area consists of southern foredune habitat that is vegetated with nonnative ice plant (*Carpobrotus chilensis*) and some coastal sage scrub species, is disturbed by vehicle traffic on SR-75, and does not provide suitable habitat for plovers. Therefore, this area does not currently contain the PCEs of plover critical habitat, although it could be restored to support PCEs. To minimize impacts to plover critical habitat associated with increased human disturbance during project construction and operation, the Navy will construct permanent visual and noise barriers to obscure the proposed entry control point on the north end of the site from adjacent occupied plover critical habitat. The Navy will also offset the permanent loss of 0.15 acres of critical habitat through restoration of plover habitat on SSTC-South, outside of the existing perimeter fence.

Rail

Although not known or expected to occur on the project site, rails are known to occur east of SSTC-South in the San Diego Bay in the South Bay Marine Biological Study Area and at the nearby San Diego Bay National Wildlife Refuge (Figure 2). SR-75 separates SSTC-South from rail-occupied habitat in the South Bay Marine Biological Study Area. Navy-owned lands that are part of the South Bay Marine Biological Study Area have historically supported up to five pairs of rails, and the closest known rail was recorded approximately 620 feet from the SSTC-South boundary in 2005.

Although no direct impacts are expected, increased noise and predation associated with project construction and operation could indirectly impact rails. Construction, including demolition and associated debris removal, will result in increased construction-related traffic from SSTC-South along SR-75 to the City of Imperial Beach. Complete demolition will occur at a rate of about 10 percent each year, resulting in an increase in truck traffic along SR-75 adjacent to the South Bay Marine Biological Study Area where rails occur year-round. According to the BA, the maximum number of construction-related trips estimated for project construction is not anticipated to double the existing traffic on area roadways (i.e., doubling traffic volume increases noise levels by 3 dBA [A-weighted decibels (dB)], which is a less than perceptible change to the human ear). Thus, traffic noise levels generated by construction traffic will not result in a substantial increase in noise levels (i.e., +5 dBA) along project roadways. Therefore, despite an increase in vehicle traffic associated with project construction, the effects to rails are anticipated to be minimal.

Upon completion of construction of the Coastal Campus, it is anticipated that 3,045 personnel will relocate to SSTC-South, which will result in a permanent increase in vehicle traffic along

SR-75. However, according to the BA, this increase in traffic along SR-75 is not likely to increase noise levels above current conditions.

Rails could also be indirectly impacted by construction and operation of the project due to increased predation resulting from the addition of new structures (i.e., construction equipment, tall buildings, utility poles, fences, and trees) that provide perches for avian predators. However, implementation of the general and species-specific measures proposed to minimize indirect impacts of increased avian predation on the plover during construction and operation will also minimize such impacts on the rail. Such measures include ensuring no net increase in the number of trees onsite; trimming/pruning of all trees onsite to reduce nesting by predatory birds; and incorporating design features such as anti-perching devices on light poles, rooftops, and other perching locations to minimize perching by avian predators. The trash control and ongoing predator control required by biological opinion FWS-SDG-08B0503-09F0517 discussed above for plovers will also benefit rails.

CONCLUSION

In summary, the Navy will implement significant conservation measures (Enclosure) as part of the project to avoid, minimize, and/or offset potential impacts to federally listed species and designated critical habitat. Based on the site and species' information described above, and the Navy's commitment to implement the conservation measures, we conclude that all potential impacts on the bird's beak, fairy shrimp, plover, plover critical habitat, and rail will be avoided or reduced to a level of insignificance (i.e., unable to be meaningfully measured, detected, or evaluated) warranting our concurrence with the Navy's determination that the project is not likely to adversely affect these species or critical habitat. Therefore, the interagency consultation requirements of section 7 of the Act have been satisfied. Should project plans change or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered and further section 7 consultation may be required.

Thank you for your coordination on this project, and your continued efforts to conserve federally listed species and their habitats while supporting the Navy's military mission. If you have any questions or concerns regarding this informal consultation, please contact Tannika Engelhard at 760-431-9440, extension 202.

Sincerely,

A handwritten signature in black ink, appearing to read 'Karen A. Goebel', with a stylized flourish at the end.

Karen A. Goebel
Assistant Field Supervisor

LITERATURE CITED

- Chesser, R. T., Banks, R. C., Cicero, C., Dunn, J. L., Kratter, A. W., Lovette, I. J., Navarro-Sigüenza, A. G., Rasmussen, P. C., Remsen, Jr., J. V., Rising, J. D., Stotz, D. F., and K. Winker. 2014. Fifty-fifth supplement to the American Ornithologists' Union Check-list of North American Birds. *The Auk* 131 (4):CSi-CSxv.
- Longcore, T., and C. Rich. 2004. Ecological Light Pollution. *Front Ecological Environment* 2(4):191–198.
- Navy [U.S. Navy]. 2014. Final Biological Assessment for Naval Base Coronado Coastal Campus Project at Silver Strand Training Complex-South. April 2014.
- Service [U.S. Fish and Wildlife Service]. 2012. Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the Pacific Coast Population of the Western Snowy Plover; Final Rule. *Federal Register* 77(118):36728–36869.

Enclosure

The Coastal Campus project includes the following general and species-specific conservation measures (CMs) that the Navy will implement to avoid, minimize, and/or offset impacts to the bird's beak, fairy shrimp, rail, plover, and plover critical habitat. These measures support the Service's concurrence with the Navy's determination that the project may affect but is not likely to adversely affect the bird's beak, fairy shrimp, rails, plovers, or plover critical habitat in accordance with section 7 of the Endangered Species Act of 1973 (ESA).

General Conservation Measures – Construction and Maintenance

- CM 1. A project biologist contracted by the Navy and approved by NBC NRO will oversee the avoidance and minimization measures, including any required surveys and monitoring activities. The project biologist will be knowledgeable of the federally listed species and associated habitats known or potentially occurring in the project area. Different project biologists may be designated for specific measures based on the qualifications necessary to satisfy the specific measure. If multiple project biologists are required, their activities will be coordinated through one primary project biologist. The project biologist(s) will have the experience and training necessary to conduct tasks described in the BA. Minimum standards for experience and training will be determined in advance by the Navy and will be dependent on the specific task being addressed by the biologist. A statement of qualifications, including a resume of experience and training for each designated project biologist, will be submitted for review and approval to NBC NRO. Generally, when a project biologist is needed, the biologist will (1) be familiar with the federally listed species and associated habitats that require the survey or monitoring activity; (2) have a bachelor's degree with an emphasis in ecology, wildlife science, or related science; and (3) have previous experience with applying measures to avoid and minimize impacts to the listed species in the project area. In addition, where applicable, the project biologist will possess an ESA section 10(a)(1)(A) permit specific to the species and type of surveying or monitoring required. The biologist's resume, qualifications statement, and permit number, if required, will be submitted to NBC NRO. The correct number of appropriately trained biological monitoring staff will be present during all construction (pre-construction, construction, and post-construction) activities (i.e., vegetation clearing, grading, trenching, drilling) to ensure that ESA and Clean Water Act avoidance and minimization measures are carried out correctly.
- CM 2. If, during the design phase of the proposed action, ground-disturbing activity within the footprint, such as geological testing, is conducted, NBC NRO will be notified at least 15 days before the activity is scheduled to occur. NBC NRO approval will be required for any such activity, and the location of the activity will be reviewed to determine if it should be monitored by a biological monitor who is approved by NBC NRO because the location is near a sensitive biological resource. Monitoring of such sites will occur to ensure minimal damage to sensitive resources and adequate restoration of disturbed areas. All temporary effects associated with the geotechnical boring surveys will remain within the footprint of the project area, as described in the BA. The project

biologist will work with the boring crews to avoid and minimize risks to listed resources to the maximum extent practicable, including approving driving routes to reach the boring sites. If it is determined that the geotechnical borings will potentially result in permanent effects to listed species, NBC NRO will coordinate accordingly with the Service. If ground-disturbing activity will take place outside of project limits as described in the BA, an analysis of potential effects to listed species will be required and additional consultation with the Service will occur for areas outside those described in the BA.

- CM 3. All construction will take place within the project footprint defined in the BA contractor(s) will be informed that construction activity must be confined within established limits.
- CM 4. Contractor(s) will be provided with digital files showing the project limits used for the environmental analyses in the final version of the BA. Digital files and hardcopy maps will include the locations of federally listed species and sensitive habitats (including vernal pools and their watersheds). Contractor(s) will be required to coordinate with NBC NRO during design and construction to ensure that projects stay within the limits identified.
- CM 5. The project has a goal of zero storm water discharge (capture 100 percent of the discharge). However, if this goal cannot be achieved, runoff during construction and post-construction operations will be minimized and treated through measures which include but are not limited to preparing a storm water pollution prevention plan; applying soil stabilizers or other measures for erosion control on unpaved access roads; and implementing low impact development features.
- CM 6. Standard BMPs to control dust, such as watering site during construction, covering truckloads and stockpiles, and applying soil stabilizers on unpaved access roads will be implemented during construction.
- CM 7. The project biologist will monitor construction activities to ensure compliance with required avoidance and minimization measures, and will keep the project manager and NBC NRO informed about construction activities that may threaten sensitive biological resources. The project biologist will record daily construction activities and provide an electronic version of all weekly biological monitoring reports to NBC NRO and the Navy Construction Manager. The project biologist will have the ability to halt activities to avoid effects to listed species.
- CM 8. All construction and maintenance personnel will receive environmental training from the project biologist or NBC NRO before commencing work. The environmental training will be on the resources and avoidance and minimization measures involved in the project and the requirements and boundaries of the project. Environmental training will include a description of sensitive species and habitats potentially occurring on or

near the project site or greater project area, details on each species' habitat requirements, the protective measures to be implemented for each species, the role of the project biologist and the responsibilities of those on site to protect biological resources, the importance of complying with avoidance and minimization measures, the method for reporting problems, and the steps to take for problem resolution.

- CM 9. The project will have a designated footprint and the project biologist will ensure that all construction personnel remain within the limits of the project footprint for the duration of project activities. The project footprint is considered the project limits and no construction will be permitted outside of this footprint.
- CM 10. Where adjacent to native plant communities and determined necessary by NBC NRO, construction fencing will be installed around the outer perimeter of the project limits to reduce human disturbance to these adjacent natural habitats.
- CM 11. Construction and maintenance workers and Navy and civilian personnel who use the facilities in the future will not be permitted to bring any domesticated pets to any of the construction sites or facilities to ensure that domestic pets do not affect wildlife through harassment or predation in adjacent natural habitats. This does not apply to military working dogs as training impacts on wildlife from military working dogs have already been analyzed in the biological opinion FWS-SDG-08B0503-09F0517 which contains specific conservation measures for military working dogs at SSTC-S that must be followed.
- CM 12. Natural areas temporarily impacted by construction of the water pipeline (Option 1 or 2) will be restored to native vegetation following construction. A restoration plan will be submitted and approved by NBC NRO before initiating any restoration work. Restoration will be initiated with 12 months of the completion of water pipeline construction.
- CM 13. To comply with EO 13112, National Invasive Species Act, Federal Noxious Weed Act, and Noxious Plant Control Act, construction and maintenance contractors will ensure that all equipment and/or vehicles will be clean and free of mud, dirt, and weeds before entering SSTC-South. When washing wheeled vehicles, the front wheels will be turned from lock-to-lock to allow for exposure of surfaces that may hold weed seeds. Invasive plants with an overall moderate or high ranking in the most current California Invasive Plant Council Inventory will be considered as "weeds". The project biologist will be knowledgeable of and able to identify weed species listed in the California Invasive Plant Council Inventory. Additional qualifications may be specified by NBC NRO for the project biologist handling weed management. The project biologist will report all new weed species invasions (whether they are new to SSTC-South or new to the specific project site) to NBC NRO.
- CM 14. Avoidance and minimization measures adopted as part of individual projects will

include all those described in this informal consultation. Where in conflict, conservation measures listed in the informal consultation will supersede those listed elsewhere.

- CM 15. Written approval by the NBC Wildlife Biologist and NBC Botanist is required prior to finalization and implementation. Engagement and coordination with the aforementioned subject matter experts in the Request for Proposal (RFP) and design process must occur from the beginning to ensure timely coordination so as to afford appropriate opportunities for project review and modification to comply with Federal laws and regulations, to protect endangered/threatened species and habitats in close proximity to the project site, and to comply with the Secretary of the Interior Standards for Rehabilitation. Subject matter experts must be contacted during RFP development and prior to the kickoff-meeting of the project design.

Species-Specific Conservation Measures – Construction, Operation, and Maintenance

In addition to the general CMs outlined above, the Navy will implement the following species-specific CMs to minimize impacts to fairy shrimp, rail, plovers, and plover critical habitat.

Fairy Shrimp

- CM 16. Avoidance and minimization of indirect effects to fairy shrimp-occupied habitat adjacent to the project footprint will occur through BMPs for dust and erosion control as outlined above. In addition, NBC NRO will review specific BMPs (e.g., sediment fencing intended to protect vernal pools) before measures are implemented to avoid potential adverse effects (e.g., altered hydrologic regime) of the BMP and determine whether special post-BMP measures are warranted (e.g., revegetation of areas temporarily impacted). No trenching will occur within vernal pool watershed areas in association with BMPs. Additionally, storm water coming from the project footprint, both during and after construction, will be directed away from occupied basins and their watersheds to prevent contaminants and sediment from flowing off the project footprint and into adjacent habitat. All storm water coming from the project will be captured, directed to storm drains, and prevented from entering vernal pools or their watersheds.
- CM 17. To avoid effects to fairy shrimp-occupied habitat, known occurrences within 500 feet of project boundaries will be identified on project demolition and construction plans and, if determined necessary by NBC NRO or the project biologist, occupied habitat will be clearly indicated in the field with markers or exclusion fencing. Known populations and restricted areas will be monitored by the project biologist (familiar with the habitat of species) during construction phases, as determined necessary by NBC NRO. If deemed necessary by NBC NRO, a 100-foot non-disturbance buffer will be established around each vernal pool watershed and exclusion fencing, markers, or BMPs will be established around the non-disturbance buffers to prevent construction-related runoff and sedimentation from entering the pools.

- CM 18. To avoid impacts to vernal pools resulting from unauthorized trespass during construction, operation, and maintenance activities, signs and/or gates will be installed at all locations that could provide potential access to the vernal pool watershed (i.e., dirt access roads or foot paths) prior to the initiation of project construction. The type and placement of signs and/or gates will be determined by NBC NRO. Signs and/or gates will be regularly maintained and remain in place for the life of the project.

Plover and Rail

- CM 19. The Navy will distribute educational materials and/or install interpretive panels to inform military and civilian personnel of the sensitive species on SSTC-South and measures in place to avoid effects (e.g., no recreational use of the beach, meaning activities not associated with approved training, is permitted).
- CM 20. Construction during the breeding season within 300 feet of plover nesting locations will be avoided to the maximum extent feasible. The nesting season occurs from approximately 1 March through 15 September, but varies depending on species and environmental conditions for each year. The exact timing of construction to avoid the nesting season (when construction will occur within 300 feet of occupied habitat) will be agreed upon by NBC NRO and Service. If construction must occur during the nesting season within 300 feet of occupied plover habitat, NBC NRO, in coordination with the Service, will determine the locations to construct noise and visual attenuation barriers of plywood 12 feet tall to mitigate any potential temporary noise and visual effects to nearby plover breeding locations. NBC NRO may determine the need for additional noise attenuation and light reduction measures for any building or bunker demolition that may take place during the breeding season.
- CM 21. In the event that nighttime construction work is required, prior approval will be required by NBC NRO. Any artificial lighting required will be shielded away from native vegetation communities, beaches, and SR-75.
- CM 22. Other methods of reducing light pollution (e.g., dusk-to-dawn sensor activation, low-lumen or limited-spectrum lighting) will be applied wherever possible. Light poles and light placement will be constructed at the lowest height possible (considering security constraints) to reduce effects to the surrounding natural resources by reducing raptor perching sites and to reduce light pollution.
- CM 23. NBC NRO will review project design features (during the design phase) to ensure that building designs minimize effects to plovers and rails. Design features that prevent raptors and avian predators from perching near sensitive avian species nesting habitat may include the use of anti-perching devices on light poles, rooftops, and other perching locations. Anti-nesting devices will be installed on appropriate structures to prevent prey species from nesting on buildings, which may attract predatory avian

species. Additional building design features may include minimizing building heights to reduce bird collisions, altering roof pitch designs to minimize perching, and limiting the number of new light poles or new perching structures. Light poles and light placement will be constructed at the lowest height possible (considering security constraints) to reduce effects to the plover and rail by reducing raptor perching sites and to reduce light pollution.

- CM 24. During construction, equipment (such as cranes) that could provide temporary supplemental perches for birds of prey and predatory birds will be staged and stored when not in use at least 500 feet away (inside the project footprint) from habitat occupied by plovers. Equipment staging and laydown areas will be approved in advance by NBC NRO to ensure the areas are far enough away from occupied habitat. The project biologist will monitor construction activities to determine if equipment is providing supplemental perches, and make recommendations to reduce perching opportunities for avian predators.
- CM 25. Project design for all electrical upgrades and associated facilities will follow the Avian Power Line Interaction Committee's Reducing Avian Collisions with Power Lines: The State of the Art in 2012 (APLIC 2012).
- CM 26. New buildings and structures will incorporate a bird-friendly design to reduce and prevent birds from colliding with buildings. Bird-friendly design features include transparent passageways, corners, atria, or courtyards so that birds do not get trapped; appropriately shielded outside lighting that is directed away from native habitats to minimize attraction to light-migrating songbirds; interior lighting that is turned off at night or designed to minimize light escaping through windows; and landscaping that is designed to keep birds away from the building's façade. Use of non-reflective or opaque glass; external shades (or other devices to reduce glare, transparency, or reflectiveness) on windows; ultraviolet patterned glass; angled glass; and/or louvers can aid in reducing bird collisions. Additionally, night-time lighting will include bird-friendly design features such as shielded lights (to reduce ambient light into nearby native habitats), use of motion detectors, dusk-to-dawn sensor activation and other automatic controls, low-lumen or limited-spectrum lighting, and lighting design that uses shields to prevent light from shining upward into the sky (Sheppard 2011). NBC NRO will be consulted to ensure the minimization measures are incorporated to prevent window strikes.
- CM 27. To avoid impacts to plovers resulting from operation of the project (i.e., causal outdoor recreation such as walking or running within occupied plover habitat), the existing gate along the western perimeter fence allowing beach access will remain locked at all times during the plover breeding season except when authorized access is granted.
- CM 28. All proposed planting palettes, landscape designs, and installation of trees will be submitted for review and approval by NBC NRO and Navy Landscape Architect and

will use native, drought-tolerant plants appropriate for SSTC-South, NAB Coronado, and NASNI. Invasive plant species will not be included in landscape plantings. A list of suitable landscape plants (including trees) is included in the Landscaping and Installation Appearance Plan Approved Plant List in Appendix H of the Naval Base Coronado Integrated Natural Resources Management Plan (Navy 2013). To reduce the effects of nesting avian predators in trees within the project footprint, there will be a 1:1 ratio of trees removed to trees planted so there is no net increase in the number of trees from current conditions. Trees will not be placed within 300 feet of the western fence line. Trees will be spaced far enough apart so that when full grown their branches will not be touching. Trees will be trimmed or pruned to open up the canopy of the trees to prevent nesting of American crows (*Corvus brachyrhynchos*) and/or common ravens (*Corvus corax*).

- CM 29. All trash generated from construction, operation, and maintenance of the project will be contained within covered, secured trash bins that are inaccessible to wildlife and emptied on a regular basis and prevented from overflowing. All exposed food waste or trash generated from food products (e.g., wrappers, food containers) will be removed from the site on a daily basis to prevent attraction of predators (e.g., American crows or common ravens and mammalian scavengers such as rats [*Rattus* spp.], raccoons [*Procyon lotor*], and skunks [*Mephitis mephitis*]).

Plover Critical Habitat

- CM 30. A visual obstruction is necessary to obscure the proposed entry control point on the north end of the site and the vehicles using the deceleration lane from adjacent occupied critical habitat for the plover on Silver Strand State Beach and from adjacent occupied plover habitat at the north end of SSTC-South. Construction of the entry control point will require grading to access SR-75 due to existing topography, slope stability, and the need for suitable vehicle access associated with the entry control point. Pre-construction engineering may indicate that the grading and site preparation itself may create a topographic visual barrier that adequately obscures the entry control point from the adjacent critical habitat for the plover. However, if engineering design for the entry control point does not create conditions that obscure the site from critical habitat for the plover, a permanent stonewall, concrete wall, or earthen berm or screening fence will be constructed within the project footprint along the west side of the entry gate road prior to the initiation of construction of the traffic and entry gate improvements. The height and length of the wall or fence will be determined by NBC NRO and USFWS. The wall or fence will have anti-perching devices installed on the top to prevent birds of prey from using the wall or fence for perching.
- CM 31. During the design phase, NBC NRO will be consulted regarding the exact location of the entry control point. If feasible, the entry control point will be located as far south along SR-75 as possible to reduce the potential for disturbance to plovers within critical habitat from humans and vehicles entering and leaving SSTC-South. To the maximum

extent feasible, construction of the new proposed entry control point and adjacent security fence will take place outside of the plover nesting season (which generally occurs from 1 March through 15 September, but this may vary slightly from year to year).

- CM 32. To offset permanent impacts to plover critical habitat, the Navy will restore/enhance 0.15 acres of plover habitat through removal of ice plant along the western SSTC-South boundary (outside of the fence line) within 12 months of the completion of construction activities in plover critical habitat. All ice plant removal will be accomplished during the non-nesting season and will be completed using a work crew with hand tools or machinery (i.e., a bobcat or loader with grapppler attachment).

LITERATURE CITED (ENCLOSURE)

- APLIC [Avian Power Line Interaction Committee]. 2012. Reducing Avian Collisions with Power Lines: The State of the Art in 2012. Edison Electric Institute, APLIC, and the California Energy Commission. Washington, D.C., and Sacramento, California.
- Navy [U.S. Navy]. 2013. Final Integrated Natural Resources Management Plan. Naval Base Coronado, California. July.
- Sheppard, C. 2011. Bird-Friendly Building Design. American Bird Conservancy, The Plains, Virginia, 58 pp. Available at <http://www.abcbirds.org/newsandreports/BirdFriendlyBuildingDesign.pdf>.

**E2 – CALIFORNIA COASTAL COMMISSION
COASTAL CONSISTENCY DETERMINATION**

CALIFORNIA COASTAL COMMISSION

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Staff Report/Findings	10/31/14
Hearing Date:	11/12/14
Commission Vote:	7 – 4
Hearing on Findings:	2/13/15

ADOPTED FINDINGS ON CONSISTENCY DETERMINATION

Consistency Determination No.:	CD-0003-14
Federal Agency:	Department of the Navy (Navy)
Location:	Silver Strand Training Complex - South, Coronado, San Diego County (Exhibits 1 and 2)
Project Description:	Coastal campus development comprising 24 projects and 1.5 million square feet of new facilities, constructed over a 10-year period
Commission Action:	Concurrence
Prevailing Commissioners:	Commissioners Cox, Howell, McClure, Mitchell, Turnbull-Sanders, Vargas, and Chair Kinsey

SUMMARY OF COMMISSION ACTION

The Navy has submitted a consistency determination for the construction of a new Coastal Campus at Naval Base Coronado (NBC), located on Coronado Island and the Silver Strand

peninsula, San Diego County (**Exhibit 1**). The project involves the construction, operation and maintenance of a developed campus providing approximately 1.5 million square feet of new facilities to support the operations, logistics, field and classroom training, and administration of Naval Special Warfare Command (NSWC). The project would be located on the northern and central portions of the Silver Strand Training Complex – South (SSTC-S) (**Exhibits 1 – 4, 5**). The project also includes road and utility improvements, including a new northern entrance to the site, road upgrades, and a new right-turn lane on State Highway 75 (SR-75). Full build-out of the NBC Coastal Campus would result in new development covering approximately 162 acres of the SSTC-S site, with construction occurring over a period of approximately ten years.

The project site contains multiple environmentally sensitive habitats areas (ESHA) and wetlands, including vernal pools, southern foredunes on the seaward margin of the training complex, Diegan coastal sage scrub and maritime succulent scrub, and coastal freshwater and saltwater marshes, along with a number of California Native Plant Society (CNPS)-listed rare and endangered plant species (**Exhibit 6**). The project has been sited to avoid many, though not all, of these environmentally sensitive habitat areas (ESHA). The development footprint coincides with previously disturbed and developed areas that nonetheless support large numbers of Nuttall's lotus (*Acmispon prostratus*), an annual herb considered by the CNPS to be critically-imperiled in California, and at high risk of extinction, and which the Commission has determined to be ESHA under the Coastal Act. The Navy has agreed to provide at least 3:1 mitigation for impacts to Nuttall's lotus through restoration of 7 acres of appropriate habitat, and to relocate the proposed waterline to avoid impacts to sensitive habitats. The Commission therefore finds that the proposed project, though not fully consistent, is consistent to the maximum extent practicable with the environmentally sensitive habitat policies of the California Coastal Management Program (CCMP) (Coastal Act Section 30240).

The southern portion of the proposed water line would retain and reuse an existing pipeline, and thus would avoid the need for trenching and fill within wetlands and vernal pools. The Commission therefore finds the project **consistent** with the wetland policy of the CCMP (Coastal Act Section 30233).

Available sea level rise projection tools indicate that the project site will become increasingly vulnerable to flooding as sea level increases (**Exhibit 13**); this hazard could be exacerbated by on-going beach recession along the southern Silver Strand. However, the Navy has indicated that there are no other feasible alternative sites within NBC at lower risk under future conditions of higher sea level, and it has provided evidence that the site would not be at risk of inundation within the design life of the project assuming three feet of sea level rise. Therefore, the Commission finds that the proposed project is **consistent** with the hazards policies of the CCMP (Coastal Act Section 30253(a) – (b)).

Visual modifications would be most prominent from the northern approach along SR-75 and the Bayshore Bikeway. While most of the new structures would be similar in height and scale to existing structures, the project also includes a 120-foot tall parachute drying tower that would be highly obtrusive. However, relocating this structure to a different NBC installation would result in significant logistical problems, and generate additional traffic and vehicle trips in potential

conflict with other Coastal act policies (e.g., coastal access, vehicle miles traveled). The Navy has agreed to examine siting alternatives at SSTC-S to minimize the tower's visual impact, and to share building designs with the Commission and the City of Coronado as soon as they are publically-available. The Commission therefore finds that the proposed project is **consistent** with the visual and scenic resources policy of the CCMP (Coastal Act Section 30251).

Public access would not be directly affected. However, increases in traffic congestion accompanying the project could limit public access to the coast during periods of high visitation (e.g., weekends, holidays, summers) during the ten-year construction period. The Navy proposes to carry out a number of traffic improvements (e.g., signal and lane adjustments) at key intersections to reduce congestion, and has agreed to restrict construction traffic on weekends and holidays and to expedite the construction of a new northern entrance to the site. Thus the Commission finds that the proposed project is **consistent** with the public access and recreation policies (Coastal Act Sections 30210-30212, 30220, 30252) and the energy and vehicle miles traveled policy (Coastal Act Section 30253(d)) of the CCMP.

The Commission finds that the proposed project consistent with the relevant water quality policy (Coastal Act Section 30231) and cultural resource policy (Coastal Act Section 30244) of the CCMP.

For the above reasons, the Commission **concurs** with CD-0003-14.

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Exhibit 15 – View modifications	
Exhibit 16 – Water quality measures	

I. FEDERAL AGENCY'S CONSISTENCY DETERMINATION

The Navy has determined that the project is fully consistent with the California Coastal Management Program (CCMP), and thus, that it satisfies the standard of being consistent to the maximum extent practicable.

II. COMMISSION ACTION, MOTION AND RESOLUTION

A. COMMISSION ACTION – CONCURRENCE

On November 12, 2014, by a vote of seven in favor, four opposed, the Commission concurred with the consistency determination submitted by the Navy on the grounds that the project is consistent to the maximum extent practicable with the policies of Chapter 3 of the Coastal Act. Because that action differed from the Commission staff's proposal, the action proposed in this staff report is the adoption of findings to reflect the Commission's action.

B. MOTION AND RESOLUTION

Staff recommends that the Commission adopt the following motion in support of its decision:

Motion:

I move that the Commission adopt the following findings in support of its concurrence with consistency determination CD-0003-14.

The staff recommends a YES vote on this motion. Pursuant to Section 30315.1 of the Coastal Act, adoption of findings requires a majority vote of the members of the prevailing side who are present at the hearing where the findings are adopted, with at least three of the prevailing members voting. Only those Commissioners on the prevailing side of the Commission's action are eligible to vote. A yes vote by the majority of the prevailing Commissioners listed on page 1 of this report who are present at the January, 2015 hearing will result in adoption of these findings.

Resolution to Adopt Revised Findings:

The Commission hereby adopts the findings set forth below in support of its November 12, 2014 concurrence with consistency determination CD-0003-14, submitted by the Navy for the proposed project, on the grounds that the findings support and accurately reflect the reasons for the Commission's November 12, 2014 concurrence and determination that the project is consistent to the maximum extent practicable with the California Coastal Management Program.

III. APPLICABLE LEGAL AUTHORITIES

Standard of Review

The federal Coastal Zone Management Act (“CZMA”), 16 U.S.C. § 1451-1464, requires that federal agency activities affecting coastal resources be “carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved State management programs.” Id. at § 1456(c)(1)(A). The implementing regulations for the CZMA (“federal consistency regulations”), at 15 C.F.R. § 930.32(a)(1), define the phrase “consistent to the maximum extent practicable” to mean:

... fully consistent with the enforceable policies of management programs unless full consistency is prohibited by existing law applicable to the Federal agency.

This standard allows a federal activity that is not fully consistent with California’s Coastal Management Program (“CCMP”), which are the policies of Chapter 3 of the Coastal Act (Cal. Pub. Res. Code §§ 30200-30265.5), to proceed, if full compliance with the CCMP would be “prohibited by existing law.” In reviewing the project the Commission determined that the project complied with the “maximum extent practicable” standard.

IV. FINDINGS AND DECLARATIONS

A. PROJECT DESCRIPTION & BACKGROUND

The Navy has submitted a consistency determination for the proposed construction and operation of a new developed campus (“Coastal Campus”) within the Silver Strand Training Complex-South (SSTC-S), Naval Base Coronado (NBC), in San Diego County (**Exhibits 1, 2**). The Navy proposes to add approximately 1.5 million square feet of new instructional and administrative facilities at SSTC-S over a ten-year period in order to support logistics, operations, classroom training and administration for the Naval Special Warfare Command (NSWC).

Site Description & Project Purpose

NBC comprises eight separate installations in San Diego and Los Angeles counties, including several on the Silver Strand peninsula and Coronado Island. SSTC-S consists of 548 acres of land located on the southern end of Silver Strand, bordered by the City of Imperial Beach to the south, Silver Strand State Beach to the north, State Route 75 (“SR-75”) and San Diego Bay to the east, and the Pacific Ocean to the west. SSTC-S also includes offshore training areas below the mean high tide line which are owned by the State of California.

In its consistency determination, the Navy describes the mission of Naval Special Warfare Command as follows:

... to organize, train, man, equip, educate, sustain, and maintain combat readiness and deploy Naval Special Warfare (NSW) forces to carry out special warfare missions worldwide. NSW is composed of active duty Special Warfare Operators or Sea, Air and

Land (SEALs) team personnel; Special Warfare Boat Operators, also known as Special Warfare Combatant-Craft Crewmen (SWCC), reserve and support personnel and civilians. Since 11 September 2001, U.S. Special Operation Command (USSOCOM), of which NSWC is the maritime component, manpower has nearly doubled, the budget has nearly tripled and overseas deployments have quadrupled. These increases are primarily in response to ever-increasing wartime requirements.

The Navy's consistency determination goes on to explain that the proposed Coastal Campus is necessary to support this expanded role of special warfare in its worldwide mission, and that the campus would allow for the consolidation of NSWC's operations, training and administration at a single site:

The purpose of the proposed project is to (1) provide adequate facilities to support growth of NSWC on the west coast and (2) maintain the required levels of operational readiness of special warfare forces as mandated by Title 10 U.S.C. Section 167 and 5062. This is necessary because:

- 1. Congress mandated an expansion of Special Operations Force capabilities and NSWC has experienced and continues to experience substantial growth to meet the global operational demands for special operatives.*
- 2. Many NSW facilities are functionally obsolete and do not meet current or future requirements without expansion and renovation;*
- 3. NSWC and its subordinate commands are located at five separate installations of NBC (NASNI, NAB Coronado, SSTC, Naval Outlying Landing Field Imperial Beach (NOLFIB), and Naval Auxiliary Landing Field San Clemente Island (NALF SCI);*
- 4. On NAB Coronado alone, NSWC and supporting commands are spread throughout 60 facilities that are divided by SR-75;*
- 5. Consolidation of multiple commands into one geographic location will provide for more efficient operations and improve readiness; ...*

The following table from the Navy's Draft Environmental Impact Statement (DEIS, p. 1-5), illustrates NSWC's unmet facility needs:

Table 1

NSWC Functional Areas	Current Assets (square feet)	Requirements (square feet)	Percent of Requirements Met
<i>Administration</i>	<i>49,000</i>	<i>90,000</i>	<i>54%</i>
<i>Operations</i>	<i>310,000</i>	<i>737,000</i>	<i>42%</i>
<i>Logistics/Community Support</i>	<i>102,000</i>	<i>292,000</i>	<i>35%</i>
<i>Training (Indoor/Physical)</i>	<i>120,000</i>	<i>340,000</i>	<i>35%</i>

The Navy has been conducting its activities on its NBC bases for more than 60 years, including maritime and field training exercises at SSTC-S. In 2010 the Commission reviewed a consistency determination covering the proposed expansion and intensification of the Navy's training activities at SSTC-S and other installations (CD-033-10); the present project, while directly related to special warfare training, would not result in additional outdoor training activities that were not covered by that consistency determination. At present, SSTC-S contains four oceanside beach and boat training lanes as well as inland training areas and facilities within a fenced perimeter. Existing structures at the site include a handful of World War II-era buildings and structures, a grid of streets on the northern half of the base laid out in the late 19th century, remaining portions of the National Radio Receiving Facility (NRRF) Wullenweber Antenna Array, and several defunct bunkers and batteries included in the Fort Emory Coastal Battery Historic District. On the whole, however, the site is sparsely developed and contains large expanses of open space and habitat areas. The proposed development would result in the removal of a number of the existing structures and the placement of high density development over approximately 162 acres of the northern and central portions of SSTC-S.

A map of existing development at SSTC-S is provided in **Exhibit 3**. Aerial photos of the site are shown in **Exhibit 4**.

Project Description

The Navy's consistency determination describes the project as follows:

The proposed project includes the construction, operation and maintenance of a developed campus encompassing 24 military construction (MILCON) projects over a 10-year period of time. Three administrative facilities projects would establish a command-and-control core for oversight of subordinate commands. Nine facilities projects would be for operational unit needs for five West Coast SEAL teams and other operational units that provide communications and intelligence, surveillance, and reconnaissance (ISR) support. Five logistics and community support projects would provide a variety of support to operational units. Seven projects would sustain indoor training and training support for operational units. The proposed project includes related site improvements, such as

upgraded utilities, fencing, roads, parking; site preparation such as demolition of existing infrastructure as well as site grading and leveling ... the project also involves off-site traffic, access, and sewer infrastructure improvements ... No additional outdoor training is proposed.

The square footage of the 24 MILCON projects included in the proposal would match the unmet requirements listed in Table 1, above. The Navy has not provided specific site or build-out plans for the project; however, the general project footprint and a conceptual plan of the land uses proposed for the SSTC-S site are shown in **Exhibits 5a** and **5b**, respectively.

Project Alternatives

The Navy initially considered fifteen project alternatives, including several for locating the project at an alternate site in Southern California (**Exhibit 1**) or spreading the new facilities among multiple sites. The criteria used to select the alternatives were:

(1) to provide a location in proximity to existing federal facilities and military lands used by NSWC within the existing footprint of NBC; (2) to avoid adversely affecting current Navy missions; and (3) co-location of NSWC facilities to the extent feasible to optimize efficiency and primacy of use.

The Navy rejected twelve of the alternatives on the basis that they would not fulfill one or more of the selection criteria. In particular, locating the project at many of the alternate military installations would place it at too great a distance from existing NSWC facilities at NBC, or would interfere with current Navy missions at those sites. Dividing the project components among multiple sites outside of NBC would also run counter to the Navy's goal of consolidating NSWC activities within a single geographic location. The Navy ultimately analyzed three project alternatives, each placing the majority of the new facilities at SSTC-S, as well as a "no action" alternative (DEIS, pp. 2-1 to 2-68). Alternative 1, the Navy's "preferred alternative," would be to place all facilities at SSTC-S, and would include the demolition of Building 99, the largest existing historic battery on site. Key elements of the preferred alternative include the following:

- ***Consolidation of necessary NSWC facilities to one location on SSTC-South***
The campus would be concentrated in the northern and previously disturbed and developed portion of SSTC-S. Co-locating administrative, operational support, logistics, indoor training and training support, equipment and equipment maintenance functions into one area will optimize organizational efficiency, provide synergy as well as enable effective command and control. The consolidation of NSWC functions and facilities at SSTC-S would replicate similar NSW concentrations on the East Coast.
- ***Design and construction of logistical support buildings, equipment use (and equipment maintenance) training facilities (including an approximately 50-foot long by 80-foot wide by 120-foot tall parachute drying tower or paraloft), classroom and tactical skills instruction buildings, storage, and administrative facilities infrastructure; utilities; fencing; roads; and parking.***

SSTC-S occupies 2.5 miles of coastline (approximately 1.2 miles of bay and 1.3 miles of ocean) and is approximately 548 acres in size. The Coastal Campus' 24 building footprint would be limited to 161.8 acres in the northern portion of SSTC-S.

Considerations for site development include a historic bunker complex in the northern portion, an extensive network of vernal pools and wetlands in the southern portion, a portion of the historic Wullenweber Antenna Array that is being preserved, Western Snowy Plover nesting areas on the beach area beyond the perimeter fence, and various utility lines and easements (see Figure 8). All buildings, with the exception of the paraloft at 120 feet, would be limited in height to 45 feet, which is the highest structure currently existing in the northern portion of SSTC-S. Projects would use applicable sustainability and energy efficiency guidelines as well as conform to the NSWC MILCON Development Plan and the NBC Installation Appearance Plan to ensure cohesive and compatible development.

- ***Construction of a new entry control point providing immediate access to SSTC-S from State Route 75 (SR-75).***

The main gate access to SSTC-S is located in the southern portion and requires transit through a residential area of the City of Imperial Beach. Construction of a new entry control point in the northern portion of SSTC-S will provide direct access to the Coastal Campus from SR-75. Establishing the entry control point at the point where Hooper Boulevard intersects SR-75 would require road improvements, a new traffic signal on SR-75, a new southbound right-turn lane, a new northbound left-turn lane and construction of a 600 square foot sentry house. A temporary entry control point will be established initially to provide construction traffic access to the northern portion until the permanent gate and road improvements can be completed.

- ***Demolition of Building (Bldg) 99 (Bunker) as well as 20 other existing structures.***

Bldg 99 is part of a bunker complex eligible for listing on the National Register of Historic Places (NRHP). Bldg 99 is 4.6 acres in size, has a 17-foot thick armored roof with approximately 49,900 cubic yards of reinforced concrete and steel. It is located in the middle of the northern portion of SSTC-S and, once removed, would provide additional buildable space. Its demolition is subject to the Section 106 process of National Historic Preservation Act (NHPA). The bunker is the tallest structure in the northern portion of SSTC-S at 45-foot high. Comparatively, the existing Wullenweber antenna array, the most prominent structure on SSTC-S, is 100-feet high on the southern portion of SSTC-S. Demolition would be conducted with the use of small commercial explosives and/or diamond saws to initially break up the structure followed by drilling and hammering. Demolished concrete and steel will be reused as part of the construction material or removed to a local landfill. Demolition is expected to take 24 months; however the majority of debris removal would be concentrated over a 2 to 3 month period.

- ***Traffic, Access and Utility Improvements***

Future traffic improvements to five intersections along Palm Avenue (SR-75) in

Imperial Beach would be required in order to improve traffic flow during heavy commute times once the Coastal Campus is fully developed. On site water storage and tapping into existing 16-inch water main line for purposes of a 10-inch fire main and a 6-inch potable water service to the new buildings would be required. There may be a requirement to relocate a 16-inch water main within a 30-foot water easement. A new wastewater conveyance system along with a wastewater storage facility and pump station would be constructed. There may be a requirement to improve the City of Imperial Beach's sewer system. The current electrical system at SSTC-S would be placed underground.

Alternatives 2 and 3 considered by the Navy would be similar to the preferred alternative in that all or most of the new development would occur at SSTC-S. However, under Alternative 2, the Building 99 battery would be retained; under Alternative 3, the battery would be retained, and three new buildings would be constructed at the Naval Amphibious Base (NAB) Coronado and one new building at the Naval Air Station North Island (NASNI) instead of at SSTC-S (**Exhibit 5c**). This would require the demolition of ten existing buildings at NAB.

Access Road & Utility Improvements

Primary access to the project site during construction and operation would be from SR-75 along an improved northern access road (**Exhibits 5a-b, d**). The existing northern access road would be realigned and widened up to 72 feet, including additional turn lanes and improved ingress and egress from SR-75 in the Caltrans right-of-way. The existing northern access gate would also be replaced with a 600-square foot sentry house (plus permanent visual and noise barriers) to serve as the new entry control point.

The proposed project includes several utility improvements (including water, wastewater, natural gas and electrical service) at SSTC-S and within the City of Imperial Beach (**Exhibits 5a-b, e**). The Navy examined two options for upgrading water service to the Coastal Campus site. Under the Navy's original proposal (Option 1) a new 16-inch diameter water pipe would be installed in the coastal dune area just inside the western perimeter fence, east of the SSTC-S beach. The new water line would run approximately 9,875 feet from near the northern site boundary to the southern boundary of the YMCA Camp, and then extend eastward to connect back to an existing water line that extends into SSTC-S from Imperial Beach. The "Option 2" water line route would follow the Option 1 route across the northern portion of SSTC-S, but would then ~~have~~ turned eastward into the development footprint to connect with the existing water line. The existing water line, running from the development footprint southward into Imperial Beach, would be retained, with no trenching or ground disturbance required along its route in the areas south of the development footprint. In November 6, 2014, correspondence with Commission staff, the Navy indicated it would implement the Option 2 route. At the hearing, the Navy committed to modifying the waterline route to match one of the routes identified by the Commission staff in **Exhibit 6e**, which would avoid direct impacts to all sensitive habitats and species.

Upgrades and/or replacement of existing natural gas and wastewater lines are also proposed. These service lines run beneath Hooper Blvd. between Imperial Beach and the development

footprint, across the southern portion of SSTC-S. Upgrades to the City of Imperial Beach's sewer system may also be necessary at two locations (**Exhibit 5e**). The Navy has also proposed several traffic signal and lane improvements at intersections along SR-75 in order to offset projected increases in traffic congestion (*see* Subsection G, below) **Exhibit 5e**.

Project Schedule and Future Operations

Project construction is expected to begin in 2015 and be completed by 2024, with approximately 10% of construction occurring each year. At the hearing, the Navy stated that that northern access improvements would be initiated relatively early in the construction timeline, and completed by the beginning of 2018. Upon completion of the project, an estimated 3,045 Navy personnel would be rerouted for training from NAB Coronado to SSTC-S, increasing the total number of personnel onsite from about 300 at present to about 3,350.

Environmental Baseline

The 548-acre SSTC-S site contains a patchwork of land cover types and habitats (**Exhibit 6a**). Much of the northern and central portions of the site are characterized by the Navy as "urban/developed" or "disturbed habitat." Existing structures at the site include a handful of World War II-era buildings and defunct batteries included in the Fort Emory Coastal Battery Historic District several, a grid of streets on the northern half of the base laid out in the late 19th century for the planned Coronado Heights community, and the NRRF antenna array. Developed areas (62 acres) are comprised of existing buildings, bunkers and other structures, roads and paved areas, and areas occupied by and surrounding the remnant foundations of old buildings. Areas identified as disturbed habitat (174 acres) are dominated by non-native iceplant, which was planted in the 1950s to control erosion and wind-blown sand, but which has since invaded large areas of native vegetation, including the southern foredune habitat. It is important to note, however, that both the urban/developed and disturbed habitat types at SSTC-S continue to support native plant species, in particular Nuttall's lotus (*Acmispon prostratus*), an annual herb known to colonize sandy soils which have been disturbed or otherwise cleared of competing vegetation. Nuttall's lotus is especially abundant in the open sandy areas surrounding the abandoned building pads and in other breaks in the iceplant cover at SSTC-S, as well as in disturbed habitat areas at NASNI (**Exhibit 6b**).

B. OTHER AGENCY APPROVALS AND CONSULTATIONS.

U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service (USFWS) has responsibilities over the proposed project under the Endangered Species Act and the Fish and Wildlife Coordination Act. The Navy requested consultation with the USFWS regarding potential project impacts on the federally endangered salt marsh bird's beak, San Diego fairy shrimp, and light-footed clapper rail, and on the threatened Western snowy plover and its designated critical habitat. The consultation concluded on September 12, 2014, and the Navy has incorporated a number of required conditions and modifications into the proposed project.

San Diego Regional Water Quality Control Board

The San Diego Regional Water Quality Control Board (RWQCB) regulates waste discharges into receiving waters in the project area under the federal Clean Water Act (33 U.S.C. §1251 et

seq.). The NBC operates under a National Pollutant Discharge Elimination System (NPDES) permit issued by the RWQCB, which would be modified as necessary to take into account changed conditions with the addition of the Coastal Campus. The Navy will also apply for NPDES General Construction permits for the individual MILCON projects included in the Coastal Campus.

Section 106 Consultation – State Historic Preservation Office

The Navy is engaged in formal consultation with the State Historic Preservation Officer under the National Historic Preservation Act (NHPA) for historic, cultural and archaeological resources at the project site, which is expected to be completed in February 2015.

C. ENVIRONMENTALLY SENSITIVE HABITAT AREAS

Coastal Act Section 30240 states:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Coastal Act Section 30107.5 defines environmentally sensitive area:

“Environmentally sensitive area” means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.

The southern and eastern portions of the SSTC-S site support extensive natural land covers and vegetation types, including non-native grassland (104 acres), wetlands, including coastal salt marsh (21 acres), vernal pools (11 acres) and freshwater marsh (0.16 acres), and small, scattered patches of coastal sage scrub (8 acres) and maritime succulent scrub (4.6 acres) communities (**Exhibit 6a**). The western shoreline of SSTC-S is covered by Southern foredune (41.8 acres) and beach (12.4 acres) habitats. These natural areas provide habitats for numerous plant and animal species, including several listed as threatened or endangered under the federal Endangered Species Act (*see* Subsection C, below).

The proposed development footprint under the preferred alternative has been sited to occur largely within urban/developed and disturbed habitat areas of SSTC-S, within the existing perimeter fence, in part to limit the impacts on sensitive habitats. However, some impacts will still occur. The direct impacts of the proposed project to plant communities and land cover types at SSTC-S are summarized in Table 2, below:

Table 2: Direct Plant Community and Land Cover Impacts of Coastal Campus Project

Plant Community/ Cover Type	Permanent Impacts from Coastal Campus (acres)	Water Line Impacts Option 1 / Option 2 (acres)	Sewer & Natural Gas Line Impacts (acres)
<i>Southern coastal salt marsh</i>	--	0.05 / --	--
<i>Freshwater marsh</i>	--	-- / 0.03	--
<i>Vernal pools</i>	--	-- / 0.01	--
<i>Diegan coastal sage scrub</i>	0.35	-- / 0.07	--
<i>Non-native grassland</i>	0.02	0.13 / 1.10	0.11
<i>Southern foredunes</i>	0.23	2.61 / 0.18	--
<i>Disturbed habitat</i>	114.06	2.12 / 1.87	0.01
<i>Urban/developed</i>	52.04	1.90 / 1.49	1.22
Totals	166.7	6.81 / 4.75	1.34

Sources: DEIS, pp. 3.7-78 to 3.7-79; USFWS Informal Consultation, 9/12/14.

In order to avoid, minimize, and mitigate potential impacts to environmental resources during construction and maintenance of the proposed development, the Navy will undertake a number of general conservation measures, including:

- Appointment of qualified project biologists to oversee avoidance and minimization measures, surveys, monitoring, construction activities, and permit compliance;
- Biological monitoring of ground-disturbing activities, as determined necessary by the NBC Natural Resources Office (NBC NRO);
- Restriction of construction activities to the defined project footprint;
- Provision of digital and hardcopy maps of the project footprint and locations of sensitive species and habitats to the project contractor;
- Establishment of a zero storm water discharge target (100% capture); if this proves infeasible, a stormwater pollution prevention plan (SWPPP) will be developed containing measures to minimize and treat runoff and control erosion;
- Implementation of standard dust control best management practices (BMPs);
- Environmental training for construction and maintenance personnel;
- Installation of construction fencing around project footprint where necessary to protect sensitive habitats;
- Exclusion of domestic pets from the project site during construction and future operation;
- Restoration of natural areas impacted by construction of the water pipeline;
- Compliance with federal law (e.g., EO 13112, National Invasive Species Act, Federal Noxious Weed Act, and Noxious Plant Control Act) intended to prevent the spread of invasive plants;
- Requirement of written approval from the NBC Wildlife Biologist and NBC Botanist prior to final project implementation.

Conservation measures specific to individual species or habitat types are discussed in more detail below. All general and specific conservation measures required by the USFWS informal consultation have been incorporated into the proposed project and are listed in **Exhibit 7**.

Given the above siting and habitat protection measures, the Navy would avoid direct impacts to many of the habitats the Commission would consider environmentally sensitive areas (ESHA) at SSTC-S. In most cases, the proposed project also includes adequate buffers (greater than 100 feet) between sensitive habitats and new development.

Nevertheless, as described below, the project still involves development within and affecting ESHA. The Coastal Act establishes a high standard for protection of areas that are identified as environmentally sensitive. Only resource-dependent uses, such as habitat restoration, are allowed within ESHA, and all development within or adjacent to an ESHA must be sited and designed to prevent significant disruption of ESHA.

The Coastal Act protections for ESHA are different in approach from certain other environmental laws. For example, the California Endangered Species Act, administered by the Department of Fish and Wildlife (CDFW), allows the “incidental take” of a state-listed species if the impacts of the take are minimized, fully mitigated, and would not result in jeopardy to the species.¹ Similarly, the U.S. Fish and Wildlife Service may issue incidental take permits under the federal Endangered Species Act for a listed species if the impacts are offset through a Habitat Conservation Plan.² However, with a few limited exceptions, Section 30240 of the Coastal Act does not allow development within ESHAs, even with mitigation. The primary exception applies if the proposed development is “a use dependent on the resource.” This fundamental requirement of the Act was confirmed in the *Bolsa Chica* case, wherein the Court found the following:

*Importantly, while the obvious goal of section 30240 is to protect habitat values, the express terms of the statute do not provide that protection by treating those values as intangibles which can be moved from place to place to suit the needs of development. Rather, the terms of the statute protect habitat values by placing strict limits on the uses which may occur in an ESHA ...*³

The only other exceptions would be: (1) if a Commission action were to result in a Constitutional “taking” of private property rights; (2) if the Commission were to find that a project posed conflicts between one or more Coastal Act policies, in which case the Commission could invoke the conflict resolution policy and authorize an activity that it determined met the requirements of Section 30007.5 of the Coastal Act because the conflict was being “... resolved in a manner which on balance is the most protective of significant coastal resources” (Section 30007.5); or (3) if the “consistency to the maximum extent practicable” standard applicable to federal agencies (and described above in Section III) presented a situation where avoiding development within ESHA was prohibited based on existing law.

¹ California Fish and Game Code Section 2081.

² Federal Endangered Species Act, Section 10.

³ *Bolsa Chica Land Trust v. Superior Court* (1999). 71 Cal.App.4th 493, 507.

Defining ESHA

ESHA, as defined in Section 30107.5 of the Coastal Act, is “...any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities.” Thus, Section 30107.5 sets up a two-part test for determining what constitutes ESHA. The first of these tests is whether an area includes plants, animals or their habitats that are either: (a) rare; or (b) especially valuable because of their special nature or role in an ecosystem. If it does, then the second test is whether such plants, animals, or habitats could be easily disturbed or degraded by human activities. If both tests are met, then the area where such plants, animals, or habitats are located is deemed ESHA by Section 30107.5.

In many instances when the Commission determines that a habitat qualifies as ESHA on the basis of a particular plant species, the Commission is guided in large part on whether the species is listed as a Rank 1 or Rank 2 species by the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Plants of California*. The CNPS California Rare Plant Ranking system defines Rank 1B plants as “rare, threatened, or endangered in California, and elsewhere” (Rank 1A plants are those presumed extinct in California). Rank 2 plants are those that are “rare, threatened, or endangered in California, but more common elsewhere.” A threat code extension following the ranking (*e.g.*, Rank 1B.1, 1B.2, or 1B.3) further rates the species’ in terms of the percentage of occurrences that are “threatened” in California (with “.1” being the most threatened and “.3” being the least threatened). All plants appearing on CNPS Ranks 1 and 2 meet the definitions within the Native Plant Protection Act and the California Endangered Species Act as species eligible for state listing as a rare, threatened, or endangered plant. In addition, pursuant to the California Environmental Quality Act (CEQA) guidelines (Cal. Code Regs., Title 14, Section 15380), the effects of a development project on species which meet the criteria for listing, even if not currently included on any list, must be fully considered during project environmental review.

Given the significance of the CNPS ranking as a threshold for determining the relative significance of potentially adverse impacts on biological resources and for setting requirements for formulating related mitigation and monitoring programs, the Commission typically finds that plant species that are listed as Rank 1B or 2 and the area in which they grow meet the Coastal Act definition of an ESHA as they are both: (1) “*an area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem;*” and (2) “*which could easily be disturbed or degraded by human activities or developments.*” Species with CNPS Rank 3 are those for which more information is needed before an appropriate list ranking can be assigned (*e.g.*, Rank 3 species may, after further review, be moved to Rank 1B or Rank 4). Rank 4 species are effectively on a “watch list,” comprising those plants which are of limited distribution or infrequent throughout a broader area in California. Plants in Ranks 3 or 4 may, in some instances, meet the criteria for listing and may, in some instances, meet the Coastal Act definition of ESHA.

Nuttall’s Lotus & “Disturbed” Habitat Areas

As shown in Table 2 (above) and **Exhibit 6b**, large areas of the proposed development footprint at SSTC-S are characterized as “Urban/Developed” or “Disturbed Habitat.” Developed areas at

SSTC-S include existing buildings, bunkers and other structures, roads, paved parking areas, and the abandoned foundation pads of former buildings. However, a comparison of the Navy's land cover designations (**Exhibit 6a**) with aerial photographs of the site (**Exhibit 4**) show that "Urban/Developed" areas at SSTC-S also include unpaved areas, some of which support native vegetation, in close proximity to structures or pavement. Disturbed habitat areas at SSTC-S are described as being dominated by non-native iceplant (*Carpobrotus spp.*), yet in places still support sensitive native plant species (**Exhibit 6b**). The most widespread of the rare plants occurring in developed and disturbed areas within the proposed development footprint is Nuttall's lotus (*Acmispon prostratus*) (**Exhibit 8**).

Nuttall's lotus is an herbaceous member of the pea family native to the dunes, beach, and coastal sage scrub communities of southern California. At present, the distribution of Nuttall's lotus is restricted to a narrow strip of coastal habitats in San Diego County, where it is known from just 33 locations between Tijuana and Carlsbad, including at SSTC-S and NASNI (CNPS 2014). Of these occurrences, all but six are small populations varying from a few to a few hundred plants; larger populations have been observed San Luis Rey River, San Elijo Lagoon, Mission Bay, NASNI, Silver Strand, and Border Field State Park, with by far the largest population found on the Silver Strand between NAB and SSTC-S (**Exhibit 9**, p. 5; Landis 2012). At this handful of locations, the plant can be very abundant, conforming to a common pattern among endangered species to be globally rare but locally abundant. The survival of such species may be at elevated risk because localized impacts may affect a large proportion of the population. Nuttall's lotus has undergone serious decline within its endemic range due to habitat destruction and fragmentation, and continues to be threatened by development, the spread of non-native plants and other land management activities. The existing population of Nuttall's lotus is severely fragmented, and has been estimated to have declined by 50 – 70% in the last ten years (Contu 2012; NatureServe 2014).

Due to these on-going threats and its extremely restricted range, Nuttall's lotus has been listed as a CNPS Rank 1B.1 rare and endangered species (see above), and is considered "critically imperiled" on both a state-wide and global basis. Nuttall's lotus is locally abundant at several NBC installations, with many thousands of individuals occurring within both natural and disturbed areas of SSTC-S and NASNI (**Exhibits 6b, 6c**). The apparent association of this species with developed areas at the project sites may reflect the absence of iceplant, which tends to out-compete native species for light, water, and space in coastal environments; periodic disturbance, clearing or exclusion of iceplant near development may have enabled Nuttall's lotus to persist in or colonize these areas. The local abundance of Nuttall's lotus at SSTC-S highlights the importance of this sub-population to the species continued existence; given the few known locations where Nuttall's lotus occurs, the recent declines in the population, and continued threats from development and invasive species, the sub-population at SSTC-S is especially valuable (see **Exhibit 9**, p. 4-5). Due to the extreme rarity of Nuttall's lotus and the ease with which it could be disturbed or degraded by human activities and development at the sites of the proposed project, the Commission's staff ecologist has determined that areas within SSTC-S and NASNI supporting this species meet the definition of ESHA under Coastal Act Section 30107.5 (**Exhibit 9**, p. 5). The staff ecologist (whose findings are incorporated by reference) states:

Nuttall's lotus is rare and declining due to loss of habitat, and the area supporting many thousands of the species at the Silver Strand Training Center – South clearly could be easily disturbed or further degraded by human activities and developments. Therefore, the area supporting the species meets the definition of Environmentally Sensitive Habitat Area in Section 30107.5 of the Coastal Act, despite the unusual, degraded landscape setting⁴. With the few data available, it is difficult to define the extent and boundary of this ESHA. The rare plant surveys noted the approximate locations of groups of individuals (Figure 3), but did not estimate the number of individuals represented by each filled circle or polygon. Also, this is an annual plant and a significant portion of the population is represented by the seed bank. In fact, the 2004 rare plant survey report suggested that, "[t]he fact that the lotus is found in...open areas, which historically supported dune and coastal sage scrub vegetation and now is overrun with ice plant, suggests that there may be a native seed bank still present underneath the ice plant." (Sauceda-Ortiz 2004). In the absence of detailed distributional data, the most conservative approach to the ESHA boundary would be to create a convex polygon that encompasses the documented locations of Nuttall's lotus on the sandy flats above the beach and foredunes but that excludes existing development that is in use. Such a polygon would also encompass most of the area proposed for future development.

The staff ecologist has also indicated that a 25-foot buffer between new development and occurrences of Nuttall's lotus is needed to protect the species (**Exhibit 9**, p. 6):

The area supporting Nuttall's lotus is unusual due both to the extensive remains of prior development and the extensive vegetative cover of the invasive iceplant. In order for this plant to survive and thrive, a management plan should be developed to remove the iceplant, restore native habitat, and provide a mosaic of sparsely vegetated areas, and control runoff. With such a plan in place, a 25-foot buffer would be adequate to protect the Nuttall's lotus ESHA.

Project Impacts to Nuttall's lotus and other CNPS-listed plants

As shown in **Exhibit 6b** construction of the proposed Coastal Campus at SSTC-S would result in the permanent removal of large stands of Nuttall's lotus in the central and western portions of the proposed development footprint, and the removal of numerous individual plants throughout the site, including at the new northern entry point to the base (**Exhibit 6d**). The installation of a new waterline in the "Option 1" configuration would also result in the removal of several individual lotus plants. Based on the plant survey results summarized in **Exhibit 6b** Nuttall's lotus would likely persist in the western dunes and several locations in the central and eastern portions of the site, but it appears that most occurrences of this species at SSTC-S, in any given year corresponding to many thousands of individuals, would be extirpated. Under project Alternative 3, which would place an unmanned aerial vehicle maintenance and storage facility at NASNI

⁴ In *Bolsa Chica Land Trust v. Superior Court* (1999), 71Cal.App.4th at p. 508, the Court of Appeal found that "...ESHA's, whether they are pristine and growing or fouled and threatened, receive uniform treatment and protection." The Nuttall's lotus habitat at the training complex could aptly be described as "fouled and threatened" but nonetheless meets the definition of ESHA in the Coastal Act.

rather than SSTC-S, Nuttall's lotus plants growing in a developed/paved area would also be permanently removed (**Exhibit 6c**).

In addition to these direct impacts on Nuttall's lotus, the proposed project would result in the permanent removal of several other CNPS-ranked rare and endangered plant species at SSTC-S (**Exhibits 6b, 6d**). The project would result in the removal of at least one individual of San Diego barrel cactus (*Ferocactus viridescens* var. *viridescens*) (Rank 2B), several Coast woolly-heads (*Nemacaulis denudata* var. *denudata*) (Rank 1B.2), and two individuals of California box thorn (*Lycium californicum*) (Rank 4) occurring within the proposed development footprint; and one or more individuals of Coast woolly-heads and Orcutt's pincushion (*Chaenaactis glabriuscula* var. *orcuttiana*) (Rank 1B.1) occurring along the proposed route of the Option 1 water line.

Commission staff requested that the Navy assess whether alternative facility configurations and building placements exist that would avoid the destruction of sensitive species and ESHA within the project footprint, and has requested that the Navy provide site build-out plans to allow the Commission to independently evaluate these alternatives.⁵ The Navy has declined to release site plans, providing the following response:

The Navy is in the preliminary site planning stages during which some preliminary plans have been developed. However, and most importantly, the Navy does not feel it appropriate to release those publicly given the sensitivity of the uses at the site and Naval Special Warfare Command's security concerns. Also, the Navy does anticipate that site development may change throughout the duration of the 10-year construction program, which is also a reason we opted to present a land use map with development envelope to the public, as opposed to providing a very specific site plan with building layout.

...

Acmispon prostratus (ACPR) is found across much of Coastal NBC. It is found in multiple locations on NASNI, as well as both the bayside and ocean-side areas of NAB Coronado and on SSTC-S. It is one of the focal species for management per the NBC Integrated Natural Resource Management Plan (INRMP). NBC does annual surveys to monitor its presence across the properties. The plant is very common on NBC, growing in the dune and foredune areas, disturbed and ruderal areas, and even within parking lots and pavement cracks and potholes of developed areas. Some areas where it is relatively common include: south of the runway on NASNI, within the tern nesting colony on bayside NAB Coronado, and along the fence and dunes of SSTC-S. Due to the Navy's need for open space and buffer areas around the three previously mentioned areas, and the presence of listed wildlife species in these areas (CLT and WSP), successful management of ACPR within those areas is highly likely. A population estimate doesn't exist for this species due to the large area it occupies and the sheer number of plants within those areas. However, every year a focused survey is done within the NASNI study area. The NASNI Study Area is situated just east of Southeast Runway 36 on NASNI, and is approximately 7.13 acres in size. Depending on rainfall, the ACPR population fluctuates between 15,000

⁵ September 5, 2014, correspondence between U.S. Navy and Commission staff.

*and 80,000 individuals. The total ACPR population on NBC is unknown, but is in the tens of thousands of individuals, and is found in areas with little development potential. Due to this fact, the Navy is likely able to manage tens of thousands of individuals of ACPR across multiple installations. ACPR will continue to persist along the fence line and dune/fore dune habitat of SSTC-S. ACPR may be able to persist in some ruderal and even developed areas within the proposed footprint as well. However, these areas are unknown, and most/all occurrences within the proposed footprint have the potential to be developed. Specifically, the developable area at the site is roughly 70 acres, when accounting for the various development considerations at the site, and the Navy is looking to maximize development of the proposed action within that area while striving to avoid designated resources and other areas of the site used for other operational elements. Due to the consolidation of facilities and the project footprint to avoid site resources, including WSP and SDFS, there may be very little flexibility to site buildings within the project footprint. Regarding *Lycium californicum*, there appear to be very few affected, and for *Nemacaulis denudata*, very few, if any, would likely be affected.*

In the absence of detailed plans, and in light of the Navy's statement that most or all occurrences of Nuttall's lotus (and other CNPS-listed plants) within the proposed project footprint have the potential to be developed, the Commission can only conclude that the project is located within ESHA and would result in, at a minimum, the loss of all individual plants located within the development footprint.

The Commission agrees that the presence and local abundance of Nuttall's lotus at other NBC installations and in areas of SSTC-S not slated for development indicates the potential for the species to persist outside of the proposed development footprint. However, in causing the removal of a significant portion of the extant population at the most important of the few locations known to support the lotus, the project would directly contribute to the trend of habitat destruction and alteration that has caused the species' decline. In other words, the cumulative impacts of development, including this project, threaten the continued existence of Nuttall's lotus throughout the coastal zone.

The Commission staff has also asked whether the Navy has evaluated alternative routes for the new water line that would avoid the impacts to ESHA of the "Option 1" configuration, which would require trenching in southern foredune and wetland habitats along the western fenceline (*see below*), and the removal of CNPS-listed plant species as discussed above. Commission staff suggested that an alternative location of the water line beneath Hooper Blvd. in the southern end of SSTC-S and beneath developed areas in the central and northern portions of the site would avoid disrupting ESHA.⁶

At the hearing, the Navy agreed to relocate the water line to one of the alternative routes suggested by the Commission staff in **Exhibit 6e**, which will avoid disruption of all sensitive habitats and species, including Nuttall's lotus.

⁶ September 17, 2014, correspondence between U.S. Navy and Commission staff.

The Commission recognizes the Navy's efforts to manage environmentally sensitive resources, including CNPS-listed rare and endangered plants, at its NBC bases, as exemplified by the 2013 Integrated Natural Resources Management Plan (INRMP 2013). The Commission is also sensitive to the unique security concerns present at a military base. However, the removal of a CNPS Rank 1B.1 species, which the Commission's staff ecologist has determined constitutes ESHA, is clearly inconsistent with the resource protection requirements of Section 30240 of the Coastal Act, both because the proposed development is not a resource dependent use, and because it does not protect against the significant disruption of habitat values.

Diegan Coastal Sage Scrub & Maritime Succulent Scrub

Diegan coastal sage scrub (CSS) is an endangered native plant community occurring in the coastal areas of Orange County, San Diego County and Baja California. Once widespread in coastal Southern California, this plant community has lost between 50 and 85% of its former area to agriculture and urban development, with the remainder highly fragmented (Rubinoff 2001; Taylor 2005). Remaining CSS habitat continues to be threatened by development, grazing pressure, altered fire regimes, and air pollution. Coastal sage scrub provides vital native habitat for indigenous and sensitive flora and fauna, including the federally-listed Coastal California Gnatcatcher, though this species is not known to inhabit the SSTC-S site.⁷ Several small stands of CSS are scattered across the eastern portion of the SSTC-S site.⁸ On drier sites, CSS grades into maritime succulent scrub, a related (and even rarer) plant association with higher frequencies of cacti and other succulents.⁹ Maritime succulent scrub occurs at SSTC-S in two locations (**Exhibit 6b**) in the eastern and southwestern portions of the site. Together, Diegan coastal sage scrub and maritime succulent scrub cover almost 13 acres of the site.

The Commission's determination as to whether any particular Diegan coastal sage scrub or maritime succulent scrub habitat constitutes ESHA has historically been made on a site-specific basis. In a number of past cases, the Commission has ruled that small stands of CSS do not constitute ESHA due to their isolation and distance from larger, more contiguous areas, and due to the fact that the stands did not support California gnatcatcher or other rare species. At SSTC-S, while the individual stands of these communities are relatively small, several support the CNPS-listed rare and endangered species Nuttall's lotus (Rank 1B.1), variegated dudleya (Rank 1B.2), San Diego barrel cactus (Rank 2B.1), and California box thorn (Rank 4.2). Stands of Diegan coastal sage scrub and maritime succulent scrub supporting these rare species are

⁷ The Navy reports a single sighting of a California gnatcatcher traversing the site in 2012 (DEIS, p. 3.7-52).

⁸ Coastal sage scrub at SSTC-S is dominated by native species including coast California buckwheat (*Eriogonum fasciculatum*), broom baccharis (*Baccharis sarothroides*), coast sagebrush (*Artemisia californica*), lemonade berry (*Rhus integrifolia*), and California encelia (*Encelia californica*); maritime succulent scrub at the site is dominated by coast cholla (*Cylindropuntia prolifera*), San Diego barrel cactus (*Ferocactus viridescens*), California boxthorn and variegated dudleya (*Dudleya variegata*).

⁹ The CDFW assigns Diegan coastal sage scrub a ranking of S3.1 ("vulnerable in the state due to a restricted range, relatively few populations, recent and widespread declines, or other factors"); maritime succulent scrub is ranked S1.1 ("critically imperiled because of extreme rarity or other factors"). Both are considered threatened and vulnerable to extirpation. (CDFG 2010). Note: At the time the most recent list of vegetation alliances and associations was published, in 2010, the CDFW was still known as the California Department of Fish and Game (CDFG).

especially valuable for their role in the ecosystem, and are easily disturbed or degraded by human activities. The Commission's staff ecologist has determined that these areas meet the definition of an ESHA in Coastal Act Section 30107.5 (**Exhibit 9**, p. 3-4).

The proposed Coastal Campus project would result in the permanent removal of 0.35 acres of Diegan coastal sage scrub ESHA (CSS supporting rare and endangered species) occurring at two locations in the northeastern portion of the development footprint. The removal of the stand of coastal sage scrub falling entirely within the northern development footprint would result in the removal of an occurrence of Nuttall's lotus, a special-status native plant species. These areas are shown in **Exhibit 6b**. The removal or disturbance of coastal sage scrub habitat determined to be an ESHA would be inconsistent with the resource protection requirements of Section 30240 of the Coastal Act, both because the proposed development is not a resource dependent use, and because it does not protect against the significant disruption of habitat values.

San Diego Fairy Shrimp & Vernal Pools

The San Diego fairy shrimp (*Branchinecta sandiegonensis*) is a small freshwater shrimp that inhabits vernal pools (seasonal shallow pools that are typically filled by winter and spring rains between November and May) in coastal southern California and south to northwestern Baja California. San Diego fairy shrimp (henceforth referred to as fairy shrimp) are habitat specialists found in small, shallow vernal pools and ephemeral (lasting a short time) basins with specific water chemistry and temperature conditions. All known occupied localities are below 2,300 feet and are within 40 miles of the Pacific Ocean.

In the vernal pools in which they occur, adult San Diego fairy shrimp are usually observed between January and March, hatching and maturing within a one to two week period, and persisting for about a month prior to reproduction and senescence. The length of the hatching period is dependent on hydrologic conditions, and may be extended during rainier winters. Fairy shrimp eggs are either dropped to the pool bottom or remain in the brood sac until the female dies and sinks. Resting eggs, or "cysts," are capable of withstanding temperature extremes and prolonged drying, and may remain dormant in the soil for several years. Studies have shown that vernal pools and ephemeral wetlands that support fairy shrimp, and occur in areas with variable weather conditions or filling periods (such as southern California), may hatch only a fraction of the total cyst bank (organisms in a resting stage) in any given year. Thus, reproductive success is spread over several seasons.

San Diego fairy shrimp has been listed as endangered on the federal Endangered Species Act list since 1997 due to extensive loss and degradation of habitat from development and urbanization. At the time of listing, FWS estimated that less than 200 of the original 500 acres of vernal pool habitats suitable for fairy shrimp occupation in San Diego County remained. An estimated 70% of the remaining suitable habitat occurs on lands managed by the Department of Defense.

Due to the rarity, sensitivity and importance of vernal pools as well as the fact that these areas support sensitive species, such as the fairy shrimp, the Commission has determined on previous occasions that vernal pools containing San Diego fairy shrimp and/or characteristic vernal pool plant species meet the Coastal Act definition of ESHA. At the time of surveys conducted during

the winters of 2010 and 2011, the SSTC-S site contained 59 vernal pools and ephemeral basins (with a total area of 11.11 acres), of which 45 were surveyed, 26 were observed to support San Diego fairy shrimp (**Exhibit 10**) and 22 were found to support characteristic vernal pool plant species (ICF 2012). There was no correlation between the presence of vernal pool vegetation and the presence of fairy shrimp. The Commission's staff ecologist has stated that seasonal ponds that support characteristic vernal pool plants or the federally Endangered San Diego fairy shrimp are of very high conservation value. (**Exhibit 9**, p. 3).

Potential Effects on ESHA and San Diego Fairy Shrimp; Mitigation

In its consistency determination and Draft EIS, the Navy contends that the San Diego fairy shrimp and vernal pool habitats would not be directly affected by the proposed project due to the fact that all of the vernal pools at SSTC-S are located outside the project footprint. The existing portion of the "Option 2" alignment of the water utility line crosses beneath a ditch connected to vernal pool #10 (**Exhibits 6b, 10**). Replacing this portion of the water line, as initially proposed by the Navy, would require trenching through or drilling beneath the vernal pool extension, with potential adverse effects on San Diego fairy shrimp. In response to this concern, raised by the U.S. Fish and Wildlife Service (USFWS) during its informal consultation, the Navy elected to modify the Option 2 water line by reusing the existing pipeline across the southern portion of the site (i.e., this existing pipe would no longer be replaced with a new pipeline). The consistency determination states:

Focused wildlife habitat assessments concluded that the area is suitable habitat for the Federally-listed San Diego fairy shrimp ... Surveys conducted in 2003, 2010 and 2011 confirmed presence of San Diego fairy shrimp, and one basin (vernal pool 10) is occupied and within the proposed Option 2 alignment of the water line relocation element. The main part of the basin is outside the proposed water line relocation; however, a small drainage feature that heads west toward the beach from basin 10 would be impacted by construction of Option 2 alignment ... During consultation discussions, USFWS ... raised concerns over impacts to fairy shrimp from the proposed directional drilling under vernal pool 10 for Option 2 ... Accordingly, the Navy has decided to remove work on the southern portion of the water line relocation to avoid these impacts.

In response to Commission staff concerns about the adverse impacts to wetland and southern foredune areas from the Option 1 route, the Navy now proposes to implement the Option 2 route, without replacing the existing portions of pipe, and thus avoiding the need to trench or drill within vernal pool habitat.

Although the Navy expects no direct impacts to San Diego fairy shrimp and vernal pool habitat, the construction and future operation of the SSTC-S Coastal Campus could result in a variety of indirect adverse effects due to increased dust, storm water runoff, erosion, sedimentation, and the introduction of new invasive plant species. To minimize indirect impacts during construction and operation, the Navy has proposed several impact minimization and avoidance measures through its Informal Section 7 Consultation with the USFWS. General conservation measures are summarized in Subsection A, above, and listed fully in the USFWS consultation letter (**Exhibit 7**, pp. 12-15); measures specific to the San Diego fairy shrimp include the following:

CM 16. Avoidance and minimization of indirect effects to fairy shrimp-occupied habitat adjacent to the project footprint will occur through BMPs for dust and erosion control as outlined above. In addition, NBC NRO will review specific BMPs (e.g., sediment fencing intended to protect vernal pools) before measures are implemented to avoid potential adverse effects (e.g., altered hydrologic regime) of the BMP and determine whether special post-BMP measures are warranted (e.g., revegetation of areas temporarily impacted). No trenching will occur within vernal pool watershed areas in association with BMPs. Additionally, storm water coming from the project footprint, both during and after construction, will be directed away from occupied basins and their watersheds to prevent contaminants and sediment from flowing off the project footprint and into adjacent habitat. All storm water coming from the project will be captured, directed to storm drains, and prevented from entering vernal pools or their watersheds.

CM 17. To avoid effects to fairy shrimp-occupied habitat, known occurrences within 500 feet of project boundaries will be identified on project demolition and construction plans and, if determined necessary by NBC NRO or the project biologist, occupied habitat will be clearly indicated in the field with markers or exclusion fencing. Known populations and restricted areas will be monitored by the project biologist (familiar with the habitat of species) during construction phases, as determined necessary by NBC NRO. If deemed necessary by NBC NRO, a 100-foot non-disturbance buffer will be established around each vernal pool watershed and exclusion fencing, markers, or BMPs will be established around the non-disturbance buffers to prevent construction-related runoff and sedimentation from entering the pools.

*CM 18. To avoid impacts to vernal pools resulting from unauthorized trespass during construction, operation, and maintenance activities, signs and/or gates will be installed at all locations that could provide potential access to the vernal pool watershed (i.e., dirt access roads or foot paths) prior to the initiation of project construction. The type and placement of signs and/or gates will be determined by NBC NRO. Signs and/or gates will be regularly maintained and remain in place for the life of the project.*¹⁰

With these measures in place, the USFWS concluded that “all potential impacts on the ... fairy shrimp ... will be avoided or reduced to a level of insignificance (i.e., unable to be meaningfully measured, detected, or evaluated)” (**Exhibit 7**, p. 10).

The Commission agrees with the Navy’s conclusion that the project, as currently configured, would avoid direct impacts to San Diego fairy shrimp and vernal pool habitat. In all cases, the limits of the proposed development footprint are more than 100 feet from the vernal pools, a buffer distance that is in conformance with the staff ecologist’s recommendation (**Exhibit 9**, p. 5-6) and past Commission actions, and that would provide some defense against indirect effects if the proposed development were built. The Navy’s proposed conservation measures would also avoid indirect effects on this species and habitat during construction and operation.

¹⁰ “NBC NRO” in this selection stands for “Naval Base Coronado Natural Resources Office.”

As is discussed in greater detail in Subsection I (Water Quality), below, Commission staff had expressed concern that the Navy's approach to storm water management, including the capture, rerouting and infiltration of all or most of the runoff from the proposed development footprint, could have the unintended consequence of altering the hydrologic regimes of the vernal pools in the southern portion of SSTC-S.¹¹ In subsequent discussions, the Navy has clarified that the proposed development would occur outside the drainages of existing vernal pools under most conditions, and that the goal of storm water management at the proposed campus would not be to divert all runoff at the site, but to capture the *additional* runoff resulting from the new development. Based on the information provided, the Commission concludes that the proposed handling of storm water runoff from the proposed project would avoid significant disruption of the San Diego fairy shrimp and its vernal pool habitat.

Southern Foredunes

SSTC-S contains 42 acres of southern foredune habitat on the western, seaward boundary of the site, occurring on either side of the western perimeter fence (**Exhibits 6a, 6b**). The southern foredune community is recognized by the CDFW in the California Natural Diversity Database as a rare natural community of highly limited distribution due to its scarcity and declining status in southern California (CDFG 2010). Southern foredunes have been greatly reduced by urban and other development between Point Conception and the Mexican border; it is estimated that less than 2,000 total acres of this habitat remain in California. Remaining areas of intact southern foredunes are ranked by CDFW as S2.1 ("imperiled, seriously threatened in California"), and are of high priority for conservation.

Given the rarity of dune habitats across the state, the Commission has considered dune plant communities, even those that are significantly degraded, to meet the definition of ESHA, if they retain some connection to the beach or other dune areas, or if they are inhabited by plants or animals that are rare, endangered, or have other special status. In this case, the dunes at SSTC-S, though in places degraded by foot and vehicle traffic and invasive ice-plant, remain largely intact, and together with the dunes directly to the north at Silver Strand State Beach, represent the largest contiguous stretch of dunes remaining on the Silver Strand peninsula and Coronado Island, and the most intact of this habitat remaining in San Diego County (AECOM 2012). The dune system at SSTC-S retains its connection to the beach and provides many important ecosystem functions, including nesting habitat for the federally-listed Western snowy plover, and habitat for rare native plant species, including Nuttall's lotus, Coast woolly-heads, California box thorn, Orcutt's pincushion, and Red sand-verbena (*Abronia maritima*), which are listed as "rare and endangered" species by the CNPS,¹² and the rare globose dune beetle (CDFW 2014b). Based on the rarity of southern foredune habitat in California, the high quality of the habitat and the presence of rare plant and animal species at SSTC-S, and the fact that these resources could easily be disturbed or degraded by human activities or development, the Commission's staff

¹¹ September 17, 2014, correspondence between U.S. Navy and Commission staff.

¹² Nuttall's lotus, Orcutt's pincushion and Coast woolly-heads are CNPS Rank 1B.1 species ("critically endangered in California"), while California box thorn and Red sand-verbena are CNPS Rank 4 species ("limited distribution")

ecologist has determined that the southern foredune habitat at SSTC-S meets the definition of ESHA in the Coastal Act (**Exhibit 9**, p. 4).

Direct Impacts to Southern Foredunes

The proposed project would result in the permanent removal of 0.23 acres of southern foredune habitat, including areas inhabited by Nuttall's lotus and Coast woolly-heads, as a result of the construction of the new northern entryway and access road (**Exhibits 5d, 6d**). The construction of a new right-turn lane on SR-75, within the Caltrans right-of-way on the approach to the northern entrance, would also permanently remove 0.15 acres of southern foredunes that are within the designated critical habitat of the Western snowy plover.

In addition, the installation of a new water line along either the Option 1 or Option 2 routes (*see above*) would require trenching and fill within areas of southern foredune habitat along the western boundary of the site. The initial installation of the pipe would result in the removal of several occurrences of CNPS-listed plant species, including Nuttall's lotus, Coast woolly-heads and Southwestern spiny rush,¹ growing along the water line easement (**Exhibit 6b**). While it is possible that the dune vegetation removed during the pipe installation would eventually recover, future maintenance activities along the water line easement would guarantee some degree of periodic disturbance. At the hearing, the Navy agreed to relocate the water line to one of the alternative routes suggested by the Commission staff in **Exhibit 6e**, which will avoid disturbance of southern foredune ESHA and special status plant species.

The proposed removal and disturbance of southern foredune habitat that has been designated as ESHA by the Commission's staff ecologist, as described above, would be inconsistent with the resource protection requirements of Section 30240 of the Coastal Act, both because the proposed development is not a resource dependent use, and because it does not protect against the significant disruption of habitat values.

Western Snowy Plover

The western side of the dunes at SSTC-S provides breeding and nesting habitat for the Western snowy plover (*Charadrius nivosus nivosus*), a federally-threatened shorebird species. Western snowy plover is a small shorebird that uses sandy beaches for nesting and roosting from southern Washington to Baja California. The estimated population of adult plovers that may breed along the U.S. Pacific Coast has varied between approximately 1000 to 2000 birds over the last 30 years, with approximately 1000 birds breeding along the Baja California coast (USFWS 2007; Thomas et al. 2012). Research has indicated that there has been a general decline the West Coast population of snowy plover over past decades, including a substantial decrease in the abundance of wintering plovers in southern California (USFWS 2007). Among the factors linked to the regional decline in snowy plovers includes predation, beach erosion, encroachment of exotic vegetation and disturbance from recreation. A small breeding population of plovers is known to occur in the foredunes at SSTC-S. Based on surveys from 2011 to 2013, there has been an average of six breeding pairs of plovers, and 20 nests and 13 fledges, per nesting season on the SSTC-S beach and dunes. The locations and outcomes of recent Western snowy plover nests at SSTC-S are shown in **Exhibits 5d and 10**.

As summarized above, the proposed project would result in the permanent destruction of 0.38 acres of foredune habitat associated with the construction of the new northern entrance, and the substantial disturbance of 2.61 acres of habitat due to the installation of the Option 1 water line. However, none of these areas are known to serve as habitat for Western snowy plovers. The southern foredune areas that would be removed or disturbed due to the entrance and water line construction are located inland of the SSTC-S perimeter fence, 100 feet or more from the nearest known nesting site, and are thus not accessible to snowy plovers. Moreover, the USFWS has determined in its informal Section 7 consultation letter that the 0.15 acres of critical habitat that would be removed is not suitable snowy plover habitat:

*Approximately 0.15 acre of plover critical habitat (Subunit CA 55F) will be directly impacted by construction of the new access road in Caltrans ROW along SR-75 (Figure 2). Of the four primary constituent elements (PCEs) outlined in the final critical habitat designation (Service 2012), PCEs 1 to 3 are related to habitat required by the plover for feeding, breeding, and sheltering, and PCE 4 relates to the plover's requirement for habitat with minimal human disturbance for survival and reproduction. The 0.15-acre impact area consists of southern foredune habitat that is vegetated with nonnative ice plant (*Carpobrotus chilensis*) and some coastal sage scrub species, is disturbed by vehicle traffic on SR-75, and does not provide suitable habitat for plovers. Therefore, this area does not currently contain the PCEs of plover critical habitat, although it could be restored to support PCEs.*

In order to mitigate for the loss of this small area of marginal habitat, the USFWS's determination that a formal Section 7 consultation is not necessary is contingent on the Navy agreeing to undertake the following measure:

CM 32. To offset permanent impacts to plover critical habitat, the Navy will restore/enhance 0.15 acres of plover habitat through removal of ice plant along the western SSTC-South boundary (outside of the fence line) within 12 months of the completion of construction activities in plover critical habitat. All ice plant removal will be accomplished during the non-nesting season and will be completed using a work crew with hand tools or machinery (i.e., a bobcat or loader with grapppler attachment).

Based on this USFWS analysis, and on the locations of the directly affected dune areas in relation to known plover habitat, the Commission agrees that the proposed project would not result in direct impacts to the Western snowy plover, and that the proposed ice plant removal and restoration of dune habitat outside of the SSTC-S fenceline has the potential to benefit the local plover population.

Indirect Effects on Western Snowy Plover

Although no direct impacts are expected, increased human disturbance (i.e., noise, lighting, and unauthorized trespass) and predation associated with the construction and future operation of the SSTC-S Coastal Campus could indirectly affect snowy plovers. The USFWS states:

Loud, irregular sounds during project construction may cause plovers to spend more time away from their nests, thereby increasing the potential for eggs to cool and for eggs and chicks to be predated. Artificial lighting during project construction and operation may cause disorientation, startling, disruption of inter-specific interactions, and increased predation of plovers (Longcore and Rich 2014).

Project construction and operation could also...

... provide additional perching habitat (i.e., towers, tall buildings, utility poles, trees, fences) for avian predators (e.g., hawks, falcons and ravens and crows), which may lead to increased plover predation

...increase populations of mammalian and avian predators at SSTC-South by providing supplemental food (through trash)

...increase human disturbance in the plover nesting areas.

With regard to the night-lighting and noise generated by project construction and operation, the USFWS notes:

However, southern foredunes between the project footprint and plover nesting areas along the western fence line are about 6 to 12 feet higher than the plover nesting area and are expected to attenuate much of the noise and light from project construction, operation and maintenance. In addition, project construction, operation and maintenance noise levels reaching the nesting areas are expected to be similar to or less than the relatively high ambient noise levels from ocean surf.

Noise analyses conducted by the Navy during preparation of the DEIS support this conclusion. In order to minimize the potential indirect effects of the construction and operation of the Coastal Campus at SSTC-S, the Navy has agreed to implement the following measures, as summarized in the informal Section 7 consultation:

CM 19. The Navy will distribute educational materials and/or install interpretive panels to inform military and civilian personnel of the sensitive species on SSTC-South and measures in place to avoid effects (e.g., no recreational use of the beach, meaning activities not associated with approved training, is permitted).

CM 20. Construction during the breeding season within 300 feet of plover nesting locations will be avoided to the maximum extent feasible. The nesting season occurs from approximately 1 March through 15 September, but varies depending on species and environmental conditions for each year. The exact timing of construction to avoid the nesting season (when construction will occur within 300 feet of occupied habitat) will be agreed upon by NBC NRO and Service. If construction must occur during the nesting season within 300 feet of occupied plover habitat, NBC NRO, in coordination with the Service, will determine the locations to construct noise and visual attenuation barriers of

plywood 12 feet tall to mitigate any potential temporary noise and visual effects to nearby plover breeding locations. NBC NRO may determine the need for additional noise attenuation and light reduction measures for any building or bunker demolition that may take place during the breeding season.

CM 21. In the event that nighttime construction work is required, prior approval will be required by NBC NRO. Any artificial lighting required will be shielded away from native vegetation communities, beaches, and SR-75.

CM 22. Other methods of reducing light pollution (e.g., dusk-to-dawn sensor activation, low lumen or limited-spectrum lighting) will be applied wherever possible. Light poles and light placement will be constructed at the lowest height possible (considering security constraints) to reduce effects to the surrounding natural resources by reducing raptor perching sites and to reduce light pollution.

CM 23. NBC NRO will review project design features (during the design phase) to ensure that building designs minimize effects to plovers and rails. Design features that prevent raptors and avian predators from perching near sensitive avian species nesting habitat may include the use of anti-perching devices on light poles, rooftops, and other perching locations. Anti-nesting devices will be installed on appropriate structures to prevent prey species from nesting on buildings, which may attract predatory avian species. Additional building design features may include minimizing building heights to reduce bird collisions, altering roof pitch designs to minimize perching, and limiting the number of new light poles or new perching structures. Light poles and light placement will be constructed at the lowest height possible (considering security constraints) to reduce effects to the plover and rail by reducing raptor perching sites and to reduce light pollution.

CM 24. During construction, equipment (such as cranes) that could provide temporary supplemental perches for birds of prey and predatory birds will be staged and stored when not in use at least 500 feet away (inside the project footprint) from habitat occupied by plovers. Equipment staging and laydown areas will be approved in advance by NBC NRO to ensure the areas are far enough away from occupied habitat. The project biologist will monitor construction activities to determine if equipment is providing supplemental perches, and make recommendations to reduce perching opportunities for avian predators.

CM 26. New buildings and structures will incorporate a bird-friendly design to reduce and prevent birds from colliding with buildings. Bird-friendly design features include transparent passageways, corners, atria, or courtyards so that birds do not get trapped; appropriately shielded outside lighting that is directed away from native habitats to minimize attraction to light-migrating songbirds; interior lighting that is turned off at night or designed to minimize light escaping through windows; and landscaping that is designed to keep birds away from the building's façade. Use of non-reflective or opaque glass; external shades (or other devices to reduce glare, transparency, or reflectiveness) on windows; ultraviolet patterned glass; angled glass; and/or louvers can aid in reducing bird collisions. Additionally, night-time lighting will include bird friendly design features such

as shielded lights (to reduce ambient light into nearby native habitats), use of motion detectors, dusk-to-dawn sensor activation and other automatic controls, low-lumen or limited-spectrum lighting, and lighting design that uses shields to prevent light from shining upward into the sky (Sheppard 2011). NBC NRO will be consulted to ensure the minimization measures are incorporated to prevent window strikes.

CM 27. To avoid impacts to plovers resulting from operation of the project (i.e., causal outdoor recreation such as walking or running within occupied plover habitat), the existing gate along the western perimeter fence allowing beach access will remain locked at all times during the plover breeding season except when authorized access is granted.

*CM 28. All proposed planting palettes, landscape designs, and installation of trees will be submitted for review and approval by NBC NRO and Navy Landscape Architect and will use native, drought-tolerant plants appropriate for SSTC-South, NAB Coronado, and NASNI. Invasive plant species will not be included in landscape plantings. A list of suitable landscape plants (including trees) is included in the Landscaping and Installation Appearance Plan Approved Plant List in Appendix H of the Naval Base Coronado Integrated Natural Resources Management Plan (Navy 2013). To reduce the effects of nesting avian predators in trees within the project footprint, there will be a 1:1 ratio of trees removed to trees planted so there is no net increase in the number of trees from current conditions. Trees will not be placed within 300 feet of the western fence line. Trees will be spaced far enough apart so that when full grown their branches will not be touching. Trees will be trimmed or pruned to open up the canopy of the trees to prevent nesting of American crows (*Corvus brachyrhynchos*) and/or common ravens (*Corvus corax*).*

*CM 29. All trash generated from construction, operation, and maintenance of the project will be contained within covered, secured trash bins that are inaccessible to wildlife and emptied on a regular basis and prevented from overflowing. All exposed food waste or trash generated from food products (e.g., wrappers, food containers) will be removed from the site on a daily basis to prevent attraction of predators (e.g., American crows or common ravens and mammalian scavengers such as rats [*Rattus spp.*], raccoons [*Procyon lotor*], and skunks [*Mephitis mephitis*]).*

CM 30. A visual obstruction is necessary to obscure the proposed entry control point on the north end of the site and the vehicles using the deceleration lane from adjacent occupied critical habitat for the plover on Silver Strand State Beach and from adjacent occupied plover habitat at the north end of SSTC-South. Construction of the entry control point will require grading to access SR-75 due to existing topography, slope stability, and the need for suitable vehicle access associated with the entry control point. Pre-construction engineering may indicate that the grading and site preparation itself may create a topographic visual barrier that adequately obscures the entry control point from the adjacent critical habitat for the plover. However, if engineering design for the entry control point does not create conditions that obscure the site from critical habitat for the plover, a permanent stonewall, concrete wall, or earthen berm or screening fence will be

constructed within the project footprint along the west side of the entry gate road prior to the initiation of construction of the traffic and entry gate improvements. The height and length of the wall or fence will be determined by NBC NRO and USFWS. The wall or fence will have anti-perching devices installed on the top to prevent birds of prey from using the wall or fence for perching.

CM 31. During the design phase, NBC NRO will be consulted regarding the exact location of the entry control point. If feasible, the entry control point will be located as far south along SR-75 as possible to reduce the potential for disturbance to plovers within critical habitat from humans and vehicles entering and leaving SSTC-South. To the maximum extent feasible, construction of the new proposed entry control point and adjacent security fence will take place outside of the plover nesting season (which generally occurs from 1 March through 15 September, but this may vary slightly from year to year).

The Commission staff has expressed concern to the Navy that CMs 20 and 31 (above), would not prohibit construction activities within 300 feet of occupied snowy plover habitat during the breeding season, if such a restriction were deemed infeasible. In response, the Navy has clarified that the only construction activity with the potential to occur within 300 feet of plover nesting sites is the improvement of the northern entrance; all other projects, including installation of the water line, would occur more than 300 feet from nesting sites and/or outside the breeding season. The Navy has successfully used the proposed sound and visual barriers to protect snowy plovers during previous construction projects, and has through its management policies maintained and enhanced the breeding population of plovers at NBC installations over the past decade.¹³

The Commission's staff ecologist has reviewed this information and agrees that properly designed and sited barriers would attenuate much of the noise and visual disturbance associated with constructing the entrance improvements (J. Dixon, pers. comm.). He has also noted that the entrance construction would take place on a relatively small area of the SSTC-S site, and would potentially affect only a relatively small number of plover breeding sites (**Exhibit 10**). The Commission thus concludes that the plover conservation measures, in combination with the biological monitoring requirements of CMs 1 and 7 (**Exhibit 7**, p. 12-13) and USFWS oversight, would minimize the potential for indirect effects on the Western snowy plover from the proposed project.

Conclusion

At the hearing, the Navy described its efforts to select a project location and design a project footprint that would avoid impacts sensitive species and habitat to the maximum extent practicable, and indicated that no alternative site within NBC could meet the Navy's needs for the Coastal Campus with a lesser impact on environmental resources. The Navy has also agreed to provide at least 3:1 mitigation for the direct impacts to Nuttall's lotus through restoration of 7 acres of appropriate habitat. The habitat restoration will consist of the eradication of ice-plant, which is expected to facilitate the recovery and spread of native southern foredune vegetation, including Nuttall's lotus.

¹³ October 29, 2014, correspondence between U.S. Navy and Commission staff, "#3 & #9 Plover habitat."

For the reasons discussed above, the Commission finds that the proposed development is not fully consistent with Section 30240 of the Coastal Act, because it cannot be considered a “use dependent on the resources.”

The proposed project’s permanent and/or temporary use of multiple ESHAs, including extensive areas occupied by Nuttall’s lotus and other CNPS-ranked rare and endangered plant species, 2.8 acres of southern foredunes supporting Western snowy plover, and 0.35 acres of Diegan coastal sage scrub, is not a use allowable within such habitat, and this use and the use of adjacent areas would not protect such habitat. However, with the Navy’s proposed mitigation in place, the Commission finds that the proposed project is consistent to the maximum extent practicable with the environmentally sensitive habitat policy of the CCMP (Coastal Act Section 30240).

D. WETLANDS

Coastal Act Section 30233 states:

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

...

(4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

...

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary.

Section 30121 of the Coastal Act defines a wetland as follows:

"Wetland" means lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.

In addition, Section 13577(b)(1) of the Commission’s Administrative Regulations (Title 14, Division 5.5) provides:

Wetland shall be defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent and drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salts or other substances in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deep-water habitats.

Wetland Delineations

The Navy performed wetland delineations at SSTC-S as part of a biological resources inventory completed in 2004 (Saucedo-Ortiz 2004), and revisited the delineations in the preparation of the Draft EIS. The Navy's consultants followed the procedural guidelines and criteria outlined in the U.S. Army Corps of Engineers Wetlands Delineation Manual. Several wetland areas were identified within SSTC-S (**Exhibit 6a**). The largest tract of wetlands on site, consisting of Southern coastal salt marsh and several small vernal pools, occurs in and adjacent to YMCA Camp Surf in the southwestern corner of the site. Other substantial wetland areas are located in the southeastern quadrant of the site, including numerous vernal pools, two areas of coastal salt marsh, and a few small patches of freshwater marsh. In total, the Navy's surveys identified 20.70 acres of coastal salt marsh, 11.11 acres of vernal pools, and 0.16 acres of freshwater marsh on the SSTC-S.

The Commission staff has advised the Navy that Coastal Act-defined wetlands may be more extensive than Army Corps-defined wetlands, and requested that the Navy identify any differences in the wetland delineation that would result if a Coastal-Act ("one parameter") definition were applied.¹⁴ The Navy responded as follows (in relevant part):

A one parameter wetland delineation has not been done for SSTC-S that we are aware. The one parameter wetland delineation may expand the area mapped as wetland, but it would not include any of the area within the proposed footprint. The entire proposed footprint is within disturbed or upland habitat. Standing water or wetland vegetation is not present to classify the proposed footprint as one parameter wetland. Hydric soils, the third parameter, are not considered present on site ... The only exception to this is the water line that runs through USACE wetlands (Coastal and Valley Freshwater Marsh). This is not USACE jurisdictional, as the marsh was only present due to a leaky pipe which was fixed in fall 2013. This would likely be considered a one parameter wetland. However, this area is no longer impacted, as the project has been revised to avoid new pipe within this area, so no development there is anticipated.

The Commission's staff ecologist agrees that, while a wetland delineation based on the Coastal Act definition may have identified additional wetland areas, these areas would likely occur in the same general area (i.e., the low-lying southern portions of SSTC-S) as the Army Corps-defined wetlands rather than in the proposed development footprint (**Exhibit 9**, p. 2-3). The freshwater

¹⁴ September 5, 2014, correspondence between U.S. Navy and Commission staff.

marsh referenced in the Navy's response, though not an Army Corps jurisdictional wetland, was nonetheless correctly identified as a wetland in the Navy's analysis. The staff ecologist has also noted that the small stand of Southwestern spiny rush (*Juncus acutus*), a plant often associated with salt marsh habitats, occurring in the extreme northwestern corner of the site within the proposed Option 1 water line easement (**Exhibit 6b**), likely represents a non-wetland occurrence of this species based on the surrounding dune topography and well-drained soils (J. Dixon, pers. comm.).

At the hearing, the Navy agreed to modify the water line route to match one of the alternatives suggested by the Commission staff in **Exhibit 6e**. These alternatives avoid all wetland areas. The Commission's ecologist has concluded that additional wetland delineations using State criteria would be necessary only for a water line route near the previously-identified, federal wetlands in the southern areas of the site (**Exhibit 9**). Thus, with the adoption of a modified water line configuration as shown in **Exhibit 6e**, no additional wetland delineations would be necessary.

In conclusion, the Commission finds that the project would avoid the diking, filling or dredging of coastal wetlands, and is thus consistent with the wetland policies of the CCMP (Coastal Act Section 30233).

E. HAZARDS

Coastal Act Section 30253 states in part:

New development shall do all of the following:

(a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(b) Assure stability and structural integrity, and neither contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

Though not the legal standard of review in this case, the City of Coronado's certified Local Coastal Program (LCP) provides locally-relevant guidance with regard to coastal erosion hazards:

LCP Policy E.4: *Require that any permanent building, or other structure proposed for construction be set back from an eroding beach coastline a distance sufficient to assure that the development will not be threatened by natural erosion processes during the lifetime of the structure without requiring shoreline protection structures. The builder, at the discretion of the City, shall provide a certification by a civil engineer that the proposed construction site meets this criteria [sic].*

The Navy's consistency determination does not examine whether the proposed project would place life or property in areas of high geologic, flood, or fire hazard risk. However, the coastal

location, relatively low elevation, and highly erodible soils of the SSTC-S raise the question of whether the proposed development at this site would be at risk from coastal erosion and flooding during its design life, and whether the stability and structural integrity of the development can be assured into the future without reliance on shoreline protective devices.

Low-lying coastal areas in San Diego Bay region, including portions of Imperial Beach, Coronado, and Silver Strand peninsula, are currently vulnerable to flooding during winter storms when heavy rainfall, storm surge and high waves coincide with high tide conditions. This vulnerability is evident in flood zone maps produced by the Federal Emergency Management Agency (FEMA) (**Exhibit 11**) and tsunami inundation maps produced by the State of California (**Exhibit 12**).¹⁵ The sandy ocean shorelines of Silver Strand, itself a sand spit deposited over time by the net northward sediment transport in the Silver Strand Littoral Cell, are also highly vulnerable to coastal erosion. Since the damming of the Tijuana River in 1937 and the loss of the greater part of the sediment supply to the littoral cell, along with decreased rates of artificial beach nourishment in recent decades, significant beach recession has occurred at the Tijuana River delta, Imperial Beach, and southern Silver Strand (Flick 1993; Hapke et al. 2006; U.S. Navy 2010). Over the last several decades, estimated rates of beach retreat at Imperial Beach and Silver Strand locations near SSTC-S range from 3 to 6 feet per year. Rising sea level associated with global warming will increase the exposure of at-risk areas to coastal flooding and erosion hazards, and over time extend the area of vulnerability inland.

Sea level rise

Projections of future sea level rise for a given location vary greatly depending on assumptions made about future greenhouse gas emissions, the magnitude of ocean warming and ice sheet loss, and local or regional factors such as land subsidence or uplift. Regionally-specific sea level rise projections for the California coast south of Cape Mendocino are contained in a 2012 National Research Council report examining sea level along the west coast (NRC 2012), and an updated state sea level rise guidance issued in 2013 by the Coastal and Ocean Working Group of the California Climate Action Team (CO-CAT). The 2013 CO-CAT report, reflecting the updated science provided in the NRC 2012 report, projects sea level along the California coast to rise 2 to 12 inches (4 – 30 cm) by 2030, 5 to 24 inches (12 – 61 cm) by 2050, and 17 to 66 inches (42 - 167 cm) by 2100. The ranges in these projections are based on a range of modeling results and low, medium and high future greenhouse gas emission scenarios. The State Coastal Conservancy and the State Lands Commission have adopted the use of 55 inches (140 cm) of sea level rise for 2100 which is consistent with the average of the models of sea level rise for 2100 based on a high future greenhouse gas emission scenario.

Throughout the first half of the 21st-century, sea level rise alone is not expected to cause significant flooding, inundation, or erosion; rather the highest probability and most damaging events likely will take place when increasingly elevated sea level occurs simultaneously with high tides, storm surge and large waves (e.g., during winter storms, El Niño events). Between 2050 and 2100, the effects of sea level rise alone (flooding and inundation) and the combined

¹⁵ The FEMA flood zone map is reproduced in the Draft EIS as Fig. 3.5-2; the tsunami hazard zone map is reproduced as Fig. 3.2-3.

effects of sea level rise and large waves (e.g., damage to coastal structures, cliff erosion, beach loss) are projected to have much greater impacts.

To comply with Coastal Act Section 30253 development must be planned, located, designed and engineered for the changing water levels and associated impacts that might occur over the life of the development. In addition, project planning should anticipate the migration and natural adaptation of coastal resources (beaches, dunes, wetlands, etc.) due to these future sea-level rise conditions in order to avoid future impacts to those resources from the new development. At SSTC-S, the proposed development would be located inland of an intact coastal dune system, that has been determined by the Commission to support ESHA (*see* Subsection C, above), and which, under natural conditions, would be expected to migrate inland with increasing sea level. If the Coastal Campus project, or any future shoreline protective device needed to protect the development, has the potential to limit the natural migration of the dune system and result in its eventual loss due to erosion, it could not be found consistent with Section 30253 in that it would contribute to the destruction of the site and surrounding area.

Topography of the Coastal Campus Site

The topography of southern Silver Strand is relatively flat, with elevations rarely exceeding 15 feet above mean sea level (MSL). The northern portion of the SSTC-S, where much of the proposed Coastal Campus development would be located, occurs on some of the highest ground in the area, a low plateau at about 30 feet (9 meters) above MSL. In contrast, the southern portion of the site, including the circular area currently occupied by the NRRF antenna array that is also slated for development, sits at an elevation of approximately 10 feet (3 m) above MSL, and includes numerous small depressions forming ephemeral wetlands and vernal pools during the wet season. The western edge of SSTC-S is bounded by a system of coastal dunes, which provide a degree of natural flood protection to the SSTC-S site, but are subject to erosion from prevailing coastal winds, surf, storm surge, and military training maneuvers. (DEIS, p.3.2-1; U.S. Navy 2010).

SSTC-S Vulnerability to Coastal Flooding, Erosion & Sea Level Rise

In the Draft EIS, the Navy evaluates flooding hazards at SSTC-S as follows:

Although SSTC-South is outside the 100-year flood zone, some off-SSTC-South areas planned for traffic and utility improvements, are within the 100-year floodplain and are subject to flooding during a 100-year storm event (Figure 3.5-2). SSTC-South is susceptible to localized flooding and has been known to contain seasonal pools created by storm water runoff due to its low-lying, flat terrain; poor drainage; and high water table.

However, the Navy acknowledges that military properties are exempt from flood zone mapping, and that the location of SSTC-S outside the mapped 100-year flood zone does not necessarily reflect the actual flooding risk that presently exists at the site.¹⁶ While the relatively high elevations (about 30 feet above MSL) of the northern portion of SSTC-S are almost certainly above the 100-year flood zone, the lower-lying southern portion of the site, including the area

¹⁶ September 17, 2014, correspondence between U.S. Navy and Commission staff.

around the NRRF Wullenweber antenna array, may be vulnerable to flooding under certain conditions. These southern areas are currently at risk of flooding during a large tsunami event, as indicated by the tsunami inundation maps produced by the California Emergency Management Agency (**Exhibit 12**).

As discussed in Subsection I (Water Quality), the Navy will implement a variety of measures to capture, reroute, and infiltrate storm water runoff (**Exhibit 16**), and in the Draft EIS, the Navy indicate that these measures would be adequate to handle a 100-yr storm event:

By successfully complying with these measures, runoff during construction and postconstruction operations would be minimized and 100-year storm flows would be properly conveyed without impeding or redirecting flows that would potentially harm life or property. By incorporating these design standards, no significant impacts would occur with implementation of features of Alternative 1.

However, the Navy does not address if, and under what circumstances, the lower-lying portions of SSTC-S would become vulnerable to coastal flooding, nor what measures would be necessary to mitigate this hazard.

Another deficiency of the Navy's DEIS analysis is the failure to evaluate hazards that may arise over the life of the Coastal Campus development from future sea level rise and shoreline erosion and retreat. The National Oceanic and Atmospheric Administration (NOAA) has developed a sea level rise visualization tool ("NOAA SLR Viewer") to demonstrate the potential of various levels of sea level rise to effect coastal areas. **Exhibit 13a** shows the output from this tool in the vicinity of SSTC-S at high tide (A) under present conditions, (B) with 3 feet of sea level rise, and (C) with 6 feet of sea level rise, respectively. Under present conditions, several of the existing pools and wetlands in the southern portion of the site are highlighted as "low lying areas" potentially at risk of flooding. With three feet of sea level rise, these at-risk areas have expanded toward the development footprint. With six feet of sea level rise, corresponding to "high emissions" scenarios for the year 2100, much of the southern portion of the site – including a portion of the development footprint – could be inundated. The NOAA SLR Viewer does not take into account higher frequency sea level variability due to storms, El Nino events, or high wave conditions. Another set of future flood risk projections, developed for the state of California, illustrates how storm conditions could amplify the potential for flooding under future sea level rise (Heberger et al. 2009) (**Exhibit 13b**).¹⁷ Under these projections, which assume 55 inches (4.6 feet) of sea level rise in combination with a 100-year storm, the area of potential inundation at SSTC-S is similar to that shown in the NOAA SLR Viewer with 6 feet (72 inches) of sea level rise (**Exhibit 13a**).

These sea level rise projection tools make a number of unrealistic assumptions, most notably that present-day topographic features will remain fixed, and are not designed to substitute for robust, site-specific analysis. At SSTC-S, sea level rise is likely to exacerbate on-going beach erosion

¹⁷ Coastal flood and erosion hazard zone maps associated with the Pacific Institute sea-level rise report (Heberger et al. 2009) are available at http://www2.pacinst.org/reports/sea_level_rise/hazmaps.html.

and shoreline retreat, and the sea level rise projection tools may thus underestimate future hazards. Nonetheless, these simple tools demonstrate the potential for sea level rise to contribute to coastal flooding and erosion hazards within the proposed development footprint, and the need for detailed analysis of these hazards over the design life of the project. It is also worth noting that the southern portion of the development footprint is presently within a tsunami hazard zone (**Exhibit 12**), and that future sea level rise would only expand the areas at risk of inundation during a tsunami.

Information submitted by the Navy in response to questions from Commission staff has only partially addressed the potential for future flooding and erosion at SSTC-S. In an e-mail dated October 29, 2014, the Navy provided maps of projected inundation (using the NOAA Sea Level Rise Viewer) with three to four feet of sea level rise occurring by 2083, a timeframe which the Navy indicates would exceed the design life of the Coastal Campus. No flooding occurs within the development footprint under either of these projections. However, as noted above, the NOAA Viewer projects future water levels based on current mean high high tide alone, and does not take into account extreme high tides, storm surges, El Niño events and other factors which will lead to brief or extended periods of much higher water levels, independently of sea level rise. Crucially, the NOAA Viewer also neglects future shoreline erosion, which will likely exacerbate future flood hazards at this site.

In a November 6, 2014 e-mail, the Navy provided staff with additional information on the Department of Defense's efforts to plan for and adapt to sea level rise (DoD 2014), along with a link to a detailed technical study of potential sea level rise impacts at Camp Pendleton and Naval Base Coronado (Chadwick et al. 2014). The results of this study appear to provide additional evidence that coastal flooding and erosion associated with sea level rise could threaten portions of the Coastal Campus development in the future, and emphasize the need for a site-specific analysis at SSTC-S.

At the hearing, the Navy reiterated its argument that the proposed project would be safe from inundation through 2083 with an assumed 3 feet of mean sea level rise (representing a "moderate" scenario for future sea level rise, but neglecting the effects of erosion or episodic high water levels), and presented evidence that the project site at SSTC-S encompasses the only large, minimally-developed, and relatively high elevation area remaining within NBC, and thus represents the least vulnerable feasible location on which to construct the Coastal Campus. The Navy also stated that shoreline armoring is not a part of the proposed project, and that, at this time, it has no plans for shoreline armoring in the future. The Navy also acknowledged that any future proposal for shoreline armoring at the project site would require federal consistency review by the Commission.

Based on this information, the Commission finds that the proposed project is consistent with the hazards policies of the CCMP (Coastal Act Section 30253).

F. SCENIC AND VISUAL RESOURCES

Coastal Act Section 30251 states:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

Although not the standard of review in this case, the visual resource policies of the City of Coronado's certified LCP can provide context, since the NBC installations where the proposed project would be located are nominally within the Coronado city limits.

LCP Policy B.6: *Maintain high standards for visual aesthetics and preserve these scenic qualities as recreational resources.*

LCP Policy H.2: *Require that permitted development be sited and designed to safeguard existing public views to and along the ocean and bay shores of Coronado, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.*

LCP Policy H.5: *Reaffirm the Scenic Highway Element of the City's General Plan which designates the Silver Strand and San Diego Coronado Bay Bridge portions of State Highway 75 as Scenic Highway, and the Scenic Highway Modifying Chapter of the City's Zoning Ordinance which regulates land use adjoining Scenic Highways.*

LCP Policy H.7c: *Require that development in the entire community generally be compatible in height and bulk with existing development to preserve the scale and character of the community.*

Existing Views

Views to and along the shoreline at SSTC-S are available from a variety of public vantage points south, east, and north of the site. However, due to the size (approximately 1.5 miles long, 0.4 – 0.6 miles wide in most places) and topography of the site (see below), views of the ocean from eastern vantage points are very limited (**Exhibit 15**, p. 3-6). Thus, the most significant shoreline views in the immediate vicinity SSTC-S are from the public beaches north and south of the site and from southbound SR-75, approaching the training complex from the north.

Existing views at the site encompass a mix of natural and man-made features. Natural features include flat, low-lying grassland, marsh, and scrub plant communities, a handful of old, planted cypress trees in the more developed portions of the site, and the coastal dune system along the seaward margin. Most existing buildings and structures are located in the northern half of the

site, and due to their relatively low heights, generally do not present significant visual barriers (**Exhibits 3, 4, 15**). The most notable exception to this rule is the decommissioned NRRF and its Wullenweber Antenna Array, consisting of a 1200-foot diameter concentric ring of 100-foot tall poles, with a 12,000 square foot control building at the center, located on the southern portion of the site (**Exhibits 3, 4, 15**, p. 2, 6-9). The antenna array is the most prominent visual feature of SSTC-S from distant vantage points due to its height, and from the neighborhoods and beaches of Imperial Beach due to proximity; however, most of the array is slated for removal prior to the construction of the Coastal Campus. Other prominent features include the 700 foot long Building 99 bunker and two other historic batteries (Bldg. 98 and Bldg. 100) on the northern portion of the site (**Exhibit 3**). Though the batteries are approximately 45-feet tall, they are covered with earth and vegetation, and more closely resemble low hills than man-made structures (**Exhibits 4, 15**, p. 3, 5). The northeastern boundary of the site along SR-75 is bordered by a mile-long earthen berm (approximately 25 feet in height) that obstructs most views across the northern portion of the site from the east, including from the SR-75 and the Bayshore Bikeway (**Exhibit 15**, p. 4).

The Silver Strand Highway (SR-75) is a state designated Scenic Highway providing views of the coast along portions off its length, including the segment just to the north of SSTC-S. Drivers, bicyclists or pedestrians approaching SSTC-S from the north have relatively unobstructed views of the coastal dunes and shoreline, with existing trees and structures on the site (most prominently the antenna array) and developed areas of Imperial Beach in the background (**Exhibit 15**, p. 2). As one nears the northern boundary of the SSTC-S, the highway bears east, and the foreground view becomes dominated by the site perimeter fence and the beginning of the berm, with the Building 98 battery, trees, and a handful of existing structures in the background, while views of the coastal dunes and ocean gradually diminish (**Exhibit 15**, p. 3). The roadside berm obstructs all views of the coast from the east across SSTC-S from just south of the northern entry to a point about mid-way down the length of the site. Views across the southern portion of SSTC-S from SR-75 and the Bikeway are relatively unobstructed, but the width of site and the western dunes ensure that the ocean is visible only on the horizon (**Exhibit 15**, p. 5-6). Looking to the northwest, trees and a few structures (most notably the Building 99 bunker) are visible in the distance (**Exhibit 15**, p. 7); to the west and southwest, the dominant structure is the antenna array (**Exhibit 15**, p. 6).

The Silver Strand shoreline adjacent to SSTC-S is publically-accessible from Silver Strand State Beach to the north and Imperial Beach to the south. At present, views along the shoreline from these vantage points are relatively open, containing a mix of natural and man-made features. Looking southward from Silver Strand SB, the foreground is dominated by the beach, dunes and ocean, with some existing SSTC-S development, including the antenna array, visible in the background (**Exhibit 15**, p. 1-2). Viewshed features are similar looking northward from Imperial Beach city beaches, though the antenna array is much more prominent (**Exhibit 15**, p. 9).

Effect of Proposed Project on Views

The proposed Coastal Campus project would place approximately 1.5 million square feet of new facilities at SSTC-S, including 24 major buildings or structures, and convert the northern half of the site to a heavily-developed campus. All new structures, with the exception of a 120-foot high

parachute drying tower, would be 45-feet tall or less in order to match the maximum height of the existing development. Although the Navy has not provided a detailed site plan, the proposed project footprint would, for the most part, concentrate new development on the northern portion of SSTC-S (**Exhibits 5a, 5b**).

In its consistency determination, the Navy summarizes the proposed project's effects on scenic resources as follows:

The existing visual setting of SSTC-S would change as a result of the proposed project but the buildings would not obstruct any scenic public viewsheds. The Coastal Campus would modify viewsheds from SR-75, the Bayshore Bikeway, the Coronado Cays, and Silver Strand State Beach ... It would create a more concentrated visual appearance, including increased nighttime lighting conditions, primarily from southbound SR-75 approaching the north gated entry control point. However, viewshed modifications are not anticipated to be perceived as substantial, dramatic, adverse, or controversial. SSTC-S is currently used for military activities and consists of 548 acres of federal-owned military property.

...

Most construction activities would be visible to military and government personnel working on SSTC-S, boaters transiting near the project area, and from multiple view corridors (SR-75, Coronado Cays, Imperial Beach residents near the southern boundary, YMCA Surf Camp and IB Pier). Construction activities for the traffic, access and utilities will be visible to the general public on SR-75 and within the City of Imperial Beach. However, construction activities would be temporary. After construction, the project would be visually consistent with existing buildings in the foreground and adjacent areas.

The Navy also concludes that the project would be visually-compatible with its surroundings due to design features:

Design of the buildings would complement the appearance of surrounding areas by including:

- *Context-sensitive architectural treatments applied consistently throughout the development.*
- *Low reflectivity building materials in natural, earth-tone colors.*
- *Shielding of permanent outdoor lighting that limit light trespass and ambient pollution to achieve dark sky compliance to the extent possible. Additional methods to reduce light pollution, such as dusk-to-dawn sensors, low-lumen or limited spectrum lighting applied as possible and light poles at lowest height possible considering security constraints;*
- *Context- and water-sensitive landscape treatments, including visual buffers such as earthen berms, vegetated buffers, screening trees, and right-of-way landscape improvement along public-facing areas*

With regard to the potential addition of structures at NAB and NASNI under Alternative 3, the Navy states:

Further, modification to views at NAB Coronado and NASNI would not be substantial as those base locations are currently characterized as nearly built out. The addition of one or two new facilities at these locations would not be a change in character or perceptible to the average viewer.

The Navy's assessment of the project's visual impacts are largely echoed by a visual review conducted by the California Department of Transportation , which evaluated visual changes along SR-75, a State Scenic Highway (Caltrans 2014a). In this memo, Caltrans states:

The height of the proposed structures would be consistent with the profile of the existing buildings; however, the location and number of buildings will increase the visibility of facilities from southbound SR-75. The design and appearance of all structures would fit the visual setting (character) and would be 'attractive, landscaped, and receive proper maintenance', in keeping with NBC policies and current practice. The view shed modifications are not anticipated to be perceived as substantial, dramatic, adverse, or controversial, and not result in significant adverse visual impact.

...

In addition, the post-construction conditions of SR-75 would continue to comply with the five (5) legislatively required elements for official scenic highways under Section 261 of the Streets and Highways Code.

Comment letters submitted by the City of Coronado on the Navy's Draft EIS and the Commission's federal consistency review (**Exhibit 14**) provide a counter-argument to the Navy's conclusion that the visual impacts of the proposed project would be insignificant. From the City's perspective, the number, volume and height of the new buildings, and the overall mass of the development, would represent a significant change from existing conditions and would not, as proposed, be visually compatible with its physical surroundings or the City's design guidelines. The City's comment letter on the DEIS includes the following points:

- The proposed project would greatly increase the bulk, mass and height of development in the northern portion of SSTC-S, and would be particularly visible from southbound SR-75. The entire project should be re-designed to be architecturally- and environmentally-sensitive and compatible with the project area and surroundings.
- Although the City does not have direct land use authority over the federal lands of SSTC-S, the proposed project is located in the Wildlife Preserve and Scenic Highway Overlay zones of the City's Land Use Plan (LUP), which include regulations designed to protect the aesthetic characteristics of land within the zones. The Navy should design the Coastal Campus in conformance with design guidelines for these zones, and submit conceptual plans to the City's Design Review Commission for review and comment.

- The Navy should analyze alternatives to the 120-foot high paraloft tower that would reduce visual impacts, such as placing the building partially below grade, redesigning the tower to be an “open” structure (allowing some visual transparency), or relocating it to the NAB where taller structures presently exist.
- The proposed modifications the SSTC-S northern entrance would include the addition of a new roadway, security gate, sentry building, lighting, traffic signal, and other structures which would change the visual appearance of the area and result in new night-time visual intrusions, especially headlight glare in the direction of the Coronado Cays neighborhood. These potential adverse effects should be analyzed and mitigated.

Analysis

It is clear that construction of the Coastal Campus would substantially alter the visual appearance of the SSTC-S, and would replace many of the natural aesthetic qualities of the site with a man-made, built environment. However, under the Coastal Act’s visual resources policy, the Commission does not simply consider whether a development would change the aesthetics of a site, but whether the new development has been sited and designed to protect public views to and along the ocean, to minimize alteration of natural landforms and be visually compatible with the character of the surrounding area.

On one hand, much of the proposed Coastal Campus development would be clustered in the northern portion of the SSTC-S and set back from the edges of the site, thereby taking advantage of the size of the parcel to reduce visual impacts, maximize the shielding effects of the existing berm on the northeastern site boundary, and leave open much of the southern portion of the site. This broad-scale siting decision would protect views to the west from SR-75 and the Bayshore Bikeway along the southern portion of SSTC-S, and limit the project’s intrusion into views along the shore from nearby public beaches.

The Commission agrees with the Navy’s conclusion that the earthen berm would shield all but the tallest proposed structures from the view of SR-75 and the Bikeway along the northeastern portion of the project (**Exhibit 15**, p. 4), and that changes to the coastal view from the highway along the southern portion of SSTC-S would be minor due to the large distances between potential vantage points and the new structures (**Exhibit 15**, p. 5-7). Similarly, views to the coast from street ends in the northern neighborhoods of Imperial Beach would not be substantially degraded due to the distances involved and the presence of existing concrete walls separating the neighborhoods from the military installation (**Exhibit 15**, p. 8). The proposed development would be visible to beach-goers looking northward from Imperial Beach (**Exhibit 15**, p. 9) or southward from Silver Strand State Beach (**Exhibit 15**, p. 1-2), but due to the distances involved, and the planned setbacks from the beach (at least 400 – 600 feet), it would not obstruct views along the shoreline. At worst, new structures would be visible in the distance, but the more proximal inland views would be protected by the existing coastal dune system.

The trade-off of the proposed siting of the Coastal Campus is that the development would be highly visible from northern vantage points, in particular to viewers travelling southward on SR-75 and the Bayshore Bikeway. **Exhibit 15** (p. 3) illustrates how the proposed project would modify the view from southbound SR-75 near the northern entrance to SSTC-S. At present, the

view contains a handful of structures, including the natural-seeming Bldg. 98 battery on the left, which is softened by clusters of trees and the visible horizon; post-project, these natural visual elements would be largely replaced by a solid mass of buildings. The 120-foot tall paraloft tower and a large structure composed of scaffolding on the right would be particularly obtrusive. However, even at present, the shoreline itself is not visible from this vantage point, and the ocean is only visible at the most distant horizon. Thus the potential effects of the project on views *to the ocean* are a relatively minor.

In the absence of specific site plans, it is difficult to evaluate whether an alternate arrangement of buildings and structures would reduce the visual impacts of the proposed project. However, the Commission concludes that, in general, the proposed concentration of development in the northern portion of SSTC-S would protect most views to and along the ocean and minimize the alteration of natural land forms. The exception is the view to the south from SR-75 and the bikeway just north of SSTC-S, which would be substantially altered by the proposed project. In this instance, the adverse visual impacts could be minimized by eliminating, redesigning, or relocating the most obtrusive structure planned for the site, the 120-foot paraloft tower. Commission staff has asked the Navy whether the parachute tower could be relocated, for instance to a previously-developed installation that contains other tall structures. The Navy's initial response indicated that an offsite location would not meet the NSWC's operational needs, but that the "Navy intends to locate that tower to minimize its visual impact to the greatest extent feasible, recognizing that it would be a noticeable feature on the landscape."¹⁸ Subsequent correspondence from the Navy, dated October 31 and November 6, 2014, provided details on the operational and logistical considerations in siting the paraloft tower. In essence, the paraloft tower is just one of several integrated facilities needed to support Navy SEAL training and operations at NBC. Relocating the tower to another installation (e.g., NAB) would create significant logistical complications, reduce the efficiency of SEAL activities, and create new safety issues for parachuting operations. Siting the paraloft tower elsewhere would also create additional daily trips on SR-75 by Navy personnel travelling between SSTC-S and NAB; in the Navy's words, "personnel would need to drive up State Route 75 to NAB numerous times per parachute" operation. Thus, an off-site location for the paraloft tower has the potential to contribute to already significant traffic problems along SR-75, and to result in conflicts with other Coastal Act policies, including those protecting public access (Sections and requiring that new development minimize vehicle miles traveled and energy consumption (Section 30253(d))). The Navy has also indicated that it would examine on-site alternatives for siting the paraloft tower in order to minimize its visual impact, stating:

Within the Coastal Campus site itself, the Navy will look to locate this facility in the optimal location to allow the existing topography to conceal the maximum amount of its profile, within the extent practicable for operational and other environmental impact concerns.

¹⁸ September 17, 2014, correspondence between U.S. Navy and Commission staff.

Based on these considerations, the Commission concludes that it would be infeasible to locate the paraloft tower at an alternative site, and that the Navy will take steps to minimize the tower's visual impact during facility siting decisions.

As discussed above, the clustering of Coastal Campus development would protect most views to and along the coast, and as a general matter, minimize the visual impacts of the project.

However, the Commission's ability to evaluate the visual compatibility of the project with its surroundings is hampered by the early stage of the Navy's planning process and a relative paucity of available information. The Navy has not yet finalized siting or design decisions for the individual MILCON projects that would comprise the Coastal Campus, and notes in its November 6, 2014, correspondence on this issue that each project may be constructed by separate architectural, engineering and construction contractors, and, by implication, may have different design features. Naval Base Coronado is "in the process of procuring a site specific Installation Development Plan for [the] Coastal Campus." As a result, detailed plans and/or simulations of individual buildings and structures are not yet available, and the development simulations provided by the Navy (included in **Exhibit 15**) contain few architectural details. With regard to building design, the Navy proposes to incorporate several features, including "context-sensitive" architecture and landscaping, low-reflectivity building materials, and light-pollution reduction measures, into the Coastal Campus project in order to improve its visual compatibility with its surroundings. The Navy's recent correspondence also provided excerpts from NBC's Installation Appearance Plan (IAP), which contains broad design guidelines that would help ensure some consistency among building styles at the Campus.

At the hearing, the Navy committed to sharing the designs and building parameters of individual facility construction projects with the Commission and the City of Coronado when these designs become publically-available, and stated that federal acquisitions law prevents the Navy from providing this information prior to its publication in the Federal Register. The Navy also reiterated its intention to solicit and accept comments from neighboring communities on building design, and to work with the City of Coronado to achieve a visually-compatible aesthetic for the Coastal Campus.

Based on this information, the Commission finds that the proposed project is consistent with the visual resources policy of the CCMP (Coastal Act Section 30251).

G. PUBLIC ACCESS AND RECREATION

The Coastal Act provides for the protection and enhancement of coastal public access and recreation. Coastal Act Sections 30210, 30211 and 30212 state (in part):

Section 30210: In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211: Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30212(a): Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or (3) agriculture would be adversely affected.

Coastal Act Section 30220 states:

Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Coastal Act Section 30252 provides (in part):

The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, ...

The Coronado peninsula, on which SSTC-S, NAB Coronado and NASNI are situated, is a major recreational destination, in large part due to its coastal location, which provides water-oriented recreational opportunities and access to numerous beaches. San Diego Bay and the Pacific Ocean are used extensively by tourists and residents for boating, fishing, bathing and other recreational activities. The ocean shoreline between Coronado and Imperial Beach consists of almost 10 miles of sandy beach, including popular municipal beaches and Silver Strand State Beach, immediately to the north of SSTC-S. The 24-mile Bayshore Bikeway runs between Coronado and downtown San Diego along the shore of San Diego Bay; a segment of the Bikeway runs along the eastern boundary of SSTC-S. State Highway 75 (SR-75), a state-designated scenic highway, also runs along the bay and is the primary access road for the entire peninsula. The YMCA Surf Camp, a seasonal day- and overnight camp for youth, is operated on 45 acres of land leased from the Navy in the southwestern corner of SSTC-S (**Exhibits 3, 5a**).

Public access to the proposed project areas, including SSTC-S, NAB and NASNI, is restricted to military personnel, and would remain so during and after project implementation. The beach area west of SSTC-S is currently accessible from Silver Strand SB to the north and Imperial Beach municipal beaches to the south. The Navy periodically restricts beach and ocean access at SSTC-S during training exercises; increases in the frequency of training activities and temporary beach closures at SSTC-S were reviewed by the Commission under a prior consistency

determination (CD-033-10) and are not considered further here. In its consistency determination, the Navy states:

Implementation of the proposed action would not change public access to the sites and development of the Coastal Campus would have no effect on existing public access to the coast.

Development of new facilities within SSTC-S, NAB Coronado and NASNI would not alter the availability, access to, or functions of the recreational areas including operation of and access to YMCA Camp Surf.

Public access to all existing recreational facilities would be maintained and no changes to the recreational or adjoining land uses are proposed resulting in no effect to coastal recreation as a result of the proposed project.

In response to staff questions about existing access to the beach area west of the proposed SSTC-S campus, the Navy additionally states:

The public currently is allowed access to the beach are immediately west of SSTC-S below the mean high tide line. The Navy does not currently close the beach except during select training events. This proposal would not change beach access.

The Commission agrees with the Navy that the proposed project, which would occur almost entirely within the fenced perimeter of the Navy sites, would not directly encroach upon existing beach or shoreline access. However, as discussed below, the indirect effects of traffic congestion stemming from the proposed development have the potential to impede shoreline access in the area.

Traffic Impacts on Coastal Access

The proposed project would increase traffic congestion at multiple intersections along Silver Strand Blvd. (SR-75) during both construction and operation of the Coastal Campus facility. Because of the popularity of the Coronado peninsula as tourist destination, and the status of SR-75 as the only coastal access corridor for much of the peninsula, increased traffic congestion on this road has the potential to restrict public access to the coast.

The traffic analysis contained in the Draft EIS concluded that “significant and unmitigatable” traffic impacts would occur along SR-75 due to the construction of the Coastal Campus (DEIS, pp. 3.9-31 to 3.9-35). Congestion at 14 - 17 intersections along the SR-75 corridor in Coronado (6 - 7 intersections), Imperial Beach (4 - 8 intersections) and the Egger Highlands district of San Diego (3 intersections) would become severe – falling to “level of service” (LOS) E or F -- at some point during the ten-year construction period (2015-2023), depending on the scenario analyzed.¹⁹ Though the Navy refers to these impacts as “temporary”, at many intersections the

¹⁹ Under Transportation Research Board LOS criteria for intersections, LOS E is characterized as “operations where there is significant delay, extensive queuing, and poor progression”; LOS F is characterized as “operations that are unacceptable to most drivers, when the arrival rates exceed the capacity of the intersection”.

severe levels of traffic congestion would be sustained throughout all or most of the 2015 to 2023 period.

Operation of the new Coastal Campus and potential new facilities at NAB or NASNI would also introduce new traffic flows, generating an estimated 4000 to 4200 additional daily trips on SR-75 as compared to the present. Though the distribution of the new traffic flows depends in part on which project alternative is constructed, the proposed concentration of new facilities at SSTC-S ensures that virtually all the new trips will occur to and from this site, and that a portion of the current trips to and from the NAB in Coronado would shift southward to the new coastal campus. The traffic analysis contained in the Navy's Draft EIS examined current and projected LOS at 33 intersections along the SR-75 corridor, including scenarios with and without the proposed project alternatives, and with one to three aircraft carriers in port. Even without the proposed project, traffic congestion along SR-75 is expected to worsen over the coming decades, with numerous intersections declining to LOS E or F. Construction of the Coastal Campus would exacerbate this situation. The Draft EIS identifies five to eight key intersections in Coronado/Silver Strand (1 – 2 intersections), Imperial Beach (3 – 4 intersections) and San Diego (1 – 2 intersections), depending on the project alternative, number of carriers in port, and time frame (year 2024 or 2040), that would be significantly impacted with full implementation of the proposed project.

It is important to note that the Navy's traffic analysis is focused on peak morning and evening commute hours rather than weekends and holidays, when public access and recreation is most likely to be affected. However, as the Draft EIS notes:

Traffic patterns in Coronado are unique in that peak hours are spread over a longer time period because of the Navy's staggered work times and because of heavy tourism traffic that occurs outside of peak hours.

Because of the area's popularity as a tourist destination, the effects of increased traffic congestion on public access may also become a concern on weekdays, particularly during the summer months.

The Navy has proposed a set of mitigation and impact avoidance and minimization measures to address increased traffic congestion at intersections where these impacts were deemed significant. Measures to address significant impacts associated with the construction phase of the proposed project are as follows:

- construct the new northern entry point to SSTC-S as soon as possible;
- include construction management in the design aspect of the project;
- monitor daily activity levels during construction;
- scheduling heavy periods of vehicle activity during non-peak hours;
- encourage carpooling and staggered work hours for construction workers;
- notify public stakeholders of times where abnormal construction activity would occur.

In addition to these measures, the Navy has proposed mitigation measures for the projected significant traffic impacts at key intersections during the operations phase of the project:

- modification of traffic signal timing and phasing;
- modification of lane configurations/lane restriping;
- addition of left-turn lanes, shared through- and right-turn lanes;
- removal of crosswalk to allow changes to signal phasing;
- removal of parking spaces to allow lane addition/reconfiguration.

These measures would be implemented over time at the various affected intersections, and based on the Navy's analysis in the Draft EIS, would reduce traffic congestion to the levels of service projected under the "no project" scenarios for the years 2024 and 2040. The Navy states in the Draft EIS that the proposed measures would be implemented by the Navy, Caltrans, and/or the City of Imperial Beach. In further discussion with Commission staff, the Navy has stated that:

The proposed action would implement a bike and pedestrian pathway onto the [SSTC-S] site from SR-75 and the Bayshore Bikeway ... The Navy is also currently evaluating placement of a bus stop near or on the project site at the north entrance. In moving forward, the project design will also continue to evaluate this issue further and look for ways to reduce its traffic impact to the surrounding system.

Local Government Concerns

The Cities of Coronado and Imperial Beach have submitted comment letters expressing strong concern over projected increases in traffic congestion resulting from the proposed project. Recommendations contained in these letters include (but are not limited to) the following:

- Do not implement the "construction north, operations south" construction scenario (*see* DEIS, p. 3.9-32), which would increase the number of Imperial Beach intersections experiencing significant increases in construction traffic, including in residential neighborhoods.
- Close the SSTC-S southern gate to regular vehicle use to avoid traffic impacts in residential neighborhoods of Imperial Beach and at the Silver Strand Blvd./Palm Ave. intersection.
- Fund and implement all traffic impact avoidance, minimization and mitigation measures prior to and/or in concert with construction activities.
- Coordinate with the cities of Coronado, Imperial Beach, and San Diego during the design and implementation of all traffic improvements.
- Partially or fully fund the costs of street and traffic signal improvements needed to avoid/minimize/mitigate traffic impacts.
- Work with Caltrans, Cities of Imperial Beach and San Diego on comprehensive traffic signal improvements along SR-75 corridor between Imperial Beach and I-5.
- Develop and implement a Transportation Demand Management Plan that would encourage and support the use of alternate modes of transportation; such plan could

include a carpool/vanpool program; bicycle and pedestrian friendly campus design; inter-installation shuttle service; construction of bus stops and extension of municipal transit service to serve the northern site entrance; reinstatement of bay ferry service; charging of on-site parking fees; include carpool lanes at site entrance; etc.

To date, the Navy has not released its responses to comments received on the Draft EIS, so it is unclear to what degree these recommendations will be considered.

However, at the hearing, the Navy committed to avoiding construction activities that would generate significant traffic flows during weekends and holidays, to allowing temporary construction access to SSTC-S from the existing northern access road, and to completing the construction of the new northern entrance road and gate by the beginning of 2018. The Navy also described its existing Transportation Incentives Program, which affords every military and federal civilian employee at NAB the opportunity to participate in subsidized vanpool, rideshare, or public transit voucher programs.

The Navy's proposed mitigation, avoidance and minimization measures are likely to reduce the increase in traffic congestion in the SR-75 corridor stemming from the proposed project, and the commitment to avoid construction traffic during weekends and holidays would protect recreational access to the coast during these peak visitation periods. For these reasons, the Commission finds that the proposed project is ~~not~~ consistent with the public access and recreation policies of the CCMP (Coastal Act Sections 30210, 30211, 30212, 30220 and 30252).

H. ENERGY CONSUMPTION AND VEHICLE MILES TRAVELED

In an effort to decrease the consumption of natural resources and reduce emissions of air pollutants, including greenhouse gases (GHG), the Coastal Act includes policies requiring that new development minimize energy consumption and vehicle miles traveled throughout the life of the project. Section 30253(d) of the Coastal Act provides:

New development shall ... (d) Minimize energy consumption and vehicle miles traveled.

Energy Consumption

The Navy's consistency determination does not address the minimization of energy consumption associated with the construction and operation of the proposed Coastal Campus project. The Draft EIS addresses the issue indirectly when discussing the cumulative impacts of GHG emissions resulting from the project. The Navy concludes that annual GHG emissions from the proposed project "would not contribute substantially to cumulative impacts associated with global climate change" (DEIS, p. 4-10), and goes on to present a broad outline of Navy programs to reduce energy consumption and shift to renewable and alternative fuels:

The Secretary of the Navy established several goals for reducing the Navy's consumption of fossil fuels:

- *Mandate that energy usage, efficiency, life-cycle costs, and other such factors be part of the Navy's decision when acquiring new equipment or systems, as well as vendor efficiency or energy policies;*
- *Cut petroleum use by half in the Navy's fleet of commercial vehicles by 2015 by phasing in new hybrid trucks to replace older ones;*
- *Procure half the power at Navy shore installations from alternative energy sources, including wind or solar, by 2020 and, where possible, supply energy back to the grid, as the Navy does today at Naval Air Weapons Station China Lake, California; and*
- *Reach the point that half the energy used throughout the Navy, including in ships, aircraft, vehicles, and shore stations, comes from alternative fuel or alternative sources by 2020. Today that percentage is about 17 percent.*

These examples illustrate the leadership role that the Navy has in achieving energy reductions, which will contribute to the national effort to mitigate global climate change.

The DEIS describes measures to minimize energy consumption and GHG emissions at the SSTC-S Coastal Campus as follows:

The Proposed Action's buildings and facilities would be designed following established principles of sustainability, thereby meeting the standards set forth in EO 13423, EO 13514, and the EISA, as well as applicable Navy guidelines and regulations. The NBC Coastal Campus would include the design of an integrated layout, along with thermal and photovoltaic solar systems (on the rooftop of the proposed buildings and carports).²⁰

In subsequent discussions with Commission staff, the Navy has further stated:

The Coastal Campus proposal would provide facilities at Naval Base Coronado for Naval Special Warfare Command that would use less energy and water and would be certified to LEED Silver. Projects included in the alternatives would be constructed in compliance with applicable sustainability and energy-efficiency guidelines and regulations (e.g., EO 13423, Strengthening Federal Environmental, Energy, Energy, and Transportation Management; EO 13514, Federal Leadership in Environmental, Energy, and Economic Performance; and the Energy Independence and Security Act of 2007 [EISA]). EO 13423 requires that Federal agencies improve energy efficiency, reduce greenhouse gas (GHG) emissions, and implement sustainable building practices (Department of Energy 2007a). It also requires Federal agencies to Comply with the Guiding Principles for New Construction and Major Renovation. EO 13514 requires that Federal agencies comply with the Guiding Principles for New Construction and Major Renovation. It also requires that at least 15 percent of each agency's facilities and building leases (more than 5,000 gross square feet) meet the

²⁰ Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management, George W. Bush, January 26, 2007; Executive Order 13514, Federal Leadership in Environmental, Energy and Economic Performance, Barack Obama, October 5, 2009; Energy Independence and Security Act of 2007 (EISA).

Guiding Principles by 2015 for existing buildings. The Energy Independence and Security Act of 2007 (EISA) is an Act of Congress concerning the energy policy of the U.S. One of the stated purposes of the EISA is to increase the efficiency of buildings and to improve the energy performance of the Federal government (Department of Energy 2007b).

The Navy has since clarified to Commission staff that new Coastal Campus facilities would be designed to achieve energy and water efficiency equivalent to a LEED Silver rating, though the Navy may not pursue formal certification. At the hearing, the Navy also stated that it is committed to building the Coastal Campus as a “zero net energy consumer.” The Commission supports the Navy’s organizational goals for reducing fossil fuel consumption, and its commitment to implementing the proposed project in conformance with federal law. At this phase in the Navy’s planning process, individual building designs are not yet available, and the exact mix of energy efficiency measures to be implemented will likely vary from project to project. Such measures may include the use of green roofs, window shading, low emissivity glass for windows, solid rain canopies, day-lighting of work spaces, light-colored building exteriors, PV solar panels, high efficiency lighting, solar tubes, natural ventilation, high quality insulation, and green and recycled building materials. The Commission therefore concludes that a framework is in place to assure that the proposed project will minimize energy consumption in the new buildings and facilities.

Vehicle Miles Traveled

As discussed in Subsection G above, the Navy estimates that the proposed project, including full operation of the proposed Coastal Campus, would generate over 4000 additional daily trips on SR-75, representing a substantial increase in vehicle miles traveled and associated energy consumption and emissions in comparison to the present. The Navy’s traffic study (KHA 2014; Appendix D-2 to the DEIS) further estimates that 90% of the users of the SSTC-S campus will commute in a private vehicle. The Navy’s proposed traffic minimization and mitigation measures (summarized in the previous section) are focused almost exclusively on road and signal improvements, largely ignoring measures that would improve traffic flow by reducing the number of vehicles on the road and vehicle miles traveled. The Navy has stated that the proposed project would include a bike and pedestrian pathway onto the SSTC-S site from SR-75 and the existing Bayshore Bikeway (see Subsection G, above), and that it would “evaluate” the placement of a new bus stop near the site entrance, but has not committed to implementing any other measures that would reduce reliance on single-occupancy for accessing the Coastal Campus and potential new facilities at NAB and NASNI. At the hearing, the Navy described its existing Transportation Incentives Program, which provides subsidized opportunities for its employees to participate in vanpool rideshare, and transit voucher programs, and pledged to work closely with the City of Coronado to explore additional ways of alleviating traffic congestion.

Conclusion

Accordingly, the Commission concludes that the proposed project is consistent with the energy and vehicle miles traveled policy of the CCMP (Coastal Act Section 30253(d)).

I. WATER QUALITY

Coastal Act Section 30231 states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of groundwater supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

The proposed Coastal Campus development would occur entirely on land, with no in-water construction or new training activities that have not previously been reviewed by the Commission (e.g., CD-033-10). However, the construction and operation of the proposed Coastal Campus could adversely affect coastal waters, wetlands or vernal pools on or adjacent to SSTC-S. There are approximately 21 acres of wetlands and 11 acres of vernal pools on the SSTC-S. If not controlled, pollutants and runoff from the proposed development can be expected to reach these low-lying areas and nearby coastal waters. Conversion of the existing, largely undeveloped landscape to a developed landscape dominated by impervious surfaces could change the timing, volume, spatial pattern and quality of runoff, and thus degrade the quality of downstream receiving waters. In its consistency determination, the Navy summarizes the project's potential effects on water quality as follows:

The proposed action would increase impervious surfaces and associated stormwater runoff, including on-site and off-site drainage patterns compared to existing conditions. The impervious surfaces are roof areas, parking facilities, roads, and walkways. Increased vehicle traffic has the potential for additional pollutants in the runoff.

The Navy's Draft EIS provides a more detailed picture of the project's potential water quality impacts, highlighting the following:

- Increased impervious surfaces and associated runoff;
- Increased vehicular traffic, increased potential for pollutants from vehicle use (e.g., copper, zinc, motor oil, PAHs, etc.) in runoff;
- Altered on-site and off-site drainage patterns, including undesirable increases in runoff flow rates or volumes;
- Mobilization of sediment during storm events due to excavation and other ground-disturbing construction;
- Spills and discharges of contaminants from heavy construction equipment.

The Navy has committed to addressing these potential adverse impacts by implementing a variety of water quality measures, summarized as follows in its consistency determination:

Implementation of avoidance and minimization measures would reduce or eliminate the amount of pollutants entering water resources and the volume and direction of runoff from the site. Although the Coastal Campus project has a goal of zero storm water discharge, should that not be achieved, runoff during construction and post construction operations would be minimized and treated through Low Impact Development (LID), site design, and/or structural Best Management Practices (BMPs). Drainage design would maintain existing runoff patterns to the maximum extent practicable, and retain all runoff on-site (zero discharge) for treatment. Runoff would be directed to different types of LID storm water treatment and storage facilities to remove various pollutants from the runoff and to store storm water for on-site infiltration and evaporation. These design features would reduce runoff volume, capture runoff pollutants on-site, provide groundwater recharge, and offer a supplemental resource for irrigation and/or graywater use in facilities.

The project would adhere to the NBC National Pollutant Discharge Elimination System (NPDES) Permit and Construction General Permit requirements. As such, erosion and sediment controls would be used and a project specific Storm Water Pollution Prevention Plan (SWPPP) would be in place during construction activities to reduce the amount of soils disturbed and to prevent disturbed soils from entering runoff to surface/receiving waters.

Based on the above analysis, all water quality impacts would be temporary and localized, therefore, there would be no effect to water quality.

A detailed list of the various water quality protection measures the Navy has proposed is provided as **Exhibit 16**. The measures include (but are not limited to): Use of soft-bottom and vegetated detention basins and drainage features, with the goal of maximizing infiltration; use of pervious materials for necessary hardscapes; and implementation erosion, runoff, and sediment control BMPs during construction. As noted in the Draft EIS (p. 3.5-14), the proposed project must adhere to the requirements of both the NBC National Pollutant Discharge Elimination System (NPDES) Permit and a new NPDES Construction General Permit to be issued by the San Diego RWQCB. Any additional measures required under these permits can be expected to strengthen the water quality protections proposed in the DEIS.

The Commission staff has, in its discussions with the Navy, expressed concern that the proposed handling of storm water, in particular the project goal of “zero storm water discharge” (see above), has the potential to alter or disrupt the existing hydrologic regimes of the various wetlands and vernal pools occurring in the southern areas of SSTC-S.²¹ While recognizing the need to avoid large increases in surface runoff to these aquatic habitats due to the emplacement of impervious surfaces within the development footprint, the Commission staff was concerned that too high a degree of storm capture could have unintended consequences, such as depriving the pools and wetlands of a necessary water source, or altering the seasonal cycles during which these habitats are wet or dry. In its response, the Navy’s clarified that the vernal pool and wetland areas at SSTC-S do not presently receive runoff from the proposed project footprint,

²¹ September 17, 2014, correspondence between U.S. Navy and Commission staff.

except under rare circumstances, and that the project will not substantially alter their hydrologic regimes:

The existing drainage on the northern portion of SSTC-South does not reach the vernal pools in the southern portion of the site, except under very rare storm events (i.e., 100-year storm). In that instance, drainage from the north may reach the area, but only for a very short period of time, and that runoff would not be substantial enough to permanently alter the vernal pool structure. Groundwater, rainwater, subsurface runoff, and surface runoff within the southern region itself presumably support the vernal pools.

The intent of the drainage design for the proposed Coastal Campus is to keep the existing runoff patterns to the maximum extent practicable, retain all of the runoff on site and provide infiltration opportunities for all of the runoff that falls on impervious areas.

...

The mitigation of all the impervious area by providing infiltration or water-reuse opportunities will also protect the existing biological sensitive areas by not directing more runoff to these areas than there is today.

Based on this information, the Commission agrees with the Navy that the proposed handling of storm water from the development footprint will not substantially alter the hydrologic regimes of existing wetlands and vernal pools at SSTC-S.

In conclusion, the Commission agrees that the storm water runoff and water quality measures presented in **Exhibit 16** will protect the biological productivity and quality of coastal waters, wetlands, and vernal pools at SSTC-S, and will minimize waste water discharges, control runoff, prevent depletion of groundwater supplies, and avoid substantial interference with surface water flow. The Commission thus finds that the proposed project is consistent with the water quality policy of the CCMP (Coastal Act Section 30231).

J. CULTURAL RESOURCES

Coastal Act Section 30244 states:

Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

The proposed project has the potential to adversely affect a number of cultural resources within the SSTC-S development footprint, including ten archaeological sites, the former landscape of the late-19th century Coronado Heights development, including the remnant street pattern, scattered cypress tree plantings along the streets, a segment of the former San Diego and Coronado Railroad, several batteries, bunkers and other structures included in the Fort Emory Coastal Battery Historic District, and the Wullenweber Antenna Array.

No cultural resources would occur within the area of potential effects for possible projects at NAB and NASNI under Alternative 3.

Archaeological Resources

The archaeological resources within the SSTC-S development footprint consist of lithic and shell scatter and midden sites associated with Native American and pre-historic use of the Silver Strand for resource procurement. In all but one case, the Navy is recommending these sites as “not eligible” for listing on the National Registry of Historic Places (NRHP), and is seeking State Historic Preservation Officer (SHPO) concurrence with these evaluations as part of a pending Section 106 consultation under the National Historic Preservation Act (NHPA). The one recommended NHRP-eligible site has the potential to be affected by proposed electrical system upgrades. However, in its consistency determination the Navy states that “the upgrade would not require additional ground disturbance thus the cultural resources manager determined a no adverse effect to the historic property.” With regard to the other sites not being recommended as eligible, the Navy concludes that these “are not historic properties and cannot be affected under Section 106” (DEIS, p.3.8-13).

The SSTC-S development footprint has been surveyed for cultural resources on several previous occasions, but areas outside the formal footprint, including areas slated for off-site traffic improvements, the right-of-way of the proposed northern access way, and utility improvements, have not been surveyed. The Navy proposes to address unknown or undiscovered cultural resources within these areas as follows:

Potential effects to cultural resources from proposed ground disturbing off-site traffic, access and utility improvements would be addressed through coordination with State Parks and Caltrans for cultural resource surveys, development of a monitoring and discovery plan, and required cultural resource monitoring during excavation activities. Any accidental discovery of human remains during excavation would be addressed under the Native American Graves and Repatriation Act for remains found on federal lands, and through consultation with the Native American Heritage Commission for remains found on nonmilitary Federal lands and non-Federal lands.

Historic Structures

A 1997 historic resources evaluation of World War II-era structures at SSTC recommended that the Wullenweber Antenna Array and six other structures contributed to the Fort Emory Coastal Battery Historic District and were NRHP eligible (Herbert and Byrd 1997). These historic structures include two batteries, including the Building 99 bunker proposed for removal, concrete slabs and piers formerly supporting big guns, a plotting and sighting room, and two fuel tank pits. Neither the historic street grid nor the railroad remnants discussed above were recommended as NRHP eligible. Among these recommendations, only those involving the street grid, railroad remnants, and antenna array are subject to SHPO review. The Fort Emory structures are covered by the 2003 San Diego Metro Area Programmatic Agreement, and require only a finding by CNRSW, without outside Section 106 consultation, to be determined eligible. The Wullenweber Antenna Array was found eligible for the NRHP in 1999, and Section 106 consultation with the SHPO was completed in 2010 pertaining to the Navy’s proposal to

demolish the antenna. Under a 2010 MOA with the SHPO, the Navy is required to preserve the antenna array control building (Building 1) and a segment of the array, but may dismantle the remainder. The Navy is currently seeking SHPO concurrence on the non-eligibility recommendation for the street grid and railroad remnants as part of the Section 106 consultation for the Coastal Campus project.

Under the proposed project, the historic Fort Emory structures would be preserved, with the possible exception of the Building 99 battery, which would be demolished under the preferred alternative. In its consistency determination, the Navy states:

Potential demolition of Bldg 99, a contributor to the Fort Emory Coastal Defense Historic District, would constitute an adverse effect to this historic property. As such, resolution of the adverse effect would be defined with pending completion of Section 106 consultation with the State Historic Preservation Office and Advisory Council on Historic Preservation as required by Federal law. Any action pertaining to Bldg 99 would be taken in accordance with a Memorandum of Agreement for resolving the adverse effect. Such Memorandum of Agreement would be completed in advance of the demolition.

Conclusion

The Navy has initiated a Section 106 consultation with the SHPO, which is estimated to be completed by February of 2015. As part of this consultation, the SHPO will review the Navy's NRHP eligibility and adverse effect determinations for cultural resources at the proposed project site. Where necessary, the SHPO will require reasonable measures to mitigate for any adverse effects to cultural resources. With this review process in place, the Commission finds that the proposed project is consistent with the cultural resources policy of the CCMP (Coastal Act Section 30244).

APPENDIX A

SUBSTANTIVE FILE DOCUMENTS

Federal Consistency Determinations

1. CD-0003-14 (U.S. Navy, Naval Base Coronado Coastal Campus, San Diego County, CA, October 2013).

Coastal Commission Staff Reports

2. CD-033-10 (U.S. Navy, Silver Strand Training Complex, San Diego County, CA, June 2010).

Local Coastal Programs

3. City of Coronado certified Local Coastal Program (LCP) and Zoning Ordinance.
4. City of Imperial Beach certified Local Coastal Program (LCP).

Correspondence with the Navy

5. Correspondence between U.S. Navy and Commission staff, including:
 - September 5, 2014, “Coastal Commission Staff Questions & Concerns”, e-mailed to Deborah McKay (Navy) from Joseph Street (CCC); September 12, 2014 Navy response.
 - September 17, 2014, “Coastal Commission Staff Questions & Concerns, Part II”, e-mail to Deborah McKay (Navy) from Joseph Street (CCC); September 26 & 29, 2014 Navy responses.
 - October 27-29, 2014, e-mails from Deborah McKay (Navy), to Joseph Street (CCC) regarding Nuttall’s lotus (“2012 Rare plant survey report”, “#1 response Nuttall’s lotus at SSTC-S & NBC”).
 - October 28-31 and November 5-6, 2014, e-mails from Deborah McKay (Navy), to Joseph Street (CCC) regarding water line routing and impacts to wetlands and ESHA (“RE: answers”, “RE: water line routes”).
 - October 29, 2014, e-mail from Deborah McKay (Navy) to Joseph Street (CCC) regarding potential impacts to snowy plover (“#3 & #9 Plover habitat”).
 - October 29 and November 6, 2014, e-mails from Deborah McKay (Navy) to Joseph Street (CCC), regarding flood hazards and sea level rise (“#4 Response – flood hazard concerns”, “coastal flooding – more data”).
 - October 31 and November 6, 2014, e-mails from Deborah McKay (Navy), to Joseph Street (CCC) regarding visual resources (“#6 Paraloft & Design review”, “RE: status update”).
 - Other e-mail correspondence between Joseph Street and Mark Delaplaine (CCC), and Deborah McKay, Christopher Stathos, Teresa Bresler and Gretchen Sosbee (Navy), September – December 2014.

Other Documents, Reports, Articles & Consultations

6. AECOM (2012). *2012 Rare Plant Survey Report for Silver Strand Training Complex-South, Naval Base Coronado, San Diego County, California*, October 1, 2012. Appendix C to the NBC Coastal Campus Draft EIS.
7. California Department of Fish and Game (CDFG) (2010). List of Vegetation Alliances and Associations. Vegetation Classification and Mapping Program, September 2010.
8. California Department of Fish and Wildlife (CDFW) (2014a). California Natural Diversity Database, July 2014. Special Vascular Plants, Bryophytes and Lichens List. Quarterly publication. 124 pp.
9. California Department of Fish and Wildlife (CDFW) (2014b). California Natural Diversity Database, September 2014. Special Animals List. Periodic publication. 52 pp.
10. California Department of Transportation (Caltrans) (2014a). *Intergovernmental Review (IGR) Naval Base Coronado (NBC) Coastal Campus Visual Impact Assessment (VIA)*. Office Memo, March 3, 2014.
11. California Department of Transportation (Caltrans) (2014b). Comment letter on Draft EIS for Naval Base Coronado Coastal Campus project, September 8, 2014.
12. California Emergency Management Agency (CalEMA), California Geological Survey and University of Southern California (2009). Tsunami Inundation Map for Emergency Planning (San Diego Bay). http://www.conservation.ca.gov/cgs/geologic_hazards/Tsunami/Pages/Index.aspx.
13. California Native Plant Society (CNPS) Rare Plant Program (2014). *Inventory of Rare and Endangered Plants* (online edition, v8-02). Website <http://www.rareplants.cnps.org>. (Accessed: 23 October 2014).
14. Chadwick, B., Wang, P.F., Brand, M., Flick, R., Young, A., O'Reilly, W., Bromirski, P., Crampton, W., Guza, R., Helly, J., Nishikawa, T., Boyce, S., Landon, M., Martinez, M., Canner, I., and Leslie, B. (2014). *A Methodology for Assessing the Impact of Sea Level Rise on Representative Military Installations in the Southwestern United States*. Final Technical Report, Project Number RC-1730, Strategic Environmental Research and Development Program, Alexandria, VA, March 2014.
15. City of Coronado (2014a). City of Coronado Comments on Draft Environmental Impact Statement (EIS) prepared for the proposed Naval Base Coronado Coastal Campus, September 17, 2014.
16. City of Coronado (2014b). Comment letter on CD-0003-14 Consistency Determination for proposed Naval Base Coronado Coastal Campus, October 3, 2014.
17. City of Imperial Beach (2014). Comment letter on the Naval Base Coronado (NBC) Coastal Campus Draft Environmental Impact Statement (EIS), September 17, 2014.
18. Coastal and Ocean Working Group of the California Climate Action Team (CO-CAT) (2013). State of California Sea-Level Rise Guidance Document, March 2013 update.
19. Contu, S. (2012). *Lotus nuttallianus*. The IUCN Red List of Threatened Species. Version 2014.2. <http://www.iucnredlist.org> (Accessed: 15 October 2014).
20. Flick, R.E. (1993). The myth and reality of Southern California beaches. *Shore and Beach*, July 1993.
21. Hapke, C.J., D. Reid, B.M. Richmond, , P. Ruggiero, J. List (2006), National assessment of

- shoreline change: Part 3: Historical shoreline changes and associated coastal land loss along the sandy shorelines of the California coast: U.S. Geological Survey Open-file Report 2006-1219.
22. Heberger, M., H. Cooley, P. Herrera, P.H. Gleick, E. Moore (2009). The Impacts of Sea-Level Rise on the California Coast. Pacific Institute, Oakland, CA. Prepared for the California Climate Change Center. Report # CEC-500-2009-024-F.
 23. Herbert, R.F., and D.S. Byrd (1997). *Historic Resources Evaluation Naval Radio Receiving Facility Imperial Beach, San Diego County, California*. JRP Historical Consulting Services, Davis, CA, under contract to KEA Environmental, Inc.
 24. ICF International (2012). *Results of Protocol Surveys for Listed Fairy Shrimp, Silver Strand Training Complex-South, Naval Base Coronado*. Final Report, August 2012. Prepared for Naval Facilities Engineering Command Southwest. Contract Number: N62473-D-2401.
 25. Kimley-Horn and Associates (KHA) (2014). *Draft Traffic Study for the Environmental Impact Statement, Naval Base Coronado Coastal Campus*. Prepared for AECOM, March 2014. Appendix D-2 to the NBC Coastal Campus Draft EIS.
 26. Landis, F. (2012). Silver Strand State Beach Rare Plant Surveys by California Native Plant Society Rare Plant Survey Committee, Spring 2012. July 30, 2012.
 27. Lichvar, R.W., M. Butterwick, N.C. Melvin, and W.N. Kirchner (2014). The National Wetland Plant List: 2014 update of wetland ratings. *Phytoneuron* 2014-41: 1–42.
 28. National Oceanic and Atmospheric Administration (NOAA) (2014). Sea Level Rise and Coastal Flooding Impacts Viewer. NOAA Office of Coastal Management. <http://coast.noaa.gov/digitalcoast/tools/slr> (Accessed 29 October 2014).
 29. National Research Council (NRC) (2012). *Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future*. The National Academy Press, Washington, D.C., 202 pp.
 30. NatureServe (2014). NatureServe Explorer: An online encyclopedia of life. Version 7.1. NatureServe, Arlington, Virginia. <http://explorer.natureserve.org> (Accessed: 15 October 2014).
 31. Rubinoff, D. (2001). Evaluating the California gnatcatcher as an umbrella species for conservation of Southern California coastal sage scrub. *Conservation Biology* 15(5): 1374-1383.
 32. Saucedo-Ortiz, D. (2004). *Final Biological Resources Survey Report for the Naval Radio Receiving Facility, Naval Base Coronado, San Diego, California*. Regional Environmental Consultants (RECON). Prepared for Naval Resources Office Environmental Department (N45RN) Commander Navy Region Southwest. Contract Number: N68711-00-D-44144 0006.
 33. Taylor, R.S. (2005). A new look at coastal sage scrub: What 70-year-old VTM plot data tell us about Southern California shrublands. USDA Forest Service General Technical Report PSW-GTR-195.
 34. Thomas, S.M., J.E. Lyons, B.A. Andres, E.E. T-Smith, E. Palacios⁵, J.F. Cavitt, J.A. Royle, S.D. Fellows, K. Maty, W.H. Howe, E. Mellink, S. Melvin and T. Zimmerman (2012). Population size of snowy plovers breeding in North America. *Waterbirds* 35(1): 1-14.

35. U. S. Department of Defense (DoD) (2014). *2014 Climate Change Adaptation Road Map*. Office of the Deputy Under Secretary of Defense for Installations and Environment, Science & Technology Directorate, June 2014.
36. U.S. Fish and Wildlife Service (2007). Recovery Plan for the Pacific Coast Population of the Western Snowy Plover (*Charadrius alexandrinus nivosus*).
37. U.S. Fish and Wildlife Service (USFWS) (2014). Informal Section 7 Consultation on the Coastal Campus Project at Silver Strand Training Complex South, Naval Base Coronado, San Diego County, California, September 12, 2014.
38. U. S. Navy (2008). Naval Base Coronado Final Installation Appearance Plan. Selected pages (pp. 3-1 to 3-3; 3-24 to 3-26).
39. U.S. Navy (2010). Silver Strand Training Complex Draft Environmental Impact Statement, Department of the Navy, January 2010.
40. U.S. Navy (2013). Final Integrated Natural Resources Management Plan (INRMP), Naval Base Coronado, California, Department of the Navy, July 2013.
41. U. S. Navy (2014). Naval Base Coronado Coastal Campus Draft Environmental Impact Statement, July 2014. (“DEIS”).

CALIFORNIA COASTAL COMMISSION

45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE AND TDD (415) 904-5200



November 13, 2014

C. E. Sund
Commanding Officer
Naval Base Coronado
Box 357033
San Diego, CA 92135-7033

Re: **CD-0003-014**, U.S. Navy, Construction of 1.5 million square foot Coastal
Campus at Silver Strand Training Complex – South, Naval Base Coronado, San
Diego County

Dear Captain Sund:

On November 12, 2014, by a vote of seven in favor, four opposed, the California Coastal Commission concurred with the above-referenced consistency determination for a 1.5 million square foot campus development at Silver Strand Training Complex – South, within Naval Base Coronado. The Commission found the project to be consistent to the maximum extent practicable with the California Coastal Management Program. The Commission staff will prepare “Revised Findings” for Commission adoption at a future meeting to fully explain the basis for its decision.

Sincerely,

A handwritten signature in blue ink that reads "Joseph Street".

Joseph Street
Environmental Scientist

cc: San Diego District Office

**E3 – MEMORANDUM OF AGREEMENT BETWEEN
THE DEPARTMENT OF THE NAVY AND THE CALIFORNIA
STATE HISTORIC PRESERVATION OFFICER REGARDING
THE DEMOLITION OF BUILDING 99, NAVAL BASE
CORONADO, CALIFORNIA**

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

1725 23rd Street, Suite 100
SACRAMENTO, CA 95816-7100
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February 26, 2015

Refer to: USN_2014_0716_001

Alex Bethke
Cultural Resources Program Lead
NAVFAC Region SW
1220 Pacific Highway
Environmental, EV52.AB, Bldg 1, 5th Floor
San Diego, CA 92132

RE: Memorandum of Agreement, Demolition of Building 99, Silver Strand Training Complex South,
Naval Base Coronado, CA

Dear Mr. Bethke:

Accompanying this letter is a signed copy of the *Memorandum of Agreement between the Department of the Navy and the California State Historic Preservation Officer regarding the Demolition of Building 99 (Battery 134 Getchell), Naval Base Coronado, California* (MOA). As both consulting parties have signed the MOA, please consider consultation complete. The Agreement will be considered executed once the Navy has filed a copy with the Advisory Council on Historic Preservation.

Sincerely,

A handwritten signature in black ink that reads "Carol Roland-Nawi, Ph.D.".

Carol Roland-Nawi, Ph.D.
State Historic Preservation Officer

MEMORANDUM OF AGREEMENT
BETWEEN
THE DEPARTMENT OF THE NAVY AND
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE DEMOLITION OF BUILDING 99 (BATTERY 134 GETCHELL),
NAVAL BASE CORONADO, CALIFORNIA

WHEREAS, the Department of the Navy (Navy) proposes to construct the Coastal Campus complex at the Silver Strand Training Complex-South (SSTC-S), a component of Naval Base Coronado (NBC), which includes the demolition of the historic property Building 99; and,

WHEREAS, this proposal constitutes an Undertaking subject to consultation performed under the authority of Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. § 470f, and it's implementing regulations, 36 CFR Part 800; and,

WHEREAS, the Undertaking is located within the Fort Emory Coastal Battery Historic District; the historic district was recommended as National Register of Historic Places (NRHP)-eligible in 1997 as "resources related to coastal defense plans developed during World War II to protect the strategically important harbor at San Diego and the defense industries located within the city" under Criteria A and C with a period of significance from 1942-1945; this 1997 study found 6 contributing and 5 non-contributing elements of the Historic District; importantly, the Fort Emory Coastal Defense Historic District is the "linear descendants of Spanish, Mexican, and American batteries placed on Point Loma to protect the city and harbor in earlier times" and are non-contiguous elements of the San Diego coastal defense network during World War II that includes Point Loma's Battery Ashburn; and,

WHEREAS, the Navy finds the Undertaking will adversely affect Building 99, also known as Battery 134 Getchell, which has been identified as a contributing resource within the larger Fort Emory Coastal Battery Historic District; and,

WHEREAS, the demolition of Building 99 constitutes an Adverse Effect to the Fort Emory Coastal Defense Battery, the extent of which will be studied in Stipulation A; and,

WHEREAS, the Navy has consulted with the California State Historic Preservation Officer (SHPO) and other interested parties regarding the Undertaking pursuant to Stipulation VIII (D) of the 2014 Naval Base Coronado Programmatic Agreement (PA), and has notified the Advisory Council on Historic Preservation (Council) of the determination of Adverse Effect to the Historic District in accordance with 36 CFR § 800.6(a) (1) who has chosen not to participate in the consultation; and,

WHEREAS, the Navy will execute this Memorandum of Agreement (MOA) to evidence satisfactory compliance with Section 106 of the NHPA;

NOW THEREFORE, the Navy and the SHPO agree that the Navy will implement the Undertaking in accordance with the following stipulations in order to take into account the effect

of the Undertaking on historic properties, and that these stipulations will govern the Undertaking until this Section 106 MOA is terminated.

STIPULATIONS

The Navy will ensure that the following measures are carried out:

A. RECORDATION

The Fort Emory Coastal Defense Battery, including all six contributing resources, will be recorded in accordance with the standards of the Historic American Buildings Survey, as modified below. The Navy will ensure that the historic property is not adversely affected until the documentation stipulated hereunder has been completed.

- 1) Documentation Standards. The goal of the documentation will be to preserve information on the historical and technological significance, and character of the facility for scholars, architects, engineers, and interested members of the public. It will consist of drawings, site and historical photographs, and written data conveying and interpreting the facility's characteristics and significance.
 - a) Drawings. Selected existing architectural and/or engineering drawings, site plans, and maps illustrating important aspects of the facility's design and development will be reproduced photographically and/or xerographically. Reproductions will be on archival-stable media.
 - b) Photography. Photographic documentation will provide views of important exterior, interior, contextual, engineering details, and photographic reproductions of historic photographs. Photographs will be prepared in a high-resolution digital format. View selection, and content will record in adequate detail important characteristics of the property. Photographs will be provided in standard digital formats (tiff and jpg) and archival-stable photographic prints.
 - c) Oral History. Oral histories should be gathered from living service members and builders with experience at this or other similar Coastal Defense sites in California and from other experts in the field of Coastal Defense systems. Other existing oral histories shall also be collected from relevant repositories, including but not limited to the National Archives, the Library of Congress, the Naval History and Heritage Command, the Coronado Historical Society, the San Diego History Center, and the Coastal Defense Study Group.
 - d) Written Data. A narrative history and physical description will document and interpret the character and significance of the historic district.

2) NRHP Historic District Re-Evaluation

- a) It remains unclear what effect the demolition of Building 99 will have on the district as a whole, meaning, whether the Fort Emory Historic District will retain enough integrity to remain eligible for the NRHP. Once demolition has concluded, the Navy will re-evaluate the Fort Emory Historic District to render a NRHP determination of eligibility in subsequent consultation with SHPO per 36 CFR 800.4.
- 3) SHPO Review. The Navy will provide the SHPO with a draft documentation package for comment. Taking into account comments from the SHPO, the Navy will prepare and distribute the final documentation package.
 - a) Proposed Documentation Plan. The Navy will provide the SHPO an opportunity to comment on a technically detailed proposal for the recordation. The SHPO will provide comments on the proposed documentation plan within 30 days of receiving the proposal. The Navy will review and respond to all comments to the draft documentation plan within 30 days from receipt of the comments.
 - b) Distribution of Final Documentation. The Navy will provide copies of the documentation to the SHPO, the San Diego Historical Society, the California Room of the San Diego Public Library, the University of San Diego's Copley Library, the Imperial Beach branch of the San Diego County Library, the Coastal Battery Study Group, and the Navy will retain a copy within Commander Navy Region Southwest (CNRSW) oversight.
 - c) NRHP Re-evaluation. Upon completion of the NRHP-re-evaluation, the Navy will consult with SHPO per 36 CFR 800.4 to identify the remaining historic properties.

B. SALVAGE

- 1) World War II equipment and equipment may yet remain in the Battery, specifically the gun #2 de-contamination room. The Navy may loan such historical material to the Coastal Defense Study Group (CDSG) and one of the regional museums who preserve similar series 100 Batteries. The Navy will work with CDSG to identify historical material and locate an appropriate recipient to preserve this history.

C. DISCOVERIES AND UNANTICIPATED EFFECTS

- 1) The Navy will ensure that any post-review discoveries or unanticipated effects identified during the course of the Undertaking are addressed in accordance with 36 CFR §§ 800.13(b) (3) and 800.13(c) and Stipulation X of the 2014 *Programmatic Agreement Among the Commander Naval Base Coronado and the California State Historic Preservation Officer*.

D. RESOLVING OBJECTIONS

- 1) Should the SHPO or the Navy object in writing to the manner in which the terms of this MOA are implemented, to any action carried out or proposed with respect to implementation of the MOA, or to any document prepared in accordance with and subject to the terms of the MOA, the Navy will immediately proceed to consult with the SHPO for no more than 30 days to resolve the objection. If on-site work has already begun, it will not be stopped during this consultation period without the concurrence of the Commanding Officer, Naval Base Coronado.
- 2) If the objection is resolved during the above 30-day consultation period, the Navy may proceed with the previously disputed action in accordance with the terms of such resolution.
- 3) If, after initiating such consultation with the Navy, and the objection cannot be resolved through consultation, the Navy will forward all documentation relevant to the objection, including the Navy's proposed response to the objection to the Council. The Council will transmit its comments to NBC within forty-five (45) days after receipt of such documentation in accordance with 36 CFR § 800.7(c).
- 4) The Navy will take into account any Council recommendation or comments and any comments from the SHPO in reaching a final decision regarding the objection. The Navy's responsibility to carry out all actions under this MOA that are not the subject of the objection will remain unchanged.
- 5) The Navy will provide the SHPO and the Council (if the Council has commented) with a copy of its final written decision regarding any objection addressed pursuant to this stipulation.
- 6) The Navy may authorize any action subject to objection under this stipulation to proceed and allow for concurrent or delayed resolution in accordance with the terms of this stipulation.

E. AMENDMENTS

- 1) The Navy or the SHPO may at any time propose amendment of this MOA whereupon the Navy and the SHPO will consult to consider such amendment pursuant to 36 CFR §§ 800.6(c) (7) and 800.6(c) (8). This MOA may be amended only upon written concurrence of both the Navy and the SHPO.

F. TERMINATION

- 1) The Navy or the SHPO may terminate this MOA. If this MOA is not amended as provided for in Stipulation D, or if either the Navy or the SHPO proposes termination of this MOA for other reasons, the signatory proposing termination will in writing

notify the other signatory, explain the reasons for proposing termination, and consult with the other signatory for at least 30 days to seek alternatives to termination. Should such consultation result in an agreement on an alternative to termination, the signatories will proceed in accordance with the terms of that agreement.

- 2) Should such consultation fail, the signatory proposing termination may terminate this MOA by promptly notifying the other signatory in writing. Termination hereunder will render this MOA without further force or effect.
- 3) If this MOA is terminated hereunder, and if the Navy determines that its Undertaking will nonetheless proceed, then the Navy will consult in accordance with 36 CFR § 800.6 to develop a new MOA or request the comments of the Council pursuant to 36 CFR § 800.

G. DURATION OF THE MOA

- 1) Unless terminated earlier in accordance with Stipulation F, this MOA will remain in effect for five years following the last signature date by the Signatory Parties (Navy and SHPO). Following this five-year period, the agreement will terminate at that date certain. The Navy, in consultation with SHPO, will develop and provide a determination that the terms of the MOA have been fulfilled in a satisfactory manner. This determination will be provided in writing and the Navy will formally state that the terms of the agreement have terminated and have no further force and effect on the Navy.

H. EFFECTIVE DATE

- 1) This MOA will take effect upon the final signature date by the Navy and the SHPO.

I. EXECUTION

- 1) Pursuant to 36 CFR § 800.6(c), this MOA is an agreement with the Council for purposes of Section 106 of the NHPA. Compliance with this requirement is fulfilled by execution of this MOA by the Navy and the SHPO, transmittal by the Navy to the Council in accordance with 36 CFR § 800.6(b) (1) (iv), and subsequent implementation of its terms. Therefore, the Navy has afforded the Council an opportunity to comment on the Undertaking and its effect on historic properties. In addition, the Navy has taken into account the effect of the Undertaking on historic properties, and, upon completion of stipulated actions within the MOA, the Navy will have satisfied its responsibilities under Section 106 of the NHPA and 36 CFR Part 800.

J. SIGNATORIES TO THE AGREEMENT

COMMANDING OFFICER NAVAL BASE CORONADO

By: 

Date: 11 Feb 2015

C. E. Sund
Captain, U.S. Navy
Naval Base Coronado, Commanding Officer

CALIFORNIA STATE HISTORIC PRESERVATION OFFICER

By: 
to

Date: 2/25/15

Dr. Carol Roland-Nawi, Ph.D.
California State Historic Preservation Officer

K. CONCURRING PARTIES TO THE AGREEMENT

By: _____ Date: _____
Ms. Rachel Hurst
Community Development Department
City of Coronado

By: _____ Date: _____
Mr. Greg Wade
Community Development Department
City of Imperial Beach

By: _____ Date: _____
Mr. Aharon Sasson, President
San Diego County Archaeological Society

By: _____ Date: _____
Mr. Bruce Coons, Executive Director
Save Our Heritage Organization

By: _____ Date: _____
Mr. Bruce Linder, Director
Coronado Historical Association

By: _____ Date: _____
Mr. Gordon Bliss, Preservation Officer
Coastal Defense Study Group