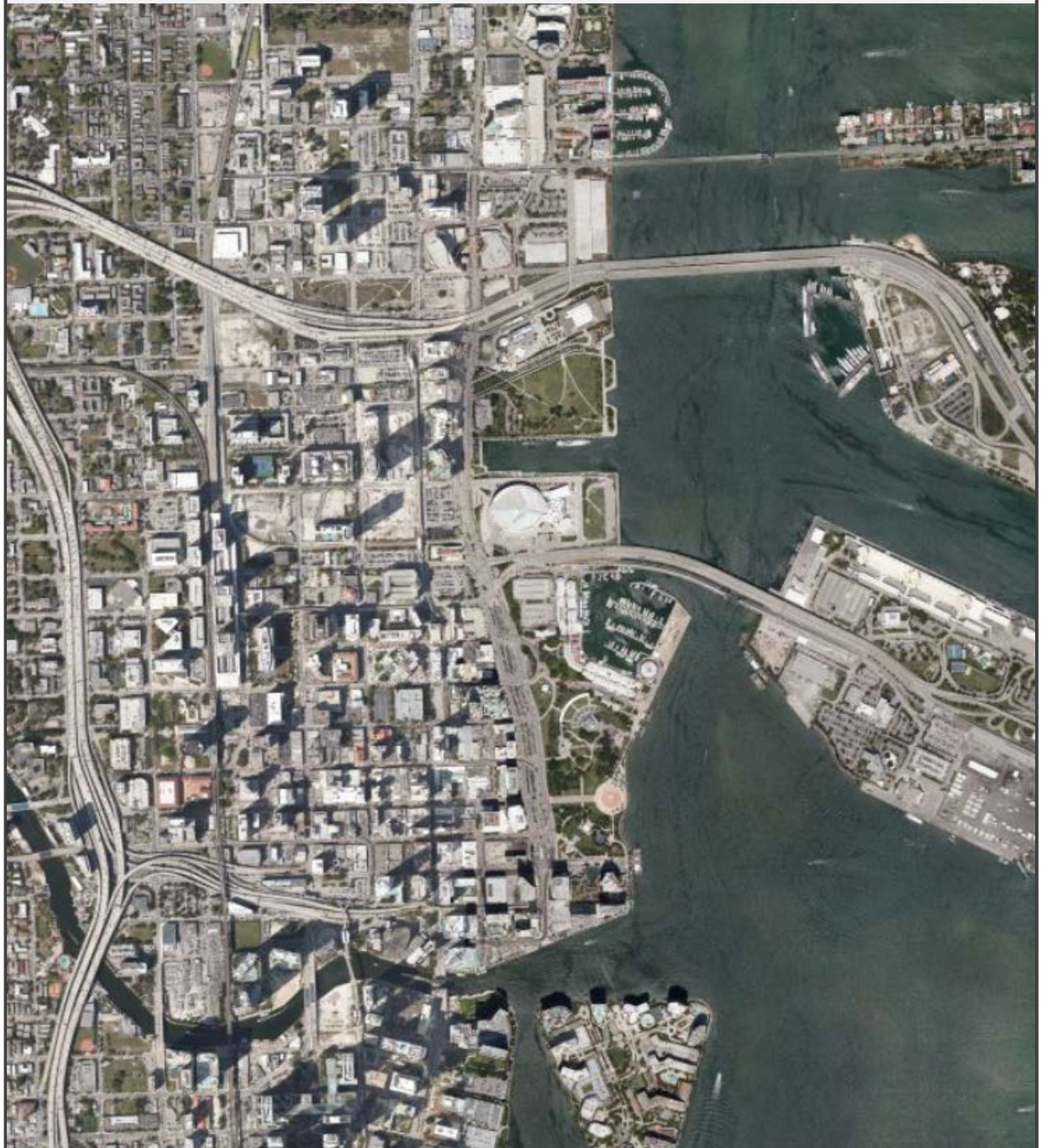


Districtwide Traffic Operations & Safety Studies
FPID 250650-5-32-01
Contract C-AA02

June 2023

RRR SAFETY REVIEW CRASH UPDATE

SR 886/Port Boulevard
From Biscayne Boulevard
To Port Miami
Section 87061000 (MP 0.000 to 0.776)



Resurfacing, Restoration, and Rehabilitation (RRR/3R)

CRASH UPDATE



District Six Traffic Operations

District-Wide Traffic Operations & Safety Studies

FM: 250650-5-32-01

Contract No. C-AA02

Task Work Order No. 75

SR 886/PORT BOULEVARD

From Biscayne Boulevard to Port Miami

Section 87061000 (MP 0.000 TO MP 0.776)

FDOT Project Manager: Cristina Morales, P.E.

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ENGINEER'S CERTIFICATION

I, Keffler Castro, PE, with Florida PE No. 66437, certify that I currently hold an active Professional Engineer's License in the State of Florida, and I am competent through education or experience to provide engineering services in the civil and traffic engineering disciplines contained in this report. I further certify that this report was prepared by me or under my responsible charge as defined in Chapter 61G15-18.001 F.A.C. and that all statements, conclusions, and recommendations made herein are true and correct to the best of my knowledge and ability.

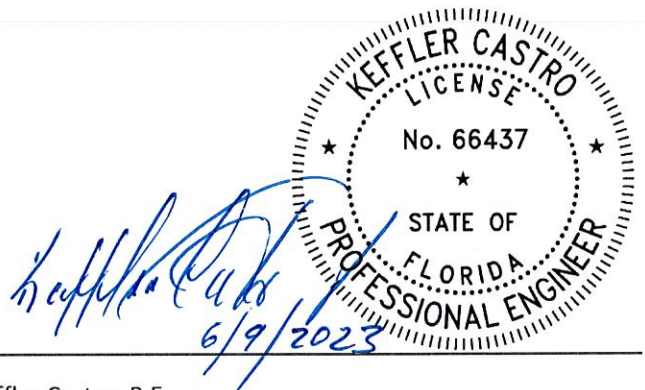
Project Description:

CRASH UPDATE FOR 3R SAFETY REVIEW

SR 886/PORT BOULEVARD

FROM BISLAYNE BOULEVARD TO PORT MIAMI

SECTION 87061000 (MP 0.000 TO MP 0.776)

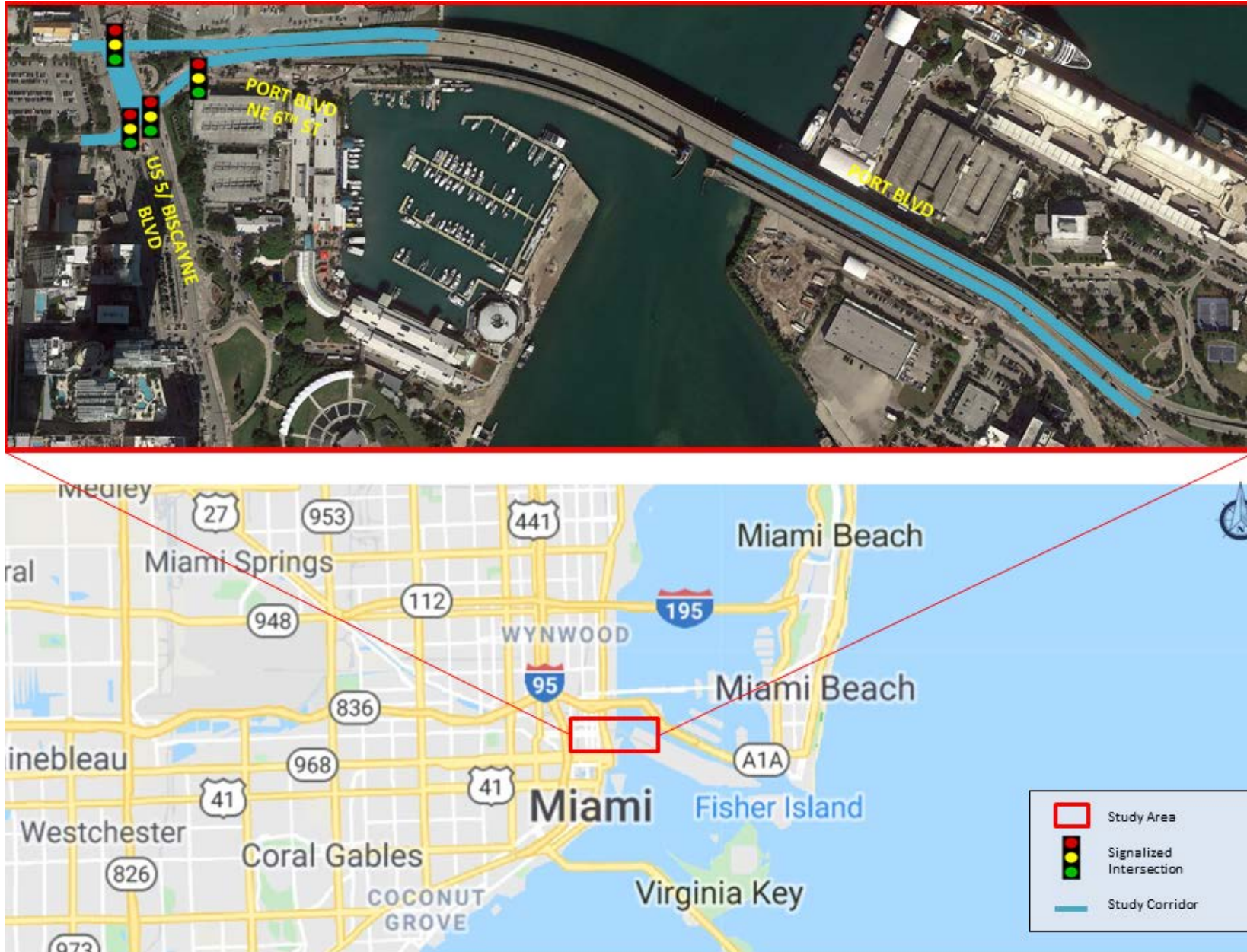


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1. INTRODUCTION

The segment of SR 886/Port Boulevard from Biscayne Boulevard to Port Miami was identified by the Department as a candidate for a Resurfacing, Restoration, and Rehabilitation (3R) project with FM No. 443913-1. A 3R Safety Review was completed in April 2020 in response to the Department's request. The 3R Safety Review included a crash analysis for the segment based on the crash data for the period starting on January 1, 2014, and ending on December 31, 2016. This Technical Memorandum has been prepared in response to the Department's request for an update on the 3R Safety Review crash analysis based on crash data starting on January 1, 2017, and ending on December 31, 2019, and performing field review during AM, MIDDAY, and PM conditions. This Technical Memorandum aims to confirm previous crash patterns and safety countermeasures or identify new crash patterns, suggest a further review, and/or recommend new safety countermeasures to enhance safety and operations and that could be implemented through the subject 3R Project. **Figure 1.1** depicts the study area.

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2. CRASH ANALYSIS

The crash data for the five years (January 1, 2018 to December 31, 2022) for 87061000/SR 886/Port Boulevard from MP 0.000 to 0.776 and 87030000/SR 5/US 1/Biscayne Boulevard from MP 11.309 to MP 11.350 was downloaded from the FDOT’s Crash Analysis Reporting (CAR) Online Database, Signal Four Analytics database, and the State Safety Office GIS Query Tool (SSOGis), and summarized for the study area. A review was conducted by individually reviewing the police reports for all crashes and updating the database for crash information such as crash type, contributing cause, vehicle travel direction, number of injuries, etc. The following is a summary of the Analysis:

- The segment experienced 152 crashes in the five years, with a yearly breakdown of 39, 31, 13, 33, and 36 (2018, 2019, 2020, 2021, and 2022, respectively). The Covid 19 pandemic could cause a drop in crashes in 2020.
- The percentage of nighttime crashes (night/dusk/dawn) was 33.6% (51 crashes), above the district-wide average of 28.5%.
- The percentage of crashes during wet/slippery pavement conditions was 11.2% (17 crashes), slightly below the district-wide average of 11.8%.
- Based on crash severity, 9.2% (14 crashes) were injury-type crashes, and 90.8% (138 crashes) were property damage-only crashes. There were no fatal crashes during the five-year study period.
- The leading types of crashes were sideswipe, with 79 crashes and rear-end, with 42 crashes. These are the same leading crashes identified in the 3R safety review completed in August 2020.
- There were four (4) pedestrian and three (3) bicycle crashes during the five years study period. Since pedestrian and bicycle features such as high-emphasis crosswalks and countdown pedestrian signal heads were upgraded recently, these crash types were not further investigated.

Table 2.1 presents a summary by crash type for the segment, and Table 2.2 presents a crash summary by different categories, such as lighting conditions, surface conditions, and weather conditions. The same information is depicted graphically in Figure 2.1 for visual comparison.

Table 2-1: Crash Summary by Type – Segment

SR 886/Port Boulevard From SR 5/US 1/Biscayne Boulevard to Port Miami		Number of Crashes Year					5 Year Total Crashes	Mean Crashes Per Year	%
		2018	2019	2020	2021	2022			
CRASH TYPE	Rear End	10	10	3	11	8	42	8	27.6%
	Head On	0	0	0	0	0	0	0	0.0%
	Angle	6	2	1	2	7	18	4	11.8%
	Left Turn	0	1	0	1	0	2	0	1.3%
	Right Turn	1	0	0	0	0	1	0	0.7%
	Sideswipe	18	17	8	17	19	79	16	52.0%
	Backed Into	0	0	0	0	0	0	0	0.0%
	Pedestrian	2	1	1	0	0	4	1	2.6%
	Bicycle	1	0	0	1	1	3	1	2.0%
	Fixed Object	1	0	0	1	0	2	0	1.3%
	Concrete Traffic Barrier	0	0	0	1	0	1	0	0.7%
	Other Fixed Object	1	0	0	0	0	1	0	0.7%
	Other Non Fixed Object Collisions	0	0	0	0	1	1	0	0.7%
	Parked Motor Vehicle	0	0	0	0	1	1	0	0.7%
Total Crashes		39	31	13	33	36	152	30	100.0%

Table 2-2: Crash Summaries by Other Categories – Segment

SR 886/Port Boulevard From SR 5/US 1/Biscayne Boulevard to Port Miami		Number of Crashes					5 Year Total Crashes	Mean Crashes Per Year	%
		2018	2019	2020	2021	2022			
SEVERITY	PDO Crashes	32	30	12	30	34	138	28	90.8%
	Fatal Crashes	0	0	0	0	0	0	0	0.0%
	Injury Crashes	7	1	1	3	2	14	3	9.2%
LIGHTING	Daylight	29	21	7	21	23	101	20	66.4%
	Dusk	0	0	1	1	2	4	1	2.6%
	Dawn	0	1	0	0	1	2	0	1.3%
	Dark	10	9	5	11	10	45	9	29.6%
	Unknown	0	0	0	0	0	0	0	0.0%
SURFACE	Dry	36	25	12	27	35	135	27	88.8%
	Wet	3	6	1	6	1	17	3	11.2%
	Others	0	0	0	0	0	0	0	0.0%
MONTH	January	4	2	7	2	5	20	4	13.2%
	February	4	2	3	3	4	16	3	10.5%
	March	1	2	0	1	5	9	2	5.9%
	April	7	5	1	1	3	17	3	11.2%
	May	2	1	0	3	3	9	2	5.9%
	June	2	1	0	2	0	5	1	3.3%
	July	2	2	0	4	1	9	2	5.9%
	August	0	2	0	2	4	8	2	5.3%
	September	1	2	0	3	2	8	2	5.3%
	October	7	6	2	5	2	22	4	14.5%
	November	6	3	0	4	3	16	3	10.5%
	December	3	3	0	3	4	13	3	8.6%
DAY	Monday	6	5	2	5	3	21	4	13.8%
	Tuesday	7	4	1	2	3	17	3	11.2%
	Wednesday	6	2	1	1	2	12	2	7.9%
	Thursday	6	3	2	3	4	18	4	11.8%
	Friday	2	7	4	8	7	28	6	18.4%
	Saturday	6	7	1	11	9	34	7	22.4%
	Sunday	6	3	2	3	8	22	4	14.5%
HOUR	00:00-06:00	2	6	0	3	0	11	2	7.2%
	06:00-09:00	7	2	2	7	5	23	5	15.1%
	09:00-11:00	5	6	1	2	3	17	3	11.2%
	11:00-13:00	3	4	2	2	7	18	4	11.8%
	13:00-15:00	4	3	2	4	3	16	3	10.5%
	15:00-18:00	8	5	1	5	4	23	5	15.1%
	18:00-21:00	3	3	3	5	7	21	4	13.8%
	21:00-24:00	7	2	2	5	7	23	5	15.1%
WEATHER	Clear	35	26	12	27	33	133	27	87.5%
	Cloudy	2	0	0	0	2	4	1	2.6%
	Other	0	0	0	0	0	0	0	0.0%

Table 2.3 and Figure 2.2 present an overall perspective of the clustering and staggering of crashes along the study segment. From Table 2.4, Figure 2.2, and a review of the crash summaries and/EVA analysis (raw data) for all intersections along the entire segment, the following locations are further investigated:

- SR 886/Port Boulevard/NE 5th Street and SR 5/US 1/Biscayne Boulevard
- SR 5/US 1/Biscayne Boulevard and NE 6th Street

Collision Diagrams were prepared for the above locations for the analysis period of January 1, 2018, through December 31, 2022, and are presented in Appendix A. The raw crash data for the segment is also presented in Appendix B.

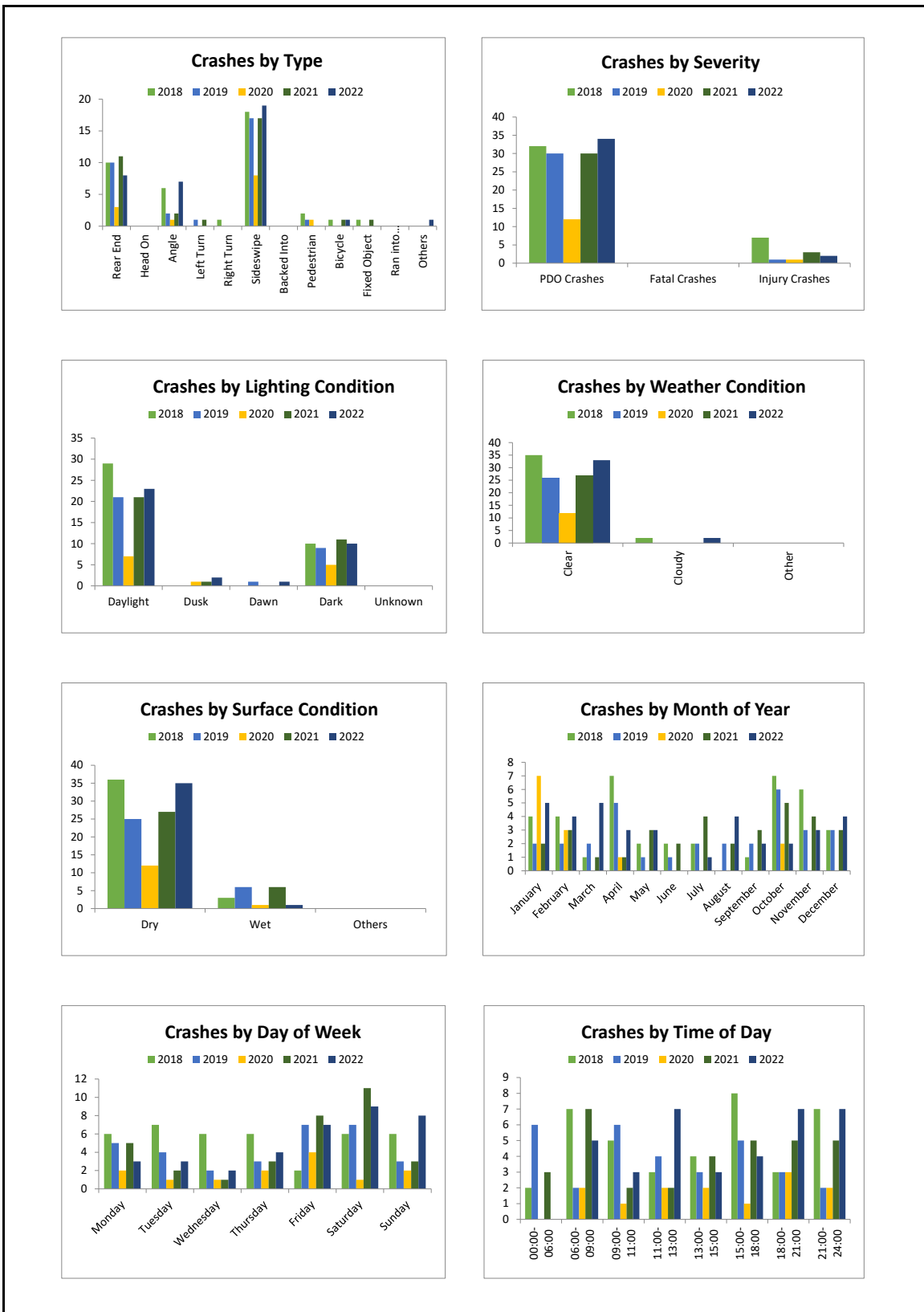


Figure 2.1: Histograms of Crash Summaries

Table 2-3: Crash Distribution by Intersection

Location	2018	2019	2020	2021	2022	PDO	Injury	Fatal	Totals
SR 886/Port Boulevard/NE 5 Street	17	18	7	17	25	74	10	0	84
SR 886/Port Boulevard/NE 6 Street	19	11	5	15	11	57	4	0	61
Bayside Exit	3	2	0	1	0	6	0	0	6
Intercoastal Waterway	0	0	1	0	0	1	0	0	1
Total	39	31	13	33	36	138	14	0	152

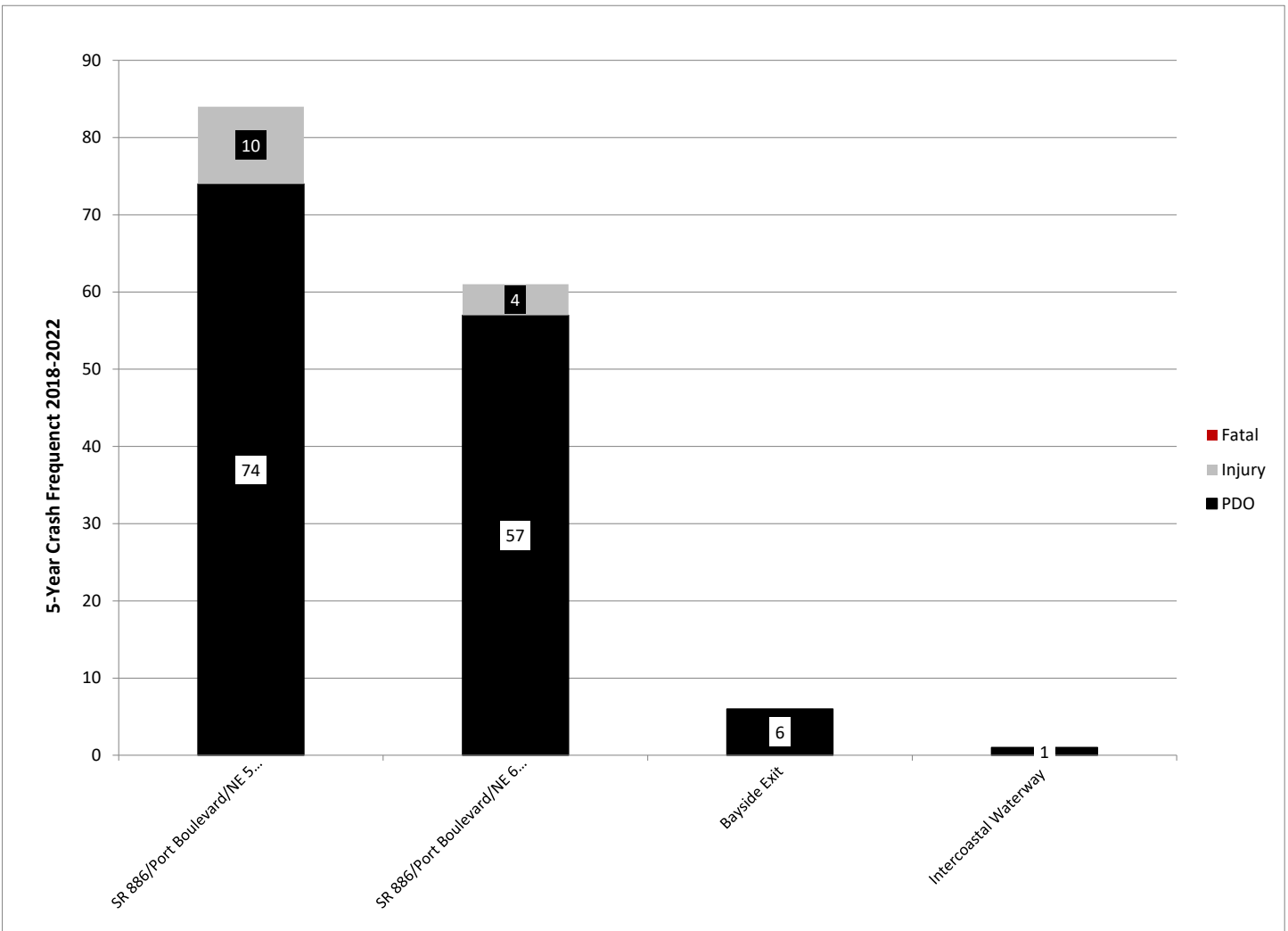


Figure 2.2: Crash Distribution by Intersection

SR 886/Port Boulevard/NE 5th Street and SR 5/US 1/Biscayne Boulevard

- Given this intersection's geometric layout, an expected value analysis (EVA) was not performed; instead, a frequency analysis was conducted.
- There were 84 crashes in the five-year study period, with a yearly breakdown of 17, 18, 7, 17, and 25 (2018, 2019, 2020, 2021, and 2022). The Covid 19 pandemic could cause a drop in crashes in 2020.
- The percentage of crashes during nighttime (night/dusk/dawn) was 36.9% (31 crashes), above the district-wide average of 28.5%.
- The percentage of crashes during wet/slippery pavement conditions was 13.1% (11 crashes), above the district-wide average of 11.8%.
- Based on crash severity, 11.9% (10 crashes) were injury-type crashes, and 88.1% (74 crashes) were property damage-only crashes. There were no fatal crashes during the five-year study period.
- There were no specific peak periods for all crashes.
- The leading crash types were sideswipe at 54.8% (46 crashes) and rear-end at 26.2% (22 crashes). However, since rear-end crashes were spread out and low in frequency, a crash pattern was not identified and will no longer be investigated.
- Of the 46 sideswipe crashes, 18 crashes involved eastbound left-turn vehicles at the east signal, with a yearly breakdown of four (4), four (4), one (1), five (5), and four (4). There was no specific peak period for sideswipe crashes. Improper turn from the inside through lane was the leading cause of the sideswipe crashes.
- There were three (3) pedestrian and two (2) bicycle crashes. Since pedestrian and bicycle features such as high-emphasis crosswalks and countdown pedestrian signal heads were upgraded recently, these crash types are not further investigated.

Table 2.5 summarizes the crash statistics of the intersection.

Table 2-4: Crash Statistics - SR 886/Port Blvd/NE 5th St and SR 5/US 1/Biscayne Blvd

SR 886/Port Boulevard/NE 5 Street at SR 5/US 1/Biscayne Boulevard		Number of Crashes					5 Year Total Crashes	Mean Crashes Per Year	%
		2018	2019	2020	2021	2022			
CRASH TYPE	Rear End	4	4	1	7	6	22	4	26.2%
	Head On	0	0	0	0	0	0	0	0.0%
	Angle	1	0	1	1	5	8	2	9.5%
	Left Turn	0	1	0	0	0	1	0	1.2%
	Right Turn	1	0	0	0	0	1	0	1.2%
	Sideswipe	9	13	4	8	12	46	9	54.8%
	Backed Into	0	0	0	0	0	0	0	0.0%
	Pedestrian	2	0	1	0	0	3	1	3.6%
	Bicycle	0	0	0	1	1	2	0	2.4%
	Fixed Object	0	0	0	0	0	0	0	0.0%
	Other Non Fixed Object Collisions	0	0	0	0	1	1	0	1.2%
Parked Motor Vehicle	0	0	0	0	1	1	0	1.2%	
Total Crashes		17	18	7	17	25	84	17	100.0%
SEVERITY	PDO Crashes	13	18	6	14	23	74	15	88.1%
	Fatal Crashes	0	0	0	0	0	0	0	0.0%
	Injury Crashes	4	0	1	3	2	10	2	11.9%
LIGHTING	Daylight	10	12	4	11	16	53	11	63.1%
	Dusk	0	0	0	1	2	3	1	3.6%
	Dawn	0	1	0	0	0	1	0	1.2%
	Dark	7	5	3	5	7	27	5	32.1%
SURFACE	Dry	16	14	6	13	24	73	14.6	86.9%
	Wet	1	4	1	4	1	11	2	13.1%

SR 886/Port Boulevard/NE 6th Street and SR 5/US 1/Biscayne Boulevard

- Given this intersection's geometric layout, an expected value analysis (EVA) was not performed; instead, a frequency analysis was conducted.
- There were 61 crashes in the five-year study period, with a yearly breakdown of 19, 11, 5, 15, and 11 (2018, 2019, 2020, 2021, and 2022).
- The percentage of crashes during nighttime (night/dusk/dawn) was 29.5% (18 crashes), slightly above the district-wide average of 28.5%.
- The percentage of crashes during wet/slippery pavement conditions was 8.2% (5 crashes), below the district-wide average of 11.8%.
- Based on crash severity, 8.9% (4 crashes) were injury-type crashes, and 91.1% (41 crashes) were property damage-only crashes. There were no fatal crashes during the five-year study period.
- The peak periods for all crashes were 9 PM to Midnight, with 13 crashes (19.7%).
- The leading crash types were sideswipe at 50.8% (31 crashes) and rear-end at 27.9% (17 crashes). However, since rear-end crashes were spread out and low in frequency, a crash pattern was not identified and will no longer be investigated.
- Of the 31 sideswipe crashes, (13) involved northbound vehicles, (14) westbound vehicles, and four (4) southbound vehicles. There was no specific peak period for sideswipe crashes. Improper Passing was the leading cause of the sideswipe crashes.
- There were one (1) pedestrian and one (1) bicycle crashes. Since pedestrian and bicycle features such as high-emphasis crosswalks and countdown pedestrian signal heads were upgraded recently, these crash types are not further investigated.

Table 2.6 summarizes the crash statistics of the intersection.

Table 2-5: Crash Statistics - SR 886/Port Blvd/NE 6th St and SR 5/US 1/Biscayne Blvd

SR 886/Port Boulevard/NE 6 Street at SR 5/US 1/Biscayne Boulevard		Number of Crashes					5 Year Total Crashes	Mean Crashes Per Year	%
		2018	2019	2020	2021	2022			
CRASH TYPE	Rear End	4	5	2	4	2	17	3	27.9%
	Head On	0	0	0	0	0	0	0	0.0%
	Angle	4	2	0	1	2	9	2	14.8%
	Left Turn	0	0	0	1	0	1	0	1.6%
	Right Turn	0	0	0	0	0	0	0	0.0%
	Sideswipe	9	3	3	9	7	31	6	50.8%
	Backed Into	0	0	0	0	0	0	0	0.0%
	Pedestrian	0	1	0	0	0	1	0	1.6%
	Bicycle	1	0	0	0	0	1	0	1.6%
	Fixed Object	1	0	0	0	0	1	0	1.6%
	Other Fixed Object	1	0	0	0	0	1	0	1.6%
Other Non Fixed Object Collisions	0	0	0	0	0	0	0	0.0%	
Total Crashes		19	11	5	15	11	61	12	100.0%
SEVERITY	PDO Crashes	16	10	5	15	11	57	11	93.4%
	Fatal Crashes	0	0	0	0	0	0	0	0.0%
	Injury Crashes	3	1	0	0	0	4	1	6.6%
LIGHTING	Daylight	16	7	3	10	7	43	9	70.5%
	Dusk	0	0	0	0	0	0	0	0.0%
	Dawn	0	0	0	0	1	1	0	1.6%
	Dark	3	4	2	5	3	17	3	27.9%
SURFACE	Dry	17	10	5	13	11	56	11.2	91.8%
	Wet	2	1	0	2	0	5	1	8.2%

3. **FIELD REVIEW**

Field reviews were conducted on Wednesday, September 21, 2022, from 3:30 PM to 5:00 PM and Wednesday, October 5, 2022, from 7:30 AM to 9:30 AM during the typical peak periods. In addition, a field review was conducted on October 18, from 6:00 PM to 7:30 PM, before an event in the FTX Arena. The following observations were made:

AM and PM Field Reviews (Typical Peak Hours)

- Low to moderate volumes were observed on the morning and afternoon field reviews. Queues from all approaches at NE 5th Street and NE 6th Street were short and cleared with their respective phases.
- Moderate pedestrian and bicycle activity was observed during the morning and afternoon field reviews. Most pedestrians/bicyclists followed the traffic signal and signs indications and regulations. A few pedestrians crossing away from the crosswalk on the south leg were observed. In addition, several pedestrians going from/to the FTX Arena and the Bayside plaza were observed crossing near the railroad tracks on the east leg. Note that a path for pedestrians connects FTX Arena and Bayside Plaza. The path runs below the Port Boulevard bridge.
- Most eastbound vehicles traveling in the shared left-turn/through and inside-through lanes performed left-turn instead of through movements during all field reviews. However, several conflicts occurred between eastbound through vehicles traveling in the shared left-turn lanes and eastbound vehicles performing illegal left-turn movements from the inside-through lane.

PM Field Review (Before FTX Event)

- High pedestrian activity before the FTX Arena event was observed. No conflicts between vehicles and pedestrians were observed. Police officers assisted pedestrians crossings NE 5th Street and NE 6th Street. A few pedestrians from the Bayside plaza to the FTX Arena were crossing near the railroad tracks on the east leg.
- During typical peak hours, most eastbound vehicles traveling in the shared left-turn/through and inside-through lanes performed left-turn instead of through movements during all field reviews.
- A few northbound vehicles were observed performing illegal left turn movements from the inside through lane.



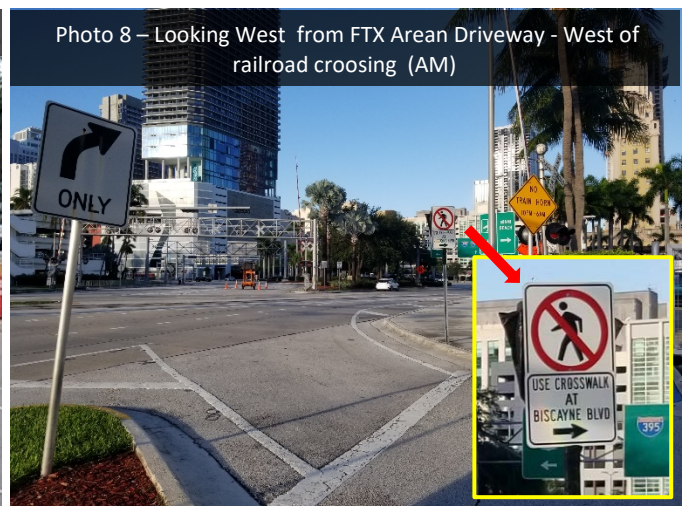
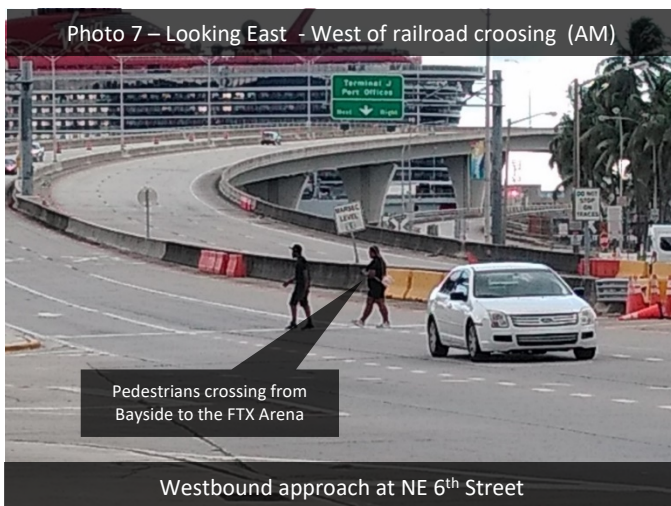
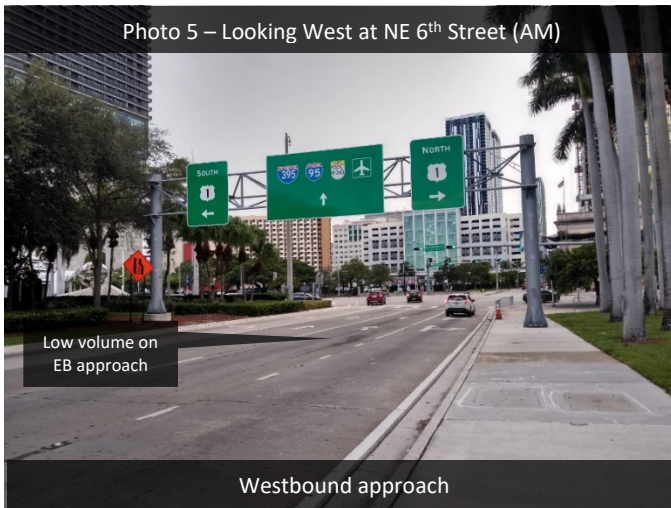
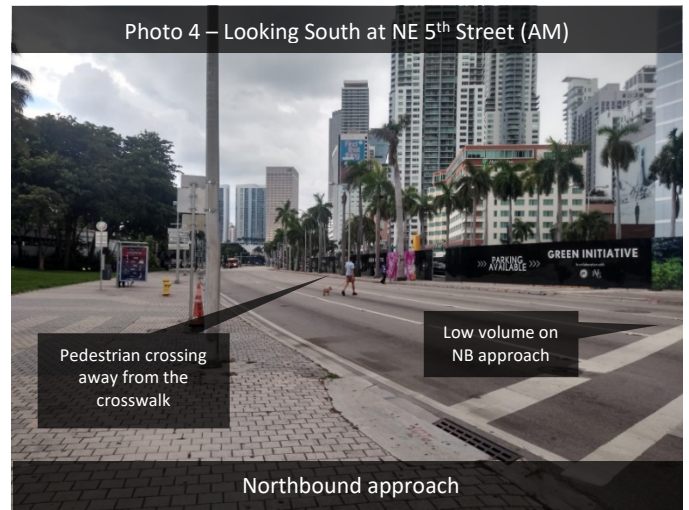


Photo 9 – Pedestrian path connecting FTX Arena and Bayside Plaza



Photo 10 – Pedestrian path connecting FTX Arena and Bayside Plaza

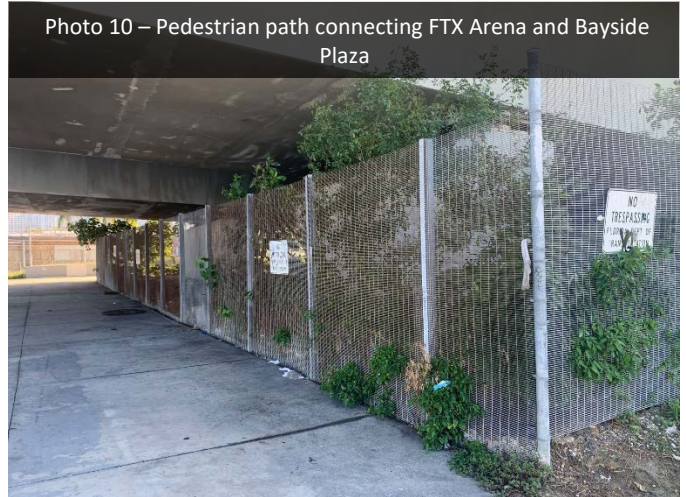


Photo 11 – Pedestrian path connecting FTX Arena and Bayside Plaza

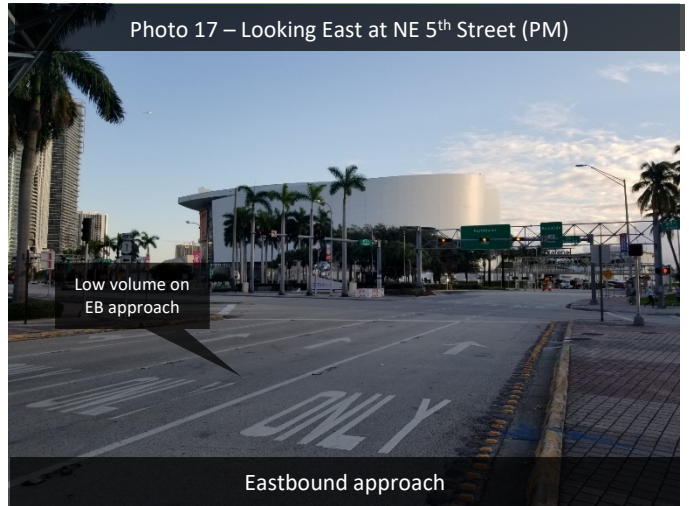
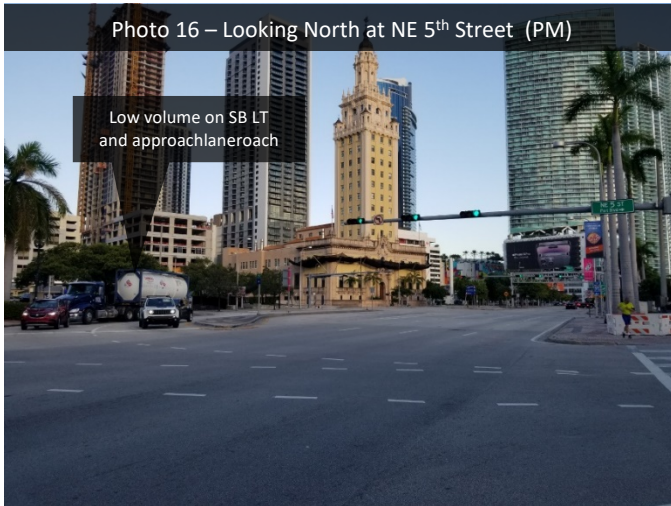


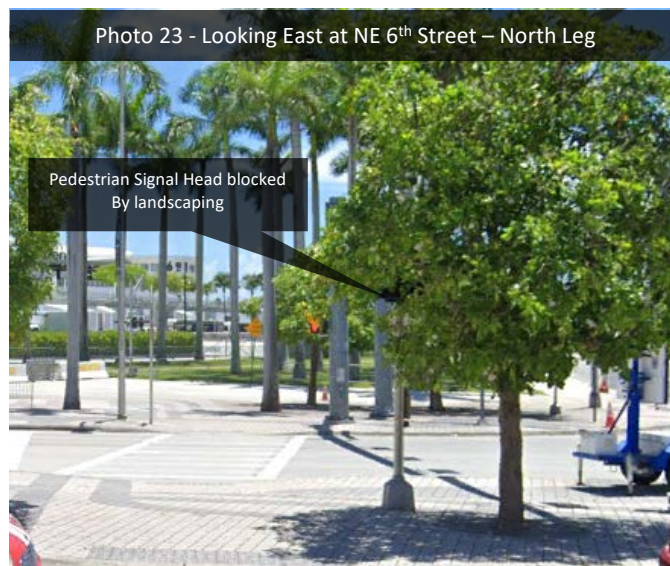
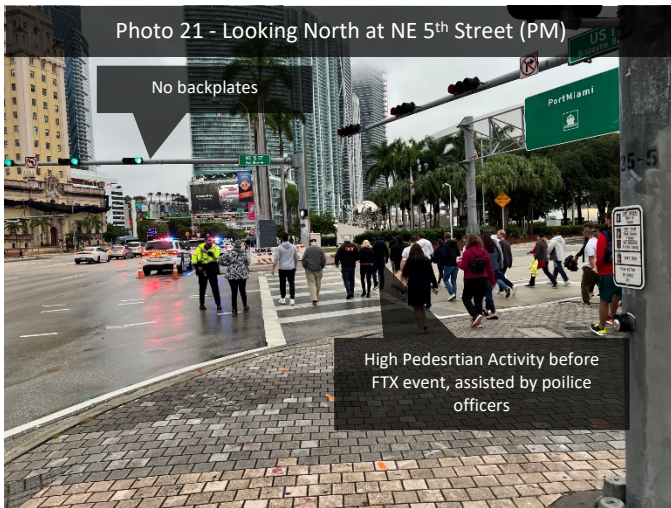
Photo 12 – Pedestrian path connecting FTX Arena and Bayside Plaza



Photo 13 – Pedestrian path connecting FTX Arena and Bayside Plaza





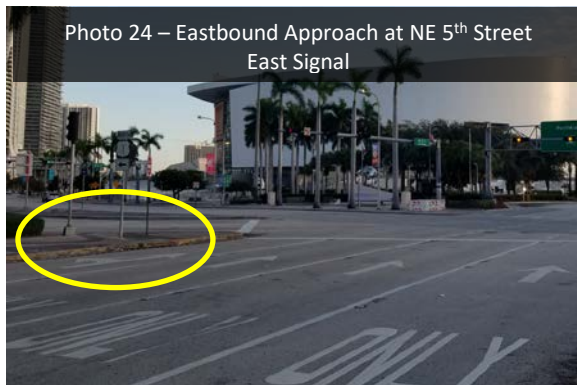


4. PROPOSED IMPROVEMENTS

SR 886/Port Boulevard/NE 5th Street and SR 5/US 1/Biscayne Boulevard

- The crash analysis confirmed the sideswipe crash patterns identified under the RRR safety review. Although overhead guide signs were installed facing the NE 5th Street eastbound approach, the Signal Four Analytics review revealed a continuation of sideswipe crashes involving eastbound left-turn vehicles at NE 6th Street. During all field reviews, most eastbound vehicles traveling in the shared left-turn/through and inside-through lanes performed left-turn instead of through movements. However, several conflicts occurred between eastbound through vehicles traveling in the shared left-turn lanes and eastbound vehicles performing illegal left-turn movements from the inside-through lane.
- The RRR Safety review did not recommend any improvement at NE 5th Street because signing and pavement markings improvements were implemented during the study. However, since the sideswipe crash pattern continues, the Safety Office requested CHP to conduct an operational analysis to evaluate changing the lane configuration at the eastbound approach. Based on the crash pattern and field review observations, the following two (2) Alternatives were considered:
 - Alternative 1: An exclusive left-turn lane and three through lanes facing the eastbound approach.
 - Alternative 2: An exclusive left-turn lane, a shared left-turn/through lane, and two through lanes facing the eastbound approach.

The conceptual improvements for Alternatives 1 and 2 are presented in Figure The operational analysis is presented in Section 4.1.



- The following improvements are also recommended for NE 5th Street:
 - Provide a high-emphasis crosswalk at the west leg of the intersection.
 - Install Flexible Retroreflective Backplates facing all approaches

SR 886/Port Boulevard/NE 6 Street and SR 5/US 1/Biscayne Boulevard

- The RRR Safety review recommended considering a lighting study at NE 6th Street to determine and/or confirm if the level of existing lighting complies with the current Department criteria given in FDM 231. However, the frequency and percentage of nighttime crashes have reduced significantly (from 32 (53.3%) to 4 crashes (26.7%)) and are now below the districtwide average; therefore, the improvement is no longer recommended.
- The following improvements are recommended for NE 6th Street:
 - Install Flexible Retroreflective Backplates facing all approaches.
 - Trim landscaping blocking the pedestrian signal heads on the north leg raised median.

SR 886/Port Boulevard at Arena Entrance

- The RRR Safety review recommended (non-safety improvement) considering removing the existing STOP sign on the north-westbound approach; however, the sign has already been removed.
- It is recommended to develop an educational campaign to reduce crossings between the FTX Arena and the Bayside plaza near the railroad crossing. Pedestrians/bicyclists can use the pedestrian path (under Port Boulevard bridge) or SR 5 sign

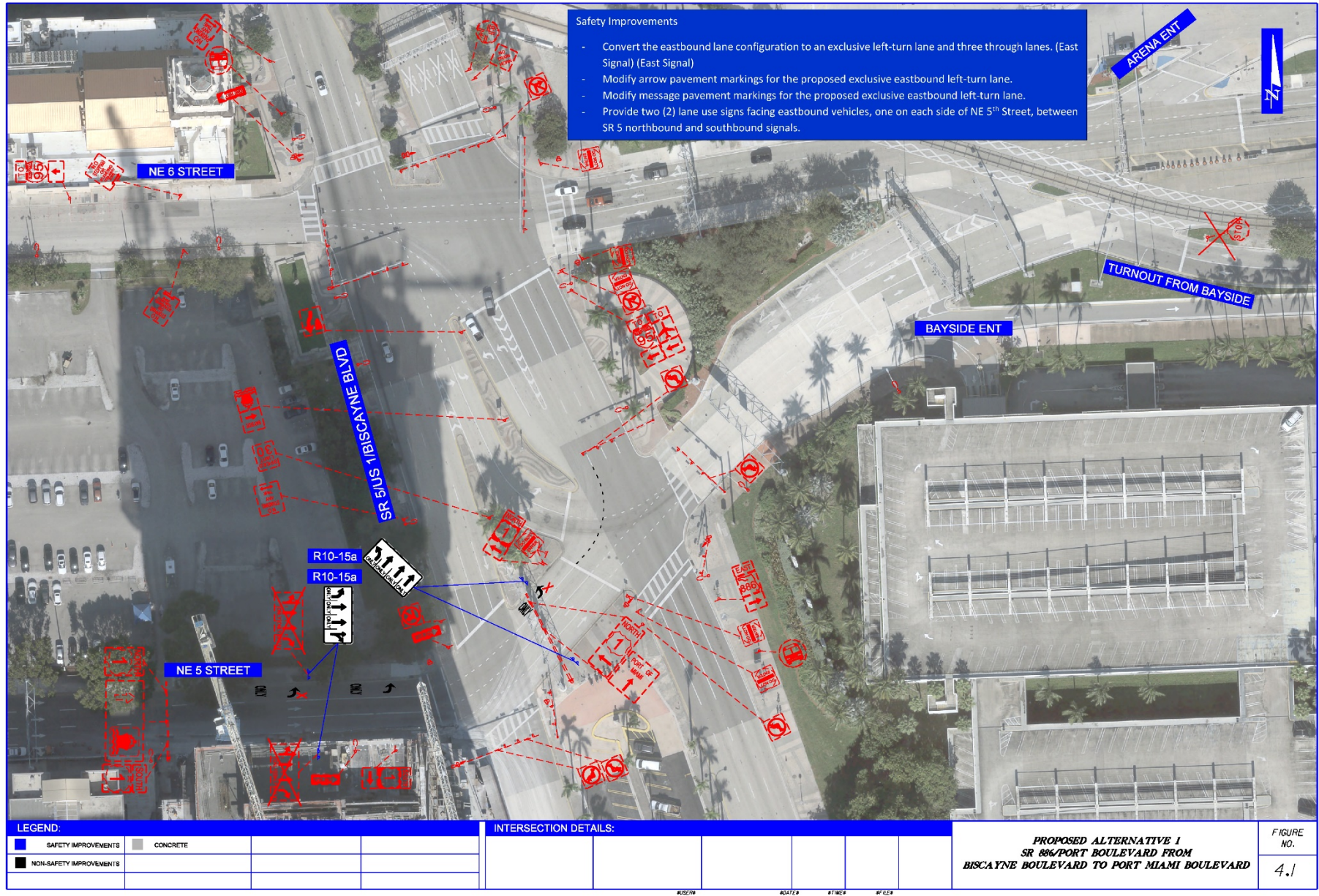


Figure 4.1: Conceptual Improvements for Alternative 1

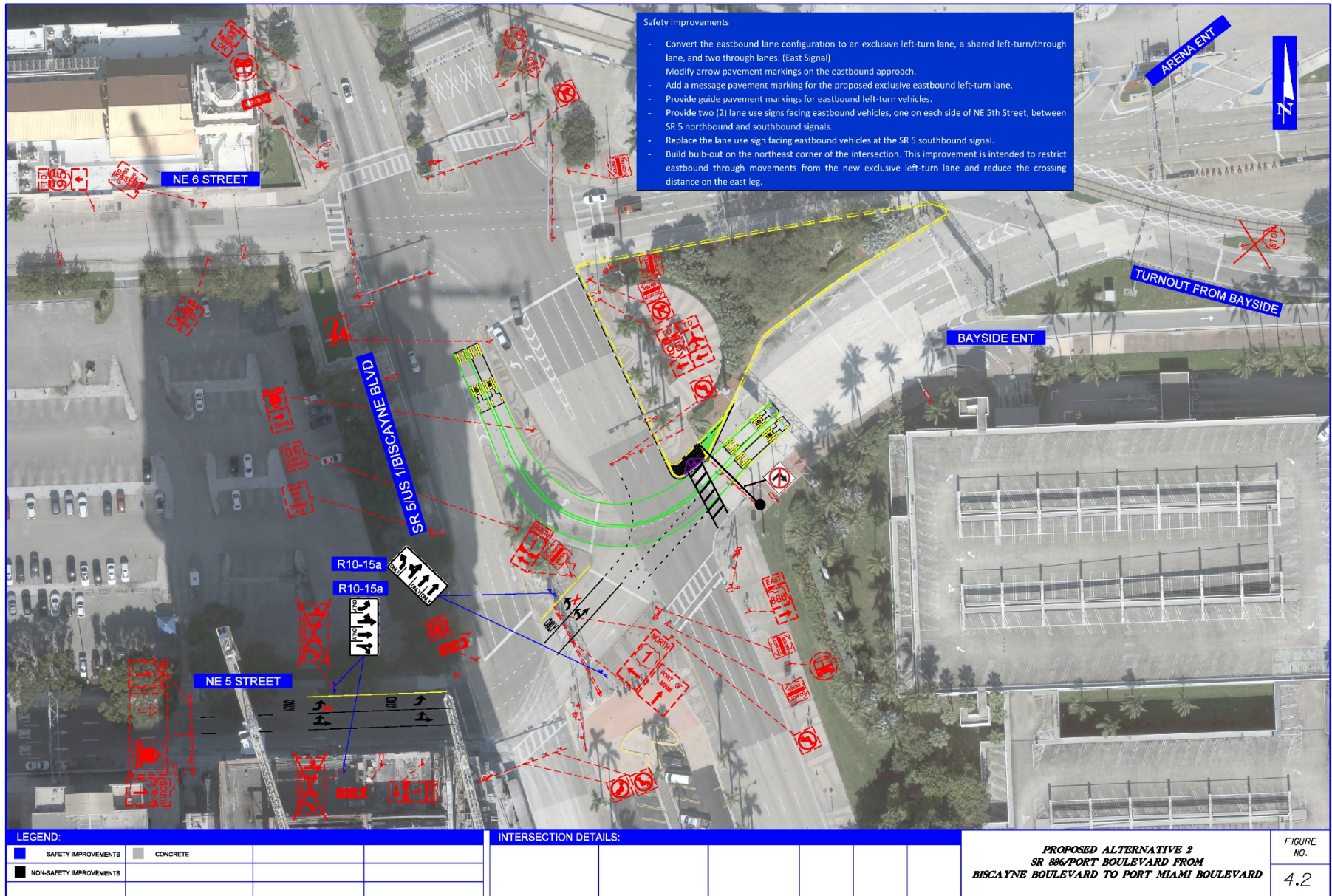


Figure 4.2: Conceptual Improvements for Alternative 2

5. OPERATIONAL ANALYSIS – SR 886/NE 5 STREET AND SR 5/US 1/BISCAYNE BOULEVARD (NB Signal)

The operational Analysis using Synchro was prepared for the AM, Midday, and PM peak hours of a typical weekday considering the following lane configuration alternatives:

- Existing: A shared left-turn lane and three through lanes.
- Alternative 1: An exclusive left-turn lane and three through lanes facing the eastbound approach.
- Alternative 2: An exclusive left-turn lane, a shared left-turn/through lane, and two through lanes facing the eastbound approach.

Table 5-1: Operational Analysis for SR 886/Port Blvd/NE 5th St and SR 5/US 1/Biscayne Blvd (NB Signal)

Lane Group	Movement	Existing Conditions				Proposed Conditions Alternative 1				Difference between Existing vs Proposed Alternative 1 AM				Proposed Conditions Alternative 2				Difference between Existing vs Proposed Alternative 2 AM					
		Volume (vph)	Delay (s-veh)	LOS	95% Queue (ft)	Volume (vph)	Delay (s-veh)	LOS	95% Queue (ft)	Δ Delay		Δ 95% Queue		Volume (vph)	Delay (s-veh)	LOS	95% Queue (ft)	Δ Delay		Δ 95% Queue			
										(s-veh)	% Δ LOS	Feet	%					(s-veh)	% Δ LOS	Feet	%		
AM PEAK	EB	110	0.0			110	5.9	A	5	5.9	#DIV/0!	Worse	5	-	110				0.0	#DIV/0!	Same	0	-
	TH	197	4.4	A	3	197	4.7	A	3	0.3	7%	Same	0	0%	197	5.6	A	5	1.2	27%	Same	2	67%
	Appr	307	4.4	E		307	5.0	A		0.6	14%	Better	-	-	307	5.6	A		1.2	27%	Better	0	-
NB	LT	767	15.9	B	152	767	15.9	B	152	0.0	0%	Same	0	0%	767	15.9	B	152	0.0	0%	Same	0	0%
	RT	155				155				0.0	0%	Same	0	0%	155				0.0	#DIV/0!	Same	0	-
	Appr	922	15.9	B		922	15.9	B		0.0	0%	Same	-	-	922	15.9	B		0.0	0%	Same	0	-
SE	LT	489	10.3	B	101	489	10.3	B	101	0.0	0%	Same	0	0%	489	10.3	B	101	0.0	0%	Same	0	0%
	UT	2	0.0			2	0.0			0.0	#DIV/0!	Same	0	-	2	0.0			0.0	#DIV/0!	Same	0	-
	Appr	491	10.3	B		491	10.3	B		0.0	0%	Same	-	-	491	10.3	B		0.0	0%	Same	0	-
Intersection		1720	11.9	B		1720	12.0	B		0.1	1%	Same	-	-	1720	12.1	B		0.2	2%	Same	-	-
MIDDAY PEAK	EB	133	0.0			133	15.1	B	48	15.1	#DIV/0!	Worse	48	-	133				0.0	#DIV/0!	Same	0	-
	TH	101	8.3	A	9	101	8.5	A	6	0.2	2%	Same	(3)	-33%	101	9.1	A	13	0.8	10%	Same	4	44%
	Appr	234	8.3	A		234	12.3	B		4.0	48%	Worse	-	-	234	9.1	A		0.8	10%	Same	0	-
NB	LT	1060	13.0	B	157	1060	13.0	B	157	0.0	0%	Same	0	0%	1060	13.0	B	157	0.0	0%	Same	0	0%
	RT	57	0.0			57				0.0	#DIV/0!	Same	0	-	57				0.0	#DIV/0!	Same	0	-
	Appr	1117	13.0	B		1117	13.0	B		0.0	0%	Same	-	-	1117	13.0	B		0.0	0%	Same	0	-
SE	LT	118	6.5	A	28	118	6.5	A	28	0.0	0%	Same	0	0%	118	6.5	A	28	0.0	0%	Same	0	0%
	UH	8	0.0			8	0.0			0.0	#DIV/0!	Same	0	-	8	0.0			0.0	#DIV/0!	Same	0	-
	Appr	126	6.5	A		126	6.5	A		0.0	0%	Same	-	-	126	6.5	A		0.0	0%	Same	0	-
Intersection		1477	11.6	B		1477	12.3	B		0.7	6%	Same	-	-	1477	11.7	B		0.1	1%	Same	-	-
PM PEAK	EB	223				223	40.2	D	155	40.2	#DIV/0!	Worse	155	-	223				0.0	#DIV/0!	Same	0	-
	TH	53	4.2	A	3	53	4.3	A	1	0.1	2%	Same	(2)	-67%	53	5.2	A	5	1.0	24%	Same	2	67%
	Appr	276	4.2	A		276	33.7	C		29.5	702%	Worse	-	-	276	5.2	A		1.0	24%	Same	0	-
NB	LT	1681	15.2	B	254	1681	15.2	B	254	0.0	0%	Same	0	0%	1681	15.2	B	254	0.0	0%	Same	0	0%
	RT	51				51				0.0	#DIV/0!	Same	0	-	51				0.0	#DIV/0!	Same	0	-
	Appr	1732	15.2	B		1732	15.2	B		0.0	0%	Same	-	-	1732	15.2	B		0.0	0%	Same	0	-
SB	LT	49	6.3	A	15	49	6.3	A	15	0.0	0%	Same	0	0%	49	6.3	A	15	0.0	0%	Same	0	0%
	UT	14				14				0.0	#DIV/0!	Same	0	-	14				0.0	#DIV/0!	Same	0	-
	Appr	63	6.3	A		63	6.3	A		0.0	0%	Same	-	-	63	6.3	A		0.0	0%	Same	0	-
Intersection		2071	13.2	B		2071	17.7	B		4.5	34%	Same	-	-	2071	13.3	B		0.1	1%	Same	-	-

Signal timing and phasing information (TOD and SOP) have been included in **Appendix D**.

As shown in **Table 5-1**, the operational analysis revealed that **Alternative 2** improves the Level of Service (LOS) for the eastbound left-turn movements during the AM peak period without impacting the LOS, delay, or V/C of the rest of the movements, approaches, or overall intersection. Although the slight operational improvements, the lane configuration change is anticipated to reduce conflicts and sideswipe crashes between eastbound left-turn and through vehicles. The implementation of this improvement requires the following:

- Modify arrow pavement markings on the eastbound approach.
- Add a message pavement marking for the proposed exclusive eastbound left-turn lane.
- Provide guide pavement markings for eastbound left-turn vehicles.
- Provide two (2) lane use signs facing eastbound vehicles, one on each side of NE 5th Street, between SR 5 northbound and southbound signals.
- Replace the lane use sign facing eastbound vehicles at the SR 5 southbound signal.
- Build bulb-out on the northeast corner of the intersection. This improvement is intended to restrict eastbound through movements from the new exclusive left-turn lane and reduce the crossing distance on the east leg.**
- Replace the mast arm facing eastbound.**

Note that the new overhead guide signs facing eastbound need not be modified.

6. BENEFIT/COST ANALYSIS – SR 886/NE 5 STREET AND SR 5/US 1/BISCAYNE BOULEVARD (NB Signal)

Given the high demand for eastbound left-turn vehicles during the PM peak period and the anticipated low impact of Alternative 1 improvements to reduce crashes, a Benefit/Cost analysis (B/C) was performed only for Alternative 2 (Preferred alternative). The analysis includes evaluating the potential reduction of sideswipe crashes at NE 5th Street upon implementing the improvements under Alternative 2 and the associated estimated improvement costs.

Preliminary Cost Estimates: Tables 6.1 and 6.2 show the preliminary construction cost estimates for Alternative 2, with and without replacing the mast arm facing eastbound. The recommended improvements were prepared using FDOT’s standard pay items and historical unit costs from previous construction projects recently completed in Miami-Dade County. The cost estimates include pay items for roadway, signalization, signing and pavement marking, traffic control maintenance, preliminary engineering, mobilization, and a contingency amount to account for unforeseen cost elements. Detailed cost estimates for Alternative 2 are included in **Appendix E**.

Table 6.1: Cost Estimates for Alternative 2 – SR 886 at SR 5 (NB Signal) – With MA Replacement

SAFETY IMPROVEMENTS	COST
Roadway	\$ 99,521.39
Signing & Pavement Marking	\$ 12,086.34
Signalization	\$ 129,686.86
SUBTOTAL	\$ 241,294.59
20% Maintenance of Traffic	\$ 48,258.92
10% Mobilization	\$ 24,129.46
32% Preliminary Engineering	\$ 77,214.27
18% Construction Engineering & Inspection	\$ 43,433.03
Project Contingency	\$ 25,000.00
GRAND TOTAL	\$ 459,330.26

Table 6.2: Cost Estimates for Alternative 2 – SR 886 at SR 5 (NB Signal) - Without MA Replacement

SAFETY IMPROVEMENTS	COST
Roadway	\$ 92,793.09
Signing & Pavement Marking	\$ 5,394.90
SUBTOTAL	\$ 98,187.99
20% Maintenance of Traffic	\$ 19,637.60
10% Mobilization	\$ 9,818.80
32% Preliminary Engineering	\$ 31,420.16
18% Construction Engineering & Inspection	\$ 17,673.84
Project Contingency	\$ 20,000.00
GRAND TOTAL	\$ 196,738.38

The cost estimates assume that a portion of the proposed bulb-out will be built with brick pavers to match the existing features.

Crash Reduction Factors (CRF)

An estimation of the potential crash reduction for Alternative 2 was calculated. The calculations were performed using the following sources: the Department’s “CRASH” 9, the FHWA report titled “Desktop Reference for Crash Reduction Factors” (Sept 2008), and the Crash Modification Factors (CMF) Clearinghouse. **Table 6.3** details the crash reduction computations for the safety-related improvements for Alternative 2. Applying the above CRF sources, the safety improvements identified are estimated to be nearly **1.4** crash reductions annually.

Table 6.3: Crash Reduction Computation for Alternative 2 – SR 886/Port Blvd/NE 5th Street at SR 5 (NB Signal)

PROPOSED IMPROVEMENTS		CRF	SOURCE	TARGETED CRASH TYPE	NUMBER OF CRASHES TARGETED	NUMBER OF REDUCED CRASHES
NE 5 Street	Modify Lane Configuration	24%	FDOT Crash Reduction Factors (#11)	Sideswipe	28	6.72
		24%		Rear End	2	0.48
	TOTAL CRASHES REDUCED IN 5-YEARS					7.20
CRASHES REDUCED PER YEAR					1.4	

B/C Calculation

The safety B/C ratio values were calculated for Alternative 2, for the two scenarios, with and without replacing the mast arm facing eastbound, as shown in **Tables 6.4** and **6.5**. The B/C ratios for Alternative 2 were calculated to be **4.7** if the mast arm facing eastbound is replaced and **11.6** if the mast arm is not replaced.

Table 6.4: Summary of B/C Analysis for Alternative 2 – With MA Replacement

DESCRIPTION	ALTERNATIVE 1
Safety Benefits	\$ 180,099.94
Annualized Cost of Project	\$ 38,354.63
SAFETY B/C	4.7
NVP	\$ 1,443,087.54

Table 6.5: Summary of B/C Analysis for Alternative 2 – Without MA Replacement

DESCRIPTION	ALTERNATIVE 1
Safety Benefits	\$ 180,099.94
Annualized Cost of Project	\$ 15,549.23
SAFETY B/C	11.6
NVP	\$ 1,705,679.42

Detailed B/C ratio computations are included in **Appendix F**.

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7. CONCLUSIONS AND RECOMMENDATIONS

Based on the crash analysis and field observation, there is a clear pattern of sideswipe crashes involving eastbound left-turn vehicles at NE 5th Street (east signal). The traffic data collected reported a high volume of left-turn vehicles, especially in the afternoon peak period. From the crashes and conditions observed during the field review, the following two (2) Alternatives were evaluated using Synchro:

- Alternative 1: Convert the eastbound lane configuration to an exclusive left-turn lane and three through lanes
- Alternative 2: Convert the eastbound lane configuration to an exclusive left-turn lane, a shared left-turn/through lane, and two through lanes.

The operational analysis revealed that **Alternative 2** improves the Level of Service (LOS) for the eastbound left-turn movements during the AM peak period without impacting the LOS, delay, or V/C of the rest of the movements, approaches, or overall intersection. Although the operational improvements are minimum, modifying the lane configuration reduces conflicts and sideswipe crashes between eastbound left-turn and through vehicles. The implementation of this improvement requires the following:

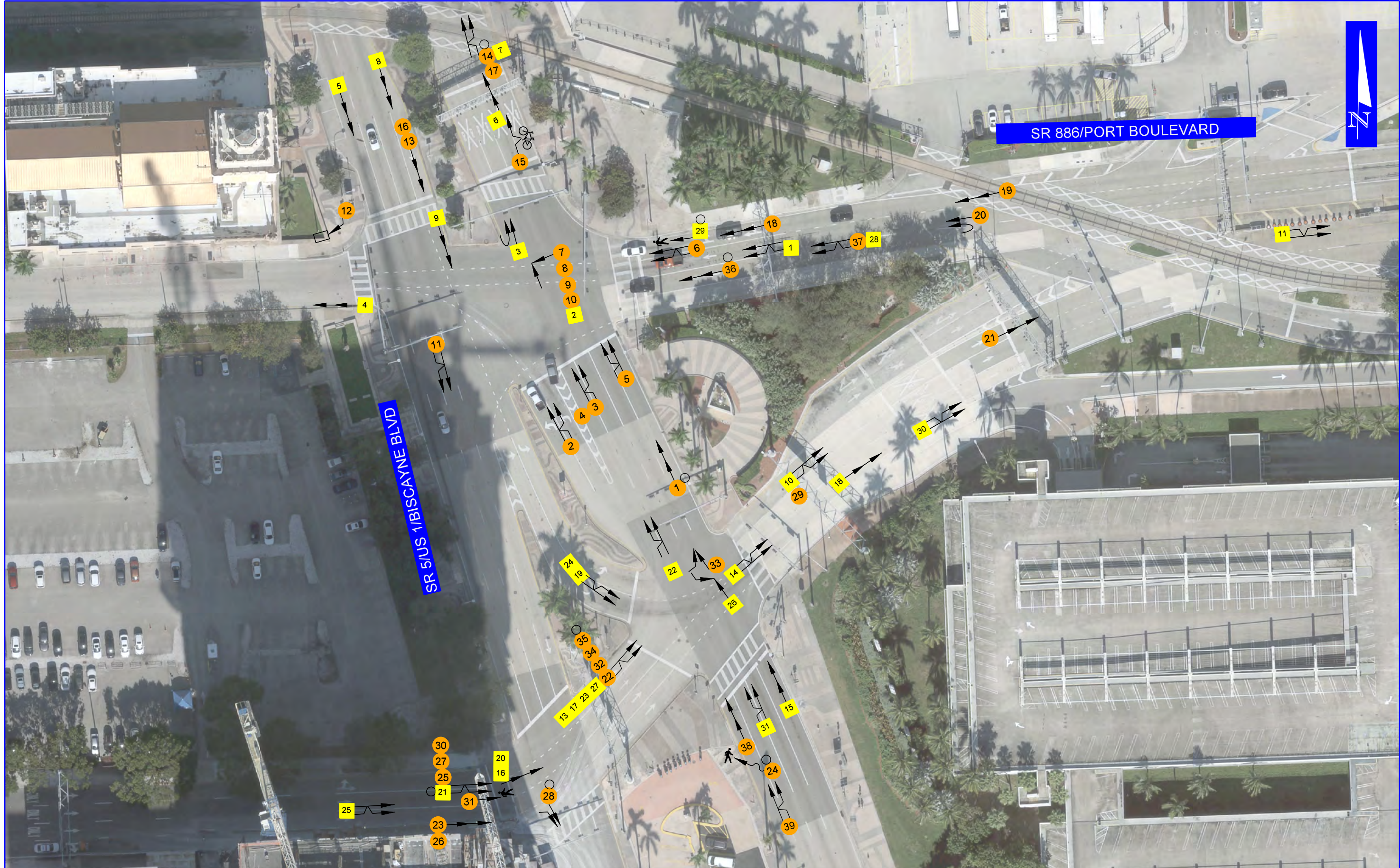
- Modify arrow pavement markings on the eastbound approach.
- Add a message pavement marking for the proposed exclusive eastbound left-turn lane.
- Provide guide pavement markings for eastbound left-turn vehicles.
- Provide two (2) lane use signs facing eastbound vehicles, one on each side of NE 5th Street, between SR 5 northbound and southbound signals.
- Replace the lane use sign facing eastbound vehicles at the SR 5 southbound signal.
- ***Build bulb-out on the northeast corner of the intersection. This improvement is intended to restrict eastbound through movements from the new exclusive left-turn lane and reduce the crossing distance on the east leg.***
- ***Replace the mast arm facing eastbound.***

Note that the new overhead guide signs facing eastbound need not be modified.

The safety improvements proposed under Alternative 2 are estimated to reduce nearly 1.4 crashes annually, and the B/C ratios for were calculated to be **4.7** if the mast arm facing eastbound is replaced and **11.6** if the mast arm is not replaced.

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APPENDIX A – COLLISION DIAGRAMS AND ANNUAL CRASH SUMMARIES



COLLISION SYMBOLS:

Ⓢ	RECORD NUMBER		BICYCLIST		FIXED OBJECT		LEFT TURN		HEAD ON		CARGO LOSS/DEBRIS		YR 2018
○	INJURY		PEDESTRIAN		PARKED CAR		OUT OF CONTROL		ANGLE		U-TURN		YR 2019
●	FATAL		BACKING VEHICLE		REAR END		RIGHT TURN		SIDE SWIPE		OVERTURNED		

COLLISION DIAGRAM
 SR 886 / PORT BOULEVARD FROM
 BISCAYNE BOULEVARD TO PORT MIAMI BOULEVARD

FIGURE NO.

A1

MATCHLINE A

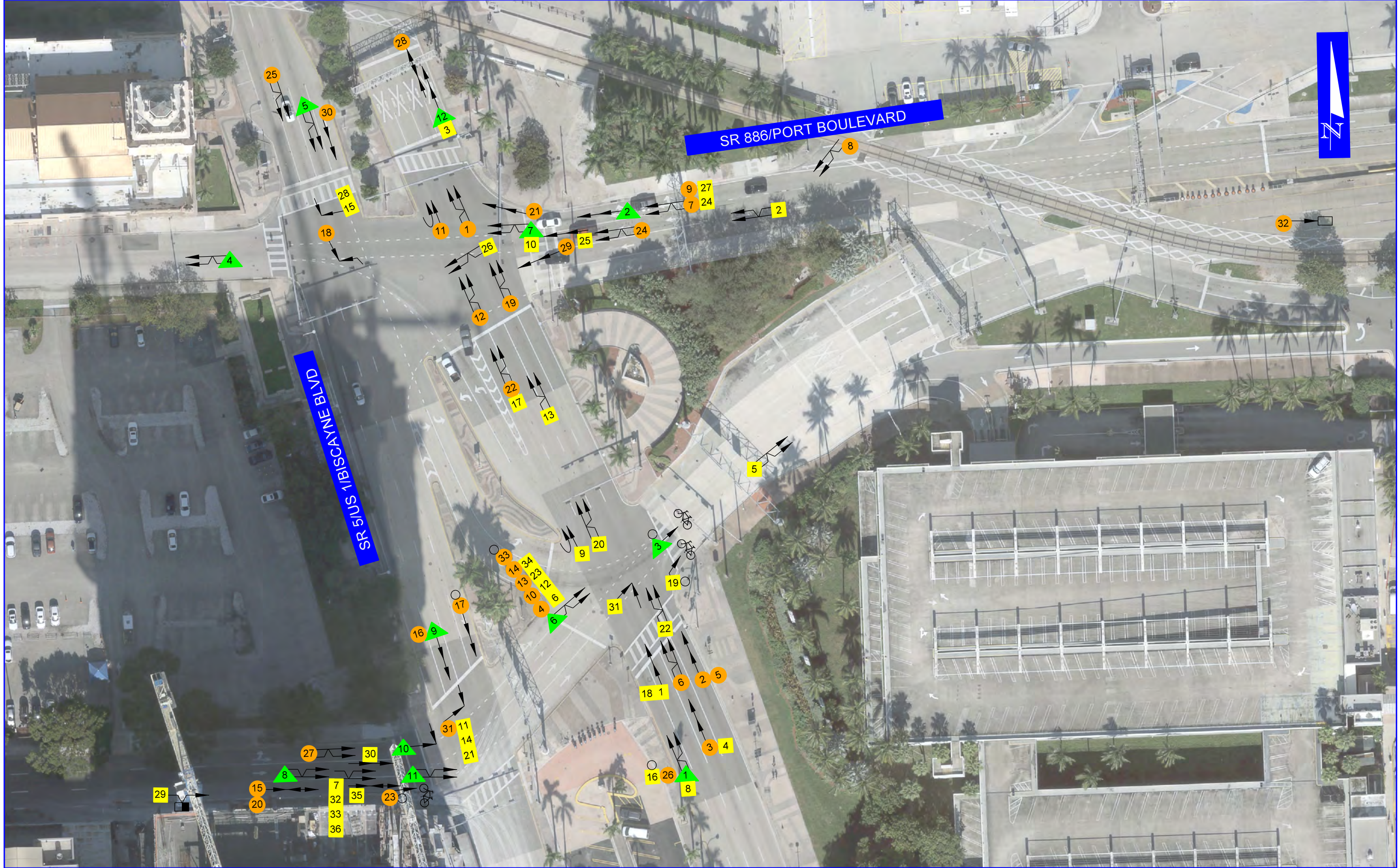


COLLISION SYMBOLS:

⊙	RECORD NUMBER	🚲	BICYCLIST	➡	FIXED OBJECT	↙	LEFT TURN	➡➡	HEAD ON	*	CARGO LOSS/DEBRIS	●	YR 2018
○	INJURY	🚶	PEDESTRIAN	➡	PARKED CAR	⤴	OUT OF CONTROL	↘	ANGLE	↺	U-TURN	■	YR 2019
●	FATAL	↔	BACKING VEHICLE	➡➡	REAR END	↘	RIGHT TURN	↘	SIDE SWIPE	↺	OVERTURNED		

SUSERS SDATES STIMES SFILES

<p>COLLISION DIAGRAM SR 886 / PORT BOULEVARD FROM BISCAYNE BOULEVARD TO PORT MIAMI BOULEVARD</p>		<p>FIGURE NO. A2</p>
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COLLISION SYMBOLS:

⑨	RECORD NUMBER		BICYCLIST		FIXED OBJECT		LEFT TURN		HEAD ON		CARGO LOSS/DEBRIS		YR 2020
○	INJURY		PEDESTRIAN		PARKED CAR		OUT OF CONTROL		ANGLE		U-TURN		YR 2021
●	FATAL		BACKING VEHICLE		REAR END		RIGHT TURN		SIDE SWIPE		OVERTURNED		YR 2022

COLLISION DIAGRAM
 SR 886 / PORT BOULEVARD FROM
 BISCAYNE BOULEVARD TO PORT MIAMI BOULEVARD

MATCHLINE A



COLLISION SYMBOLS:

⊙	RECORD NUMBER	🚲	BICYCLIST	➡	FIXED OBJECT	↙	LEFT TURN	➡➡	HEAD ON	*	CARGO LOSS/DEBRIS	▲	YR 2020
○	INJURY	🚶	PEDESTRIAN	➡	PARKED CAR	⤴	OUT OF CONTROL	↘	ANGLE	↻	U-TURN	●	YR 2021
●	FATAL	↔	BACKING VEHICLE	➡➡	REAR END	↘	RIGHT TURN	↔	SIDE SWIPE	↻	OVERTURNED	■	YR 2022

COLLISION DIAGRAM
 SR 886 / PORT BOULEVARD FROM
 BISCAYNE BOULEVARD TO PORT MIAMI BOULEVARD

FIGURE NO.
A4

State of Florida Department of Transportation CRASH SUMMARY																
SECTION:		87061000						STATE ROUTE: 886								
ROADWAY LIMITS:		SR 886/Port Blvd/NE 5 St at SR 5/US 1/Biscayne Blvd				M.P. 0.000		TO 0.776		ENGINEER: FDOT D6						
STUDY PERIOD:		FROM 1/ 2018			TO 12/ 2018			COUNTY: Miami-Dade								
Crash Number	No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)				
878461550	1	11.327	03/20/18	Tue	2300	Rear-End	0	1	0	Night	Dry	Followed too Closely				
875740460	22	11.309	01/23/18	Tue	2010	Sideswipe	0	0	1	Night	Dry	Improper Turn				
875761880	23	11.309	02/26/18	Mon	0620	Rear-End	0	0	1	Night	Dry	Followed too Closely				
878510160	24	11.309	05/28/18	Mon	1810	Pedestrian	0	2	0	Day	Dry	Erratic, Reckless or Aggressive				
878515460	25	11.309	06/05/18	Tue	1420	Sideswipe	0	0	1	Day	Dry	Improper Passing				
878524770	26	11.309	06/20/18	Wed	1100	Rear-End	0	0	1	Day	Dry	Followed too Closely				
878587370	27	11.309	09/26/18	Wed	0840	Sideswipe	0	0	1	Day	Dry	Disregarded other Road Markings				
878591240	28	11.309	10/01/18	Mon	1725	Right-Turn	0	1	0	Day	Dry	Failed to Yield Right-Of-Way				
878592760	29	11.309	10/04/18	Thu	0445	Sideswipe	0	0	1	Night	Wet	Improper Passing				
878602380	30	11.309	10/11/18	Thu	2330	Sideswipe	0	0	1	Night	Dry	Improper Passing				
878607570	31	11.309	10/27/18	Sat	2130	Pedestrian	0	0	1	Day	Dry	Careless or Negligent Manner				
878610680	32	11.309	10/30/18	Tue	0910	Sideswipe	0	0	1	Day	Dry	Improper Turn				
878620650	33	11.309	11/14/18	Wed	1015	Angle	0	0	1	Day	Dry	Failed to Yield Right-Of-Way				
878626340	34	11.309	11/25/18	Sun	0238	Sideswipe	0	0	1	Night	Dry	Improper Turn				
878634840	35	11.309	12/07/18	Fri	1445	Sideswipe	0	1	0	Day	Dry	Improper Turn				
875741050	38	11.309	07/05/18	Thu	2153	Rear-End	0	0	1	Night	Dry	Followed too Closely				
878546420	39	11.309	01/14/18	Sun	1715	Sideswipe	0	0	1	Day	Dry	Improper Passing				
	Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike Car	Parked Car	Fixed Object	Ran into Water	Other
	17	0	4	13	4	0	1	0	1	9	0	2	0	0	0	0
	Percent	0.00%	23.53%	76.47%	23.53%	0.00%	5.88%	0.00%	5.88%	52.94%	0.00%	11.76%	0.00%	0.00%	0.00%	0.00%
	Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/Aggress	Ran off Road	DUI	Wrong Way
	Total	10	7	1	16	1	2	4	0	0	4	1	1	0	0	0
	Percent	58.82%	41.18%	5.88%	94.12%	5.88%	11.76%	23.53%	0.00%	0.00%	23.53%	5.88%	5.88%	0.00%	0.00%	0.00%
TOTAL ENTERING VEHICLES/ADT: 31,267							SEGMENT CRASH RATE: 1.920 CRASHES PER MILLION VEHICLE MILES									

State of Florida Department of Transportation CRASH SUMMARY																
SECTION:		87061000										STATE ROUTE: 886				
ROADWAY LIMITS:		SR 886/Port Blvd/NE 5 St at SR 5/US 1/Biscayne Blvd					M.P. 0.000		TO 0.776			ENGINEER: FDOT D6				
STUDY PERIOD:		FROM 1/ 2019					TO 12/ 2019			COUNTY: Miami-Dade						
Crash Number	No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)				
888299180	10	11.309	04/11/19	Thu	0940	Sideswipe	0	0	1	Day	Dry	Failed to Yield Right-Of-Way				
888263020	13	11.309	02/20/19	Wed	1010	Sideswipe	0	0	1	Day	Dry	Improper Turn				
888297930	14	11.309	04/09/19	Tue	1310	Sideswipe	0	0	1	Day	Wet	Improper Passing				
888306820	15	11.309	04/22/19	Mon	1000	Rear-End	0	0	1	Day	Dry	Followed too Closely				
888308860	16	11.309	04/25/19	Thu	1505	Rear-End	0	0	1	Day	Dry	Followed too Closely				
888309460	17	11.309	04/26/19	Fri	1140	Sideswipe	0	0	1	Day	Dry	Improper Turn				
888313700	18	11.309	05/03/19	Fri	0445	Rear-End	0	0	1	Night	Dry	Followed too Closely				
892403950	19	11.309	01/14/19	Mon	0420	Sideswipe	0	0	1	Night	Wet	Failed to Yield Right-Of-Way				
892404410	20	11.309	06/14/19	Fri	1330	Rear-End	0	0	1	Day	Dry	Followed too Closely				
892414950	21	11.309	07/01/19	Mon	1010	Sideswipe	0	0	1	Day	Dry	Improper Passing				
892417850	22	11.309	07/06/19	Sat	0345	Sideswipe	0	0	1	Night	Dry	Improper Passing				
892445300	23	11.309	08/18/19	Sun	1358	Sideswipe	0	0	1	Day	Dry	Improper Turn				
892475690	24	11.309	10/02/19	Wed	0455	Sideswipe	0	0	1	Night	Dry	Failed To Keep In Proper Lane				
892480330	25	11.309	10/08/19	Tue	1040	Sideswipe	0	0	1	Day	Wet	Improper Passing				
894778790	26	11.309	11/16/19	Sat	0450	Left-Turn	0	0	1	Night	Dry	Ran Red Light				
894807900	27	11.309	12/28/19	Sat	0529	Sideswipe	0	0	1	Night	Wet	Careless or Negligent Manner				
892458590	30	11.309	09/07/19	Sat	1130	Sideswipe	0	0	1	Day	Dry	Improper Passing				
892442320	31	11.309	08/13/19	Tue	1502	Sideswipe	0	0	1	Day	Dry	Failed To Keep In Proper Lane				
	Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Parked Car	Fixed Object	Ran into Water	Other	
	18	0	0	18	4	0	0	1	0	13	0	0	0	0	0	
	Percent	0.00%	0.00%	100.00%	22.22%	0.00%	0.00%	5.56%	0.00%	72.22%	0.00%	0.00%	0.00%	0.00%	0.00%	
	Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/Aggress	Ran off Road	Wrong Way	
	Total	12	6	4	14	1	2	3	1	0	5	0	0	0	0	
	Percent	66.67%	33.33%	22.22%	77.78%	5.56%	11.11%	16.67%	5.56%	0.00%	27.78%	0.00%	0.00%	0.00%	0.00%	
TOTAL ENTERING VEHICLES/ADT: 30,550							SEGMENT CRASH RATE: 2.080 CRASHES PER MILLION VEHICLE MILES									

**State of Florida Department of Transportation
CRASH SUMMARY**

SECTION: 87061000 STATE ROUTE: 886
ROADWAY LIMITS: SR 886/Port Blvd/NE 5 St at SR 5/US 1/Biscayne Blvd M.P. 0.000 TO 0.776 ENGINEER: FDOT D6
STUDY PERIOD: FROM 1/ 2020 TO 12/ 2020 COUNTY: Miami-Dade

Crash Number	No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)				
894835480	1	11.309	02/07/20	Fri	1927	Sideswipe	0	0	1	Night	Dry	Improper Passing				
894811230	3	11.309	01/03/20	Fri	2108	Pedestrian	0	3	0	Night	Dry	Failed to Yield Right-Of-Way				
901281990	6	11.309	10/29/20	Thu	1419	Sideswipe	0	0	1	Day	Dry	Improper Passing				
894826960	8	11.309	01/27/20	Mon	1909	Sideswipe	0	0	1	Night	Dry	Improper Passing				
901204850	9	11.309	04/28/20	Tue	1200	Rear-End	0	0	1	Day	Dry	Followed too Closely				
901268260	10	11.309	10/02/20	Fri	0600	Angle	0	0	1	Day	Wet	Ran Red Light				
894818290	11	11.309	01/15/20	Wed	1000	Sideswipe	0	0	1	Day	Dry	Improper Passing				
	Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
	7	0	1	6	1	0	1	0	0	4	0	1	0	0	0	0
	Percent	0.00%	14.29%	85.71%	14.29%	0.00%	14.29%	0.00%	0.00%	57.14%	0.00%	14.29%	0.00%	0.00%	0.00%	0.00%
	Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/Aggress	Ran off Road	DUI	Wrong Way
	Total	4	3	1	6	0	1	0	1	0	4	0	0	0	0	0
	Percent	57.14%	42.86%	14.29%	85.71%	0.00%	14.29%	0.00%	14.29%	0.00%	57.14%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL ENTERING VEHICLES/ADT: #DIV/0!							SEGMENT CRASH RATE: #DIV/0! CRASHES PER MILLION VEHICLE MILES									

State of Florida Department of Transportation CRASH SUMMARY																
SECTION:		87061000						STATE ROUTE: 886								
ROADWAY LIMITS:		SR 886/Port Blvd/NE 5 St at SR 5/US 1/Biscayne Blvd				M.P. 0.000		TO 0.776		ENGINEER: FDOT D6						
STUDY PERIOD:		FROM 1/ 2021			TO 12/ 2021			COUNTY: Miami-Dade								
Crash Number	No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)				
242128340	2	11.309	03/24/21	Wed	1624	Rear-End	0	0	1	Day	Dry	Followed too Closely				
245281800	3	11.309	07/02/21	Fri	1535	Rear-End	0	0	1	Day	Dry	Followed too Closely				
245305510	4	11.309	08/06/21	Fri	0630	Sideswipe	0	0	1	Day	Dry	Improper Passing				
245323590	5	11.309	09/04/21	Sat	0030	Rear-End	0	0	1	Night	Dry	Followed too Closely				
242099950	6	11.309	02/06/21	Sat	1350	Sideswipe	0	0	1	Day	Wet	Improper Passing				
247833410	10	11.309	12/05/21	Sun	1835	Sideswipe	0	0	1	Night	Dry	Disregarded other Road Markings				
247847620	13	11.309	12/28/21	Tue	1055	Sideswipe	0	0	1	Day	Dry	Disregarded other Road Markings				
247813510	14	11.309	11/05/21	Fri	0535	Sideswipe	0	0	1	Night	Wet	Disregarded other Road Markings				
245279050	15	11.309	06/28/21	Mon	1220	Rear-End	0	0	1	Day	Wet	Improper Backing				
247814360	16	11.309	11/06/21	Sat	0820	Rear-End	0	0	1	Day	Dry	Followed too Closely				
245331940	17	11.309	09/17/21	Fri	0521	Rear-End	0	2	0	Night	Dry	Followed too Closely				
242095530	20	11.309	01/28/21	Thu	2055	Rear-End	0	0	1	Night	Dry	Improper Backing				
242110650	23	11.309	02/26/21	Fri	2200	Pedalcycle	0	1	0	Day	Dry	Failed to Yield Right-Of-Way				
242131430	26	11.309	04/04/21	Sun	1400	Sideswipe	0	0	1	Day	Dry	Improper Passing				
245259940	27	11.309	05/29/21	Sat	1420	Sideswipe	0	0	1	Day	Dry	Improper Passing				
245347960	31	11.309	10/11/21	Mon	0600	Angle	0	0	1	Night	Wet	Ran Red Light				
247808340	33	11.309	10/28/21	Thu	0738	Sideswipe	0	1	0	Day	Dry	Disregarded other Road Markings				
	Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Parked Car	Fixed Object	Ran into Water	Other	
	17	0	3	14	7	0	1	0	0	8	0	1	0	0	0	
	Percent	0.00%	17.65%	82.35%	41.18%	0.00%	5.88%	0.00%	0.00%	47.06%	0.00%	5.88%	0.00%	0.00%	0.00%	
	Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/Aggress	Ran off Road	Wrong Way	
	Total	11	6	4	13	0	1	0	1	0	4	4	0	0	0	
	Percent	64.71%	35.29%	23.53%	76.47%	0.00%	5.88%	0.00%	5.88%	0.00%	23.53%	23.53%	0.00%	0.00%	0.00%	
TOTAL ENTERING VEHICLES/ADT: #DIV/0!							SEGMENT CRASH RATE: #DIV/0! CRASHES PER MILLION VEHICLE MILES									

**State of Florida Department of Transportation
CRASH SUMMARY**

SECTION: 87061000 STATE ROUTE: 886
 ROADWAY LIMITS: SR 886/Port Blvd/NE 5 St at SR 5/US 1/Biscayne Blvd M.P. 0.000 TO 0.776 ENGINEER: FDOT D6
 STUDY PERIOD: FROM 1/ 2022 TO 12/ 2022 COUNTY: Miami-Dade

Crash Number	No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)				
247864960	1	11.309	01/26/22	Wed	2225	Rear-End	0	0	1	Night	Wet	Followed too Closely				
255158190	4	11.309	09/03/22	Sat	2232	Rear-End	0	0	1	Night	Dry	Followed too Closely				
252833110	5	11.309	08/07/22	Sun	1215	Sideswipe	0	0	1	Day	Dry	Improper Passing				
247889850	6	11.309	03/05/22	Sat	1905	Sideswipe	0	0	1	Night	Dry	Disregarded other Road Markings				
252777590	7	11.309	05/10/22	Tue	0705	Sideswipe	0	0	1	Day	Dry	Improper Passing				
247886500	8	11.309	02/28/22	Mon	1901	Sideswipe	0	0	1	Night	Dry	Improper Passing				
252839740	9	11.309	08/17/22	Wed	2320	Angle	0	0	1	Night	Dry	Failed to Yield Right-Of-Way				
252762490	11	11.309	04/17/22	Sun	2028	Angle	0	0	1	Night	Dry	Ran Red Light				
252747270	12	11.309	03/26/22	Sat	1611	Sideswipe	0	0	1	Day	Dry	Disregarded other Road Markings				
247867260	14	11.309	01/30/22	Sun	1611	Angle	0	0	1	Day	Dry	Ran Red Light				
247882680	16	11.309	02/22/22	Tue	2203	Sideswipe	0	1	0	Night	Dry	Improper Passing				
252774130	18	11.309	05/05/22	Thu	1245	Rear-End	0	0	1	Day	Dry	Followed too Closely				
247900060	19	11.309	03/20/22	Sun	0820	Pedalcycle	0	1	0	Day	Dry	Failed to Yield Right-Of-Way				
247900090	20	11.309	03/13/22	Sun	1345	Sideswipe	0	0	1	Day	Dry	Improper Passing				
252837350	21	11.309	08/14/22	Sun	1140	Angle	0	0	1	Day	Dry	Ran Red Light				
252762180	22	11.309	04/17/22	Sun	1342	Sideswipe	0	0	1	Day	Dry	Improper Turn				
247886020	23	11.309	02/27/22	Sun	1155	Sideswipe	0	0	1	Day	Dry	Disregarded other Road Markings				
252769160	29	11.309	04/28/22	Thu	1020	Parked Motor Vehicle	0	0	1	Day	Dry	Failed To Keep In Proper Lane				
255161490	30	11.309	09/09/22	Fri	1234	Rear-End	0	0	1	Day	Dry	Followed too Closely				
255222640	31	11.309	12/10/22	Sat	0810	Angle	0	0	1	Day	Dry	Ran Red Light				
247903670	32	11.309	03/25/22	Fri	1925	Rear-End	0	0	1	Day	Dry	Improper Passing				
255203700	33	11.309	11/11/22	Fri	1825	Sideswipe	0	0	1	Night	Dry	Improper Passing				
255236290	34	11.309	12/31/22	Sat	0802	Sideswipe	0	0	1	Day	Dry	Disregarded other Road Markings				
255188940	35	11.309	10/21/22	Fri	1905	Rear-End	0	0	1	Night	Dry	Improper Backing				
255233480	36	11.309	12/26/22	Mon	0840	Sideswipe	0	0	1	Day	Dry	Improper Passing				
Total No.	25	0	2	23	6	0	5	0	0	12	0	1	1	0	0	0
Percent	0.00%	8.00%	92.00%	24.00%	0.00%	20.00%	0.00%	0.00%	0.00%	48.00%	0.00%	4.00%	4.00%	0.00%	0.00%	0.00%
Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/Aggress	Ran off Road	DUI	Wrong Way	
Total	16	9	1	24	0	1	0	1	0	4	4	0	0	0	0	
Percent	64.00%	36.00%	4.00%	96.00%	0.00%	4.00%	0.00%	4.00%	0.00%	16.00%	16.00%	0.00%	0.00%	0.00%	0.00%	
TOTAL ENTERING VEHICLES/ADT: #DIV/0!							SEGMENT CRASH RATE: #DIV/0! CRASHES PER MILLION VEHICLE MILES									

State of Florida Department of Transportation CRASH SUMMARY																
SECTION:		87061000								STATE ROUTE: 886						
ROADWAY LIMITS:		SR 886/Port Blvd/NE 6 St at SR 5/US 1/Biscayne Blvd					M.P. 0.000		TO 0.776		ENGINEER: FDOT D6					
STUDY PERIOD:		FROM 1/ 2018				TO 12/ 2018				COUNTY: Miami-Dade						
Crash Number	No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)				
878480370	2	11.353	04/14/18	Sat	1130	Sideswipe	0	0	1	Day	Dry	Improper Passing				
878620290	3	11.360	11/14/18	Wed	1035	Sideswipe	0	0	1	Day	Dry	Improper Passing				
878626130	4	11.362	11/24/18	Sat	1540	Sideswipe	0	0	1	Day	Dry	Improper Passing				
878631200	5	11.366	12/03/18	Mon	2255	Sideswipe	0	0	1	Night	Dry	Improper Passing				
875761870	6	11.368	02/26/18	Mon	0640	Sideswipe	0	0	1	Day	Dry	Disregarded other Road Markings				
878487070	7	11.368	04/24/18	Tue	0712	Angle	0	0	1	Day	Dry	Ran Red Light				
878499430	8	11.368	05/12/18	Sat	0920	Angle	0	0	1	Day	Dry	Ran Red Light				
878506830	9	11.368	04/17/18	Tue	0830	Angle	0	0	1	Day	Dry	Ran Red Light				
878538530	10	11.368	07/11/18	Wed	2240	Angle	0	0	1	Night	Dry	Ran Red Light				
878591350	11	11.368	10/02/18	Tue	0813	Sideswipe	0	0	1	Day	Dry	Disregarded other Road Markings				
875744430	12	11.373	01/29/18	Mon	1100	Other Fixed Object	0	0	1	Day	Dry	Improper Turn				
875761660	13	11.373	02/25/18	Sun	1545	Rear-End	0	0	1	Day	Dry	Followed too Closely				
878551460	14	11.377	04/22/18	Sun	0950	Sideswipe	0	1	0	Day	Wet	Improper Passing				
878624810	15	11.377	11/21/18	Wed	1535	Pedalcycle	0	1	0	Day	Dry	Careless or Negligent Manner				
878489150	16	11.387	04/26/18	Thu	2130	Rear-End	0	0	1	Night	Dry	Followed too Closely				
878648070	17	11.387	12/27/18	Thu	1635	Sideswipe	0	0	1	Day	Dry	Improper Passing				
878480780	18	0.006	04/14/18	Sat	2000	Rear-End	0	0	1	Day	Dry	Followed too Closely				
875732460	36	11.387	01/11/18	Thu	1408	Rear-End	0	1	0	Day	Wet	Followed too Closely				
871568510	37	11.387	02/10/18	Sat	1425	Sideswipe	0	0	1	Day	Dry	Improper Passing				
	Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
	19	0	3	16	4	0	4	0	0	9	0	1	0	1	0	0
	Percent	0.00%	15.79%	84.21%	21.05%	0.00%	21.05%	0.00%	0.00%	47.37%	0.00%	5.26%	0.00%	5.26%	0.00%	0.00%
	Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/Aggress	Ran off Road	DUI	Wrong Way
	Total	16	3	2	17	1	0	1	4	0	7	2	0	0	0	0
	Percent	84.21%	15.79%	10.53%	89.47%	5.26%	0.00%	5.26%	21.05%	0.00%	36.84%	10.53%	0.00%	0.00%	0.00%	0.00%
TOTAL ENTERING VEHICLES/ADT: 33,447							SEGMENT CRASH RATE: 2.006 CRASHES PER MILLION VEHICLE MILES									

**State of Florida Department of Transportation
CRASH SUMMARY**

SECTION: 87061000 STATE ROUTE: 886
 ROADWAY LIMITS: SR 886/Port Blvd/NE 6 St at SR 5/US 1/Biscayne Blvd M.P. 0.000 TO 0.776 ENGINEER: FDOT D6
 STUDY PERIOD: FROM 1/ 2019 TO 12/ 2019 COUNTY: Miami-Dade

Crash Number	No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
888285070	1	11.368	03/22/19	Fri	1121	Sideswipe	0	0	1	Day	Dry	Improper Passing
892477900	2	11.368	10/05/19	Sat	0830	Angle	0	0	1	Day	Dry	Ran Red Light
892479020	3	11.368	10/06/19	Sun	1928	Angle	0	0	1	Night	Wet	Disregarded Other Traffic Sign
894808940	4	11.368	12/30/19	Mon	1816	Rear-End	0	0	1	Night	Dry	Followed too Closely
892488810	5	11.376	10/20/19	Sun	1718	Rear-End	0	0	1	Day	Dry	Followed too Closely
894787650	6	11.387	11/29/19	Fri	2331	Rear-End	0	0	1	Night	Dry	Followed too Closely
894798410	7	11.387	12/13/19	Fri	2110	Sideswipe	0	0	1	Night	Dry	Improper Passing
892475460	8	11.406	09/26/19	Thu	1830	Rear-End	0	0	1	Day	Dry	Followed too Closely
892492210	9	0.001	10/25/19	Fri	0800	Rear-End	0	0	1	Day	Dry	Followed too Closely
894771110	28	11.309	11/04/19	Mon	1749	Sideswipe	0	0	1	Day	Dry	Improper Passing
876583110	29	11.309	01/19/19	Sat	1200	Pedestrian	0	1	0	Day	Dry	Careless or Negligent Manner

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
11	0	1	10	5	0	2	0	0	3	0	1	0	0	0	0
Percent	0.00%	9.09%	90.91%	45.45%	0.00%	18.18%	0.00%	0.00%	27.27%	0.00%	9.09%	0.00%	0.00%	0.00%	0.00%

Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/Aggress	Ran off Road	DUI	Wrong Way
Total	7	4	1	10	1	0	0	1	0	3	1	0	0	0	0
Percent	63.64%	36.36%	9.09%	90.91%	9.09%	0.00%	0.00%	9.09%	0.00%	27.27%	9.09%	0.00%	0.00%	0.00%	0.00%

TOTAL ENTERING VEHICLES/ADT: **31,644**

SEGMENT CRASH RATE: **1.227** CRASHES PER MILLION VEHICLE MILES

State of Florida Department of Transportation CRASH SUMMARY																
SECTION:		87061000								STATE ROUTE: 886						
ROADWAY LIMITS:		SR 886/Port Blvd/NE 6 St at SR 5/US 1/Biscayne Blvd					M.P. 0.000		TO 0.776		ENGINEER: FDOT D6					
STUDY PERIOD:		FROM 1/ 2020				TO 12/ 2020				COUNTY: Miami-Dade						
Crash Number	No.	MILE POST	DATE	DAY	TIME	CRASH TYPE			FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)		
894811560	2	11.309	01/04/20	Sat	1610	Rear-End			0	0	1	Day	Dry	Followed too Closely		
894828820	4	11.309	01/30/20	Thu	1400	Sideswipe			0	0	1	Day	Dry	Improper Passing		
894829600	5	11.309	01/31/20	Fri	1135	Sideswipe			0	0	1	Day	Dry	Improper Passing		
894821170	7	11.309	01/19/20	Sun	2330	Sideswipe			0	0	1	Night	Dry	Improper Passing		
894847440	12	11.309	02/24/20	Mon	1912	Rear-End			0	0	1	Night	Dry	Followed too Closely		
Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other	
5	0	0	5	2	0	0	0	0	3	0	0	0	0	0	0	
Percent	0.00%	0.00%	100.00%	40.00%	0.00%	0.00%	0.00%	0.00%	60.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/Aggress	Ran off Road	DUI	Wrong Way	
Total	3	2	0	5	0	0	0	0	0	3	0	0	0	0	0	
Percent	60.00%	40.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	60.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
TOTAL ENTERING VEHICLES/ADT: #DIV/0!								SEGMENT CRASH RATE: #DIV/0! CRASHES PER MILLION VEHICLE MILES								

State of Florida Department of Transportation CRASH SUMMARY																
SECTION:		87061000						STATE ROUTE: 886								
ROADWAY LIMITS:		SR 886/Port Blvd/NE 6 St at SR 5/US 1/Biscayne Blvd				M.P. 0.000		TO 0.776		ENGINEER: FDOT D6						
STUDY PERIOD:		FROM 1/ 2021			TO 12/ 2021			COUNTY: Miami-Dade								
Crash Number	No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)				
242157700	1	11.309	05/15/21	Sat	0820	Sideswipe	0	0	1	Day	Dry	Improper Passing				
247814730	7	11.309	11/06/21	Sat	1830	Sideswipe	0	0	1	Day	Dry	Improper Passing				
245341000	8	11.309	10/02/21	Sat	2350	Sideswipe	0	0	1	Night	Dry	Improper Passing				
247833120	9	11.309	12/05/21	Sun	1204	Sideswipe	0	0	1	Day	Dry	Careless or Negligent Manner				
245327910	11	11.309	09/11/21	Sat	0620	Angle	0	0	1	Day	Dry	Failed to Yield Right-Of-Way				
245291680	12	11.309	07/16/21	Fri	2245	Sideswipe	0	0	1	Night	Wet	Improper Passing				
245261110	18	11.309	05/31/21	Mon	1425	Left-Turn	0	0	1	Day	Dry	Failed to Yield Right-Of-Way				
247806290	19	11.309	10/25/21	Mon	2340	Sideswipe	0	0	1	Night	Dry	Improper Passing				
245296920	21	11.309	07/24/21	Sat	1730	Rear-End	0	0	1	Day	Dry	Followed too Closely				
245309730	22	11.309	08/13/21	Fri	1020	Sideswipe	0	0	1	Day	Dry	Improper Passing				
247809720	24	11.309	10/29/21	Fri	2240	Sideswipe	0	0	1	Night	Dry	Improper Passing				
247819150	25	11.309	11/13/21	Sat	2020	Sideswipe	0	0	1	Night	Dry	Improper Passing				
242097420	28	11.309	02/01/21	Mon	1534	Rear-End	0	0	1	Day	Dry	Improper Backing				
245273670	29	11.309	06/19/21	Sat	1904	Rear-End	0	0	1	Day	Dry	Followed too Closely				
245289100	30	11.309	07/13/21	Tue	1622	Rear-End	0	0	1	Day	Wet	Followed too Closely				
	Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
	15	0	0	15	4	0	1	1	0	9	0	0	0	0	0	0
	Percent	0.00%	0.00%	100.00%	26.67%	0.00%	6.67%	6.67%	0.00%	60.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/Aggress	Ran off Road	DUI	Wrong Way
	Total	10	5	2	13	1	2	0	0	0	8	0	0	0	0	0
	Percent	66.67%	33.33%	13.33%	86.67%	6.67%	13.33%	0.00%	0.00%	0.00%	53.33%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL ENTERING VEHICLES/ADT: #DIV/0!							SEGMENT CRASH RATE: #DIV/0! CRASHES PER MILLION VEHICLE MILES									

**State of Florida Department of Transportation
CRASH SUMMARY**

SECTION: 87061000 STATE ROUTE: 886
ROADWAY LIMITS: SR 886/Port Blvd/NE 6 St at SR 5/US 1/Biscayne Blvd M.P. 0.000 TO 0.776 ENGINEER: FDOT D6
STUDY PERIOD: FROM 1/ 2022 TO 12/ 2022 COUNTY: Miami-Dade

Crash Number	No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
247860800	2	11.309	01/20/22	Thu	1700	Sideswipe	0	0	1	Day	Dry	Improper Passing
247884430	3	11.309	02/25/22	Fri	1400	Rear-End	0	0	1	Day	Dry	Followed too Closely
247861880	10	11.309	01/21/22	Fri	2257	Sideswipe	0	0	1	Night	Dry	Improper Passing
255155320	13	11.309	08/30/22	Tue	2032	Sideswipe	0	0	1	Night	Dry	Failed To Keep In Proper Lane
247862050	15	11.309	01/22/22	Sat	1103	Angle	0	0	1	Day	Dry	Ran Red Light
252781540	17	11.309	05/16/22	Mon	1153	Sideswipe	0	0	1	Day	Dry	Improper Passing
252810200	24	11.309	07/01/22	Fri	1615	Sideswipe	0	0	1	Day	Dry	Improper Passing
255226740	25	11.309	12/15/22	Thu	2240	Rear-End	0	0	1	Night	Dry	Followed too Closely
255208740	26	11.309	11/19/22	Sat	1058	Sideswipe	0	0	1	Day	Dry	Failed To Keep In Proper Lane
255212450	27	11.309	11/26/22	Sat	2315	Sideswipe	0	0	1	Night	Dry	Improper Passing
255189290	28	11.309	10/22/22	Sat	0930	Angle	0	0	1	Day	Dry	Ran Red Light

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
11	0	0	11	2	0	2	0	0	7	0	0	0	0	0	0
Percent	0.00%	0.00%	100.00%	18.18%	0.00%	18.18%	0.00%	0.00%	63.64%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/Aggress	Ran off Road	DUI	Wrong Way
Total	7	4	0	11	1	2	0	0	0	8	0	0	0	0	0
Percent	63.64%	36.36%	0.00%	100.00%	9.09%	18.18%	0.00%	0.00%	0.00%	72.73%	0.00%	0.00%	0.00%	0.00%	0.00%

TOTAL ENTERING VEHICLES/ADT: **#DIV/0!**

SEGMENT CRASH RATE: **#DIV/0!** CRASHES PER MILLION VEHICLE MILES

APPENDIX B – RAW CRASH DATA



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          CCCCCCCCCC      AAAAAAAAAA      RRRRRRRRRR
        CCCCCCCCCC      AAAAAAAAAAAA      RRRRRRRRRRRR
       CCC             AAA      AAA      RRR      RRR
      CCC             AAA      AAA      RRR      RRR
     CCC             AAAAAAAAAA      RRRRRRRRRRRR
    CCC             AAAAAAAAAAAA      RRRRRRRRRRRR
   CCC             AAA      AAA      RRR      RRR
  CCC             AAA      AAA      RRR      RRR
 CCCCCCCCCC      AAA      AAA      RRR      RRRR
CCCCCCCCCCCC      AAA      AAA      RRR      RRRRRR
```

C R A S H R E P O R T I N G S Y S T E M

N O T I C E: THE INFORMATION CONTAINED IN THIS DOCUMENT (REPORT, SCHEDULE, LIST, OR DATA) HAS BEEN COMPILED FROM INFORMATION COLLECTED FOR THE PURPOSE OF IDENTIFYING, EVALUATING, OR PLANNING SAFETY ENHANCEMENTS. THIS PRODUCT IDENTIFIES INFORMATION USED FOR THE PURPOSE OF DEVELOPING HIGHWAY SAFETY CONSTRUCTION IMPROVEMENT PROJECTS WHICH MAY BE IMPLEMENTED UTILIZING FEDERAL-AID HIGHWAY FUNDS. ANY DOCUMENT DISPLAYING THIS NOTICE SHALL BE USED ONLY FOR THOSE PURPOSES DEEMED APPROPRIATE BY THE FLORIDA DEPARTMENT OF TRANSPORTATION. SEE TITLE 23, UNITED STATES CODE, SECTION 409.

```
I/O NAME: ..... CARI122
PROGRAM ID: ..... CARPJ122
REPORT NUMBER: ..... 01
RUN CLASS: ..... A
MESSAGE CLASS: ..... Q
PRINTER DEST: ..... LOCAL
# COPIES: ..... 01
ACCOUNT #: ..... 5565945
SUBMIT W/HOLD? ..... N
USERID: ..... KNCHPCK
DETAIL SORT ORDER: ..... 1 - SORT BY ROADWAY, MILE POINT
PRINT SEGMENTS? ..... Y
PRINT INTERSECTIONS? ..... N
SUMMARY FORMAT: ..... 2 - TOP LINE ALL BREAKS
OVERRIDE VALUES:
MAX # OF BREAKS: ..... 06
CRASH RATE CATEGORY: ...
AVERAGE DAILY TRAFFIC:..
# OF LEGS: .....
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REPORT...CARPJ122-01
 DATE...06/29/2022
 TIME...10:01:09

FLORIDA - DEPARTMENT OF TRANSPORTATION
 C A R - CRASH ANALYSIS REPORTING SYSTEM
 CRASH DATA (IN 2011 AND LATER) DETAIL FOR STATE-MAINTAINED ROADS

PAGE NO: 3
 USERID: KNCHPCK
 I/O.... CARI122

COMMENT: 1 - SORT BY ROADWAY, MILE POINT
 FROM: 01/01/2017 TO 12/31/2019 RAMPS INCL
 FROM CO/SEC/SUB: 87 061 000 MP: 000.000 INFL INCL
 TO CO/SEC/SUB: 87 061 000 MP: 000.776 CR/OS INCL

FOR YEAR	FATAL CRASH STATISTICS			INJURY CRASH STATS		PROPERTY DAMAGE ONLY	TOTALS			INFLUENCE CRASHES OCCURRING ON INTERSECTING RDWYS	
	CRASHES	FATALITIES	INJURIES	CRASHES	INJURIES	CRASHES	CRASHES	FATALITIES	INJURIES	AT INT.	INFL AREA
2017	0	0	0	7	10	27	34	0	10	20	10
2018	0	0	0	3	3	20	23	0	3	7	11
2019	0	0	0	0	0	12	12	0	0	6	4
TOTAL	0	0	0	10	13	59	69	0	13	33	25

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REPORT...CARPJ122-01
 DATE...06/29/2022
 TIME...10:01:09

FLORIDA - DEPARTMENT OF TRANSPORTATION
 C A R - CRASH ANALYSIS REPORTING SYSTEM
 CRASH DATA (IN 2011 AND LATER) DETAIL FOR STATE-MAINTAINED ROADS
 *** REPORT TOTALS ***

PAGE NO: 4
 USERID: KNCHPCK
 I/O.... CARI122

CUMULATIVE TOTALS FOR ALL LOCATIONS SUBMITTED - OVERLAPPING OR INTERSECTING LOCATIONS MAY RESULT IN CRASHES COUNTED MORE THAN ONCE

FOR YEAR	FATAL CRASH STATISTICS			INJURY CRASH STATS		PROPERTY DAMAGE ONLY	TOTALS			INFLUENCE CRASHES OCCURRING ON INTERSECTING RDWYS	
	CRASHES	FATALITIES	INJURIES	CRASHES	INJURIES	CRASHES	CRASHES	FATALITIES	INJURIES	AT INT.	INFL AREA
2017	0	0	0	7	10	27	34	0	10	20	10
2018	0	0	0	3	3	20	23	0	3	7	11
2019	0	0	0	0	0	12	12	0	0	6	4
TOTAL	0	0	0	10	13	59	69	0	13	33	25

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```
          CCCCCCCCCC      AAAAAAAAAA      RRRRRRRRRR
        CCCCCCCCCC      AAAAAAAAAAAA      RRRRRRRRRRRR
       CCC             AAA      AAA      RRR      RRR
      CCC             AAA      AAA      RRR      RRR
     CCC             AAAAAAAAAA      RRRRRRRRRRRR
    CCC             AAAAAAAAAAAA      RRRRRRRRRRRRRR
   CCC             AAA      AAA      RRR      RRR
  CCC             AAA      AAA      RRR      RRR
 CCCCCCCCCC      AAA      AAA      RRR      RRRR
CCCCCCCCCCCC      AAA      AAA      RRR      RRRRRR
```

C R A S H R E P O R T I N G S Y S T E M

N O T I C E: THE INFORMATION CONTAINED IN THIS DOCUMENT (REPORT, SCHEDULE, LIST, OR DATA) HAS BEEN COMPILED FROM INFORMATION COLLECTED FOR THE PURPOSE OF IDENTIFYING, EVALUATING, OR PLANNING SAFETY ENHANCEMENTS. THIS PRODUCT IDENTIFIES INFORMATION USED FOR THE PURPOSE OF DEVELOPING HIGHWAY SAFETY CONSTRUCTION IMPROVEMENT PROJECTS WHICH MAY BE IMPLEMENTED UTILIZING FEDERAL-AID HIGHWAY FUNDS. ANY DOCUMENT DISPLAYING THIS NOTICE SHALL BE USED ONLY FOR THOSE PURPOSES DEEMED APPROPRIATE BY THE FLORIDA DEPARTMENT OF TRANSPORTATION. SEE TITLE 23, UNITED STATES CODE, SECTION 407.

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I/O NAME: ..... CARI122
PROGRAM ID: ..... CARPJ122
REPORT NUMBER: ..... 01
RUN CLASS: ..... A
MESSAGE CLASS: ..... Q
PRINTER DEST: ..... LOCAL
# COPIES: ..... 01
ACCOUNT #: ..... 5565945
SUBMIT W/HOLD? ..... N
USERID: ..... KNCHPCK
DETAIL SORT ORDER: ..... 1 - SORT BY ROADWAY, MILE POINT
PRINT SEGMENTS? ..... Y
PRINT INTERSECTIONS? ..... N
SUMMARY FORMAT: ..... 2 - TOP LINE ALL BREAKS
OVERRIDE VALUES:
MAX # OF BREAKS: ..... 06
CRASH RATE CATEGORY: ...
AVERAGE DAILY TRAFFIC:..
# OF LEGS: .....
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REPORT...CARPJ122-01
DATE...09/19/2022
TIME...11:36:20

FLORIDA - DEPARTMENT OF TRANSPORTATION
C A R - CRASH ANALYSIS REPORTING SYSTEM
CRASH DATA (IN 2011 AND LATER) DETAIL FOR STATE-MAINTAINED ROADS

PAGE NO: 2
USERID: KNCHPCK
I/O.... CARO213

COMMENT:

1 - SORT BY ROADWAY, MILE POINT

FROM: 01/01/2017 TO 12/31/2019 RAMP INCL
FROM CO/SEC/SUB: 87 030 000 MP: 011.309 INFL INCL
TO CO/SEC/SUB: 87 030 000 MP: 011.350 CR/OS INCL

C	ROADWYID	M	N	S	ADT	Y	M	D	H	CRCC	A	H	MO	L	W	R	R	DL	R	A	V	V	VF	VM	VA	V	V	V	VN	VN	N	V	#	#	#										
R	N	C	S	S	I	EN	TR	VAR	E	O	A	O	RALA	L	AE	AF	IC	EC	D	OC	OO	O	C	1	1	1U	1A	1C	1A	2	2N	2N	2M	2M	M	2N									
A	U	O	E	E	L	AO	AO	EIA	A	N	Y	U	ATAT	C	RV	N	GO	AO	AO	TC	A	C		N	N	T	G		M	M					M	V	K	I							
S	M	U	C	SC	E	RD	TA	RLF	R	T		R	SESE		ME	NC	HN	TN	S	DN	A	D		D	B	SC	E	DI	DE	D	B	F	MP	AA	A	D	E	I	N						
H	B	N	T	UT	P	EE	ED	AYF		H		H	SG	I	FN	EO	TD	HD	U	D	ST		L	I	OT	P	U	RO	R	I	OD	UL	NR	CC	C	RA	H	L	J						
E		T	I	BI	O	S		G	I			O	N	UT	RL	IT	ET	R	T	II	S	N	R	DY	E	V	IN	I	R	DE	NO	VI	TT	T	AG	C	L	U							
R		Y	O	O	S	T		E	C			R	V	L	L	NN	RN	F	N	TO	D		YP	C	E	V	V	/S	CC	RO	1N	N	GE	L	E	R									
		N	N	T				Y		1	GS	S	S	EN	#	E	R	R	1	R		C	/	/R	/1	2	E	S	D	D															

875722910	87030000	11.328	1180		5	040000	17	12	24	18	U-6DR	0	14	01	04	01	01	01	01	R	3	N	11	01	01	10	29	N	01	01	06	01					40	2	0	01					
878473850	87030000	11.328	1180		5	035000	18	04	05	21	U-6DR	0	15	00	04	01	01	01	01	M	M	0	88	88	88	00	00	S	01	01	01								00	2	0	00			
859670580	87030000	11.335	1267		5	040000	17	04	29	22	U-6DR	0	14	01	04	01	01	01	01	R	1	S	01	01	01	10	51	S	16	01	01	01									00	2	0	00	
878461550	87030000	11.337	1267		5	035000	18	03	20	23	U-6DR	0	14	01	04	01	01	01	01	R	3	N	01	01	01	00	59	N	01	01	08	01									46	5	0	01	
868726850	87030000	11.341	1267		5	040000	17	05	27	11	U-6DR	0	14	03	01	01	01	01	01	03	R	L	N	01	01	04	04	28	N	01	01	01	01									55	2	0	00

REPORT...CARPJ122-01
 DATE...09/19/2022
 TIME...11:36:20

FLORIDA - DEPARTMENT OF TRANSPORTATION
 C A R - CRASH ANALYSIS REPORTING SYSTEM
 CRASH DATA (IN 2011 AND LATER) DETAIL FOR STATE-MAINTAINED ROADS

PAGE NO: 3
 USERID: KNCHPCK
 I/O.... CARI122

COMMENT: 1 - SORT BY ROADWAY, MILE POINT
 FROM: 01/01/2017 TO 12/31/2019 RAMPS INCL
 FROM CO/SEC/SUB: 87 030 000 MP: 011.309 INFL INCL
 TO CO/SEC/SUB: 87 030 000 MP: 011.350 CR/OS INCL

FOR YEAR	FATAL CRASH STATISTICS			INJURY CRASH STATS		PROPERTY DAMAGE ONLY	TOTALS			INFLUENCE CRASHES OCCURRING ON INTERSECTING RDWYS	
	CRASHES	FATALITIES	INJURIES	CRASHES	INJURIES	CRASHES	CRASHES	FATALITIES	INJURIES	AT INT.	INFL AREA
2017	0	0	0	2	2	9	11	0	2	2	1
2018	0	0	0	4	5	12	16	0	5	6	1
2019	0	0	0	0	0	15	15	0	0	3	3
TOTAL	0	0	0	6	7	36	42	0	7	11	5

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REPORT...CARPJ122-01
 DATE...09/19/2022
 TIME...11:36:20

FLORIDA - DEPARTMENT OF TRANSPORTATION
 C A R - CRASH ANALYSIS REPORTING SYSTEM
 CRASH DATA (IN 2011 AND LATER) DETAIL FOR STATE-MAINTAINED ROADS
 *** REPORT TOTALS ***

PAGE NO: 4
 USERID: KNCHPCK
 I/O.... CARI122

CUMULATIVE TOTALS FOR ALL LOCATIONS SUBMITTED - OVERLAPPING OR INTERSECTING LOCATIONS MAY RESULT IN CRASHES COUNTED MORE THAN ONCE

FOR YEAR	FATAL CRASH STATISTICS			INJURY CRASH STATS		PROPERTY DAMAGE ONLY	TOTALS			INFLUENCE CRASHES OCCURRING ON INTERSECTING RDWYS	
	CRASHES	FATALITIES	INJURIES	CRASHES	INJURIES	CRASHES	CRASHES	FATALITIES	INJURIES	AT INT.	INFL AREA
2017	0	0	0	2	2	9	11	0	2	2	1
2018	0	0	0	4	5	12	16	0	5	6	1
2019	0	0	0	0	0	15	15	0	0	3	3
TOTAL	0	0	0	6	7	36	42	0	7	11	5













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SIGNAL 4 - SR 886 from Biscayne Blvd to Port Miami Blvd								
REPORT NUMBER	CRASH YEAR	CRASH DATE AND TIME	LIGHT CONDITION	WEATHER CONDITION	ROAD SURFACE CONDITION	S4 CRASH TYPE	S4 CRASH SEVERITY DETAIL	S4 PROPERTY DAMAGE
24528180	2021	7/2/2021 15:35	Daylight	Clear	Dry	Rear End	No Injury	0
25283311	2022	8/7/2022 12:15	Daylight	Clear	Dry	Rear End	No Injury	0
24530551	2021	8/6/2021 6:30	Daylight	Clear	Dry	Same Direction Sideswipe	No Injury	0
24788985	2022	3/5/2022 19:05	Dark - Lighted	Clear	Dry	Left Rear	No Injury	0
89481156	2020	1/4/2020 16:10	Daylight	Clear	Dry	Backed Into	No Injury	0
24532359	2021	9/4/2021 0:30	Dark - Lighted	Clear	Dry	Rear End	No Injury	0
25277759	2022	5/10/2022 7:05	Daylight	Clear	Dry	Same Direction Sideswipe	No Injury	0
89482026	2020	1/17/2020 16:42	Daylight	Clear	Dry	Parked Vehicle	No Injury	0
24209995	2021	2/6/2021 13:50	Daylight	Rain	Wet	Same Direction Sideswipe	No Injury	0
24788650	2022	2/28/2022 19:01	Dark - Lighted	Clear	Dry	Unknown	No Injury	0
24781473	2021	11/6/2021 18:30	Daylight	Clear	Dry	Unknown	No Injury	0
24534100	2021	10/2/2021 23:50	Dark - Lighted	Clear	Dry	Same Direction Sideswipe	No Injury	0
24786188	2022	1/21/2022 22:57	Dawn	Clear	Dry	Same Direction Sideswipe	No Injury	0
25276249	2022	4/17/2022 20:28	Dark - Lighted	Clear	Dry	Unknown	No Injury	0
25274727	2022	3/26/2022 16:11	Daylight	Clear	Dry	Other	No Injury	0
24783341	2021	12/5/2021 18:35	Dark - Lighted	Clear	Dry	Same Direction Sideswipe	No Injury	0
24532791	2021	9/11/2021 6:20	Daylight	Clear	Dry	Right Angle	No Injury	0
24529168	2021	7/16/2021 22:45	Dark - Lighted	Rain	Wet	Other	No Injury	0
24527417	2021	6/20/2021 15:40	Daylight	Clear	Dry	Parked Vehicle	No Injury	0
24783312	2021	12/5/2021 12:04	Daylight	Clear	Dry	Same Direction Sideswipe	No Injury	0
25283974	2022	8/17/2022 23:20	Dark - Lighted	Clear	Dry	Rear End	No Injury	0
24786496	2022	1/26/2022 22:25	Dark - Lighted	Rain	Wet	Rear End	No Injury	0
24786080	2022	1/20/2022 17:00	Daylight	Clear	Dry	Rear End	No Injury	0
24788443	2022	2/25/2022 14:00	Daylight	Clear	Dry	Rear End	No Injury	0
24530491	2021	8/5/2021 6:00	Daylight	Clear	Dry	Off Road	No Injury	0
24215770	2021	5/15/2021 8:20	Daylight	Clear	Dry	Same Direction Sideswipe	No Injury	0
25515819	2022	9/3/2022 22:32	Dark - Lighted	Clear	Dry	Rear End	No Injury	0
89483548	2020	2/7/2020 19:27	Dark - Lighted	Clear	Dry	Same Direction Sideswipe	No Injury	0
24212834	2021	3/24/2021 16:24	Daylight	Clear	Dry	Rear End	No Injury	0
89481123	2020	1/3/2020 21:08	Dark - Lighted	Clear	Dry	Pedestrian	Possible Injury	2
24784762	2021	12/28/2021 10:55	Daylight	Clear	Dry	Same Direction Sideswipe	No Injury	0
24781351	2021	11/5/2021 5:35	Dark - Lighted	Rain	Wet	Same Direction Sideswipe	No Injury	0
25515532	2022	8/30/2022 20:32	Dark - Lighted	Clear	Dry	Same Direction Sideswipe	No Injury	0
24527905	2021	6/28/2021 12:20	Daylight	Rain	Wet	Backed Into	No Injury	0
24786726	2022	1/30/2022 16:11	Daylight	Clear	Dry	Right Angle	No Injury	0
24781436	2021	11/6/2021 8:20	Daylight	Clear	Dry	Rear End	No Injury	0
24533194	2021	9/17/2021 5:21	Dark - Lighted	Clear	Dry	Rear End	Possible Injury	0
24526111	2021	5/31/2021 14:25	Daylight	Clear	Dry	Left Rear	No Injury	0
24780629	2021	10/25/2021 23:40	Dark - Lighted	Clear	Dry	Same Direction Sideswipe	No Injury	0
24209553	2021	1/28/2021 20:55	Dusk	Clear	Dry	Backed Into	No Injury	0
24786205	2022	1/22/2022 11:03	Daylight	Clear	Dry	Right Angle	No Injury	0
24529692	2021	7/24/2021 17:30	Daylight	Clear	Dry	Rear End	No Injury	0
89482882	2020	1/30/2020 14:00	Daylight	Clear	Dry	Unknown	No Injury	0
25282071	2022	7/14/2022 11:00	Daylight	Clear	Dry	Rear End	No Injury	0
88466971	2021	6/11/2021 7:43	Daylight	Clear	Dry	Same Direction Sideswipe	No Injury	0
24788268	2022	2/22/2022 22:03	Dark - Lighted	Clear	Dry	Same Direction Sideswipe	Possible Injury	0
24780991	2021	10/30/2021 12:14	Daylight	Clear	Dry	Single Vehicle	No Injury	0
24530973	2021	8/13/2021 10:20	Daylight	Clear	Dry	Rear End	No Injury	0
89482960	2020	1/31/2020 11:35	Daylight	Clear	Dry	Same Direction Sideswipe	No Injury	0
24211065	2021	2/26/2021 22:00	Daylight	Clear	Dry	Pedestrian	Incapacitating In	0
24780972	2021	10/29/2021 22:40	Dark - Lighted	Clear	Dry	Same Direction Sideswipe	No Injury	0
25278154	2022	5/16/2022 11:53	Daylight	Clear	Dry	Same Direction Sideswipe	No Injury	0
24781915	2021	11/13/2021 20:20	Dark - Lighted	Clear	Dry	Same Direction Sideswipe	No Injury	0
24780520	2021	10/22/2021 23:30	Dark - Lighted	Rain	Wet	Same Direction Sideswipe	No Injury	0
25277413	2022	5/5/2022 12:45	Daylight	Clear	Dry	Rear End	No Injury	0
24790006	2022	3/20/2022 8:20	Daylight	Clear	Dry	Right Angle	Possible Injury	0
24213143	2021	4/4/2021 14:00	Daylight	Clear	Dry	Unknown	No Injury	0
24525994	2021	5/29/2021 14:20	Daylight	Clear	Dry	Same Direction Sideswipe	No Injury	0
24790009	2022	3/13/2022 13:45	Daylight	Clear	Dry	Rear End	No Injury	0
89520114	2020	3/9/2020 12:45	Daylight	Cloudy	Dry	Same Direction Sideswipe	No Injury	0
24209742	2021	2/1/2021 15:34	Daylight	Clear	Dry	Backed Into	No Injury	0
90128199	2020	10/29/2020 14:19	Daylight	Clear	Dry	Other	No Injury	0
24533645	2021	9/25/2021 0:50	Daylight	Clear	Dry	Right Angle	No Injury	0
88509882	2021	7/19/2021 8:40	Daylight	Clear	Dry	Rear End	Incapacitating In	0
24527367	2021	6/19/2021 19:04	Daylight	Clear	Dry	Rear End	No Injury	0
89482117	2020	1/19/2020 23:30	Dark - Not Lighted	Clear	Dry	Same Direction Sideswipe	No Injury	0
25283735	2022	8/14/2022 11:40	Daylight	Clear	Dry	Other	No Injury	0
89482696	2020	1/27/2020 19:09	Dark - Lighted	Clear	Dry	Same Direction Sideswipe	No Injury	0
24528910	2021	7/13/2021 16:22	Daylight	Rain	Wet	Rear End	No Injury	0
25276218	2022	4/17/2022 13:42	Daylight	Clear	Dry	Other	No Injury	0
88563437	2021	9/24/2021 11:45	Daylight	Clear	Dry	Same Direction Sideswipe	No Injury	0
24534796	2021	10/11/2021 6:00	Dark - Not Lighted	Rain	Wet	Right Angle	No Injury	0
24788602	2022	2/27/2022 11:55	Daylight	Clear	Dry	Other	No Injury	0
89552812	2021	1/21/2021 6:00	Dark - Lighted	Clear	Dry	Off Road	No Injury	1
25281020	2022	7/1/2022 16:15	Daylight	Clear	Dry	Unknown	No Injury	0
90120485	2020	4/28/2020 12:00	Daylight	Clear	Dry	Rear End	No Injury	0
90126826	2020	10/2/2020 6:00	Daylight	Rain	Wet	Head On	No Injury	0
24780834	2021	10/28/2021 7:38	Daylight	Clear	Dry	Right Angle	Possible Injury	0
89481829	2020	1/15/2020 10:00	Daylight	Clear	Dry	Same Direction Sideswipe	No Injury	0

APPENDIX C – OPERATIONAL ANALYSIS FOR SR 886/NE 5 STREET AND SR 5/US 1/BISCAYNE BOULEVARD

Lanes, Volumes, Timings
2318: Biscayne Blvd & NE 5 ST

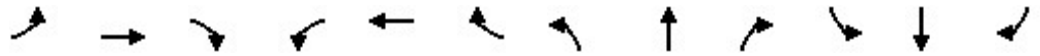
03/02/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑								↑↑↑	
Traffic Volume (vph)	0	307	157	0	0	0	0	0	0	0	1030	0
Future Volume (vph)	0	307	157	0	0	0	0	0	0	0	1030	0
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00
Fr t			0.850									
Flt Protected												
Satd. Flow (prot)	0	4988	1553	0	0	0	0	0	0	0	6346	0
Flt Permitted												
Satd. Flow (perm)	0	4988	1553	0	0	0	0	0	0	0	6346	0
Satd. Flow (RTOR)			109									
Adj. Flow (vph)	0	409	191	0	0	0	0	0	0	0	1226	0
Lane Group Flow (vph)	0	409	191	0	0	0	0	0	0	0	1226	0
Turn Type		NA	Prot								NA	
Protected Phases		8	8								2	
Permitted Phases												
Detector Phase		8	8									
Switch Phase												
Minimum Initial (s)		7.0	7.0								7.0	
Minimum Split (s)		34.0	34.0								31.3	
Total Split (s)		35.0	35.0								105.0	
Total Split (%)		25.0%	25.0%								75.0%	
Maximum Green (s)		26.0	26.0								98.7	
Yellow Time (s)		4.0	4.0								4.0	
All-Red Time (s)		5.0	5.0								2.3	
Lost Time Adjust (s)		0.0	0.0								0.0	
Total Lost Time (s)		9.0	9.0								6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.5	2.5								1.0	
Recall Mode		Max	Max								C-Max	
Walk Time (s)		7.0	7.0								7.0	
Flash Dont Walk (s)		18.0	18.0								18.0	
Pedestrian Calls (#/hr)		0	0								0	
Act Effct Green (s)		26.0	26.0								98.7	
Actuated g/C Ratio		0.19	0.19								0.70	
v/c Ratio		0.44	0.51								0.27	
Control Delay		52.3	27.1								7.7	
Queue Delay		0.0	0.0								0.9	
Total Delay		52.3	27.1								8.6	
LOS		D	C								A	
Approach Delay		44.3									8.6	
Approach LOS		D									A	
Queue Length 50th (ft)		122	65								108	
Queue Length 95th (ft)		130	122								113	
Internal Link Dist (ft)		400			44			306			228	
Turn Bay Length (ft)												
Base Capacity (vph)		926	377								4473	
Starvation Cap Reductn		0	0								2821	
Spillback Cap Reductn		0	0								0	

Lane Group	Ø5	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Satd. Flow (RTOR)		
Adj. Flow (vph)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	5	6
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	4.0	7.0
Minimum Split (s)	10.3	31.3
Total Split (s)	25.0	80.0
Total Split (%)	18%	57%
Maximum Green (s)	18.7	73.7
Yellow Time (s)	4.0	4.0
All-Red Time (s)	2.3	2.3
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	3.0	1.0
Recall Mode	None	C-Max
Walk Time (s)		7.0
Flash Dont Walk (s)		18.0
Pedestrian Calls (#/hr)		0
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		

Lanes, Volumes, Timings
 2318: Biscayne Blvd & NE 5 ST

03/02/2023

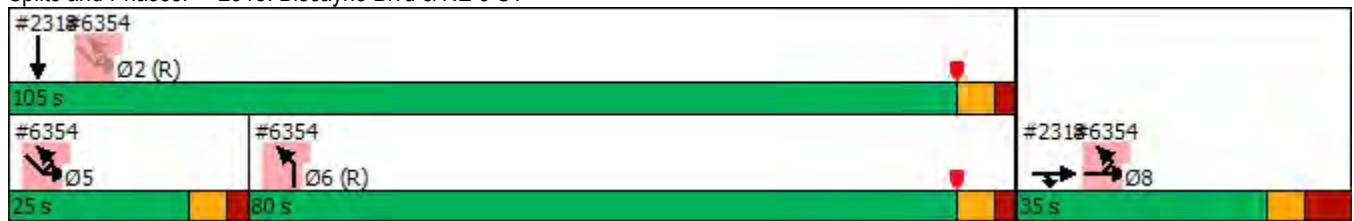


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Storage Cap Reductn		0	0								0	
Reduced v/c Ratio		0.44	0.51								0.74	

Intersection Summary

Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:SBT and 6:, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 20.3	Intersection LOS: C
Intersection Capacity Utilization 37.4%	ICU Level of Service A
Analysis Period (min) 15	

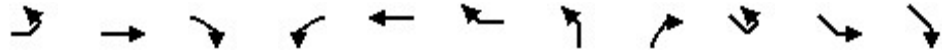
Splits and Phases: 2318: Biscayne Blvd & NE 5 ST



Lane Group	Ø5	Ø6
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Lanes, Volumes, Timings
6354: Biscayne Blvd & NE 5 ST

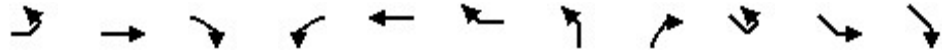
03/02/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEU	SEL	SER	Ø2
Lane Configurations		4111					1114			44		
Traffic Volume (vph)	110	197	0	0	0	0	767	155	2	489	0	
Future Volume (vph)	110	197	0	0	0	0	767	155	2	489	0	
Lane Util. Factor	0.86	0.86	1.00	1.00	1.00	1.00	0.91	0.86	0.95	0.97	1.00	
Frt							0.972					
Flt Protected		0.986					0.961			0.950		
Satd. Flow (prot)	0	6154	0	0	0	0	6186	0	0	3467	0	
Flt Permitted		0.986					0.961			0.950		
Satd. Flow (perm)	0	6154	0	0	0	0	6186	0	0	3467	0	
Satd. Flow (RTOR)							96					
Adj. Flow (vph)	115	303	0	0	0	0	843	196	4	661	0	
Lane Group Flow (vph)	0	418	0	0	0	0	1039	0	0	665	0	
Turn Type	Split	NA					Prot		pm+pt	pm+pt		
Protected Phases	8	8					6		5	5		2
Permitted Phases									2	2		
Detector Phase	8	8							5	5		
Switch Phase												
Minimum Initial (s)	7.0	7.0					7.0		4.0	4.0		7.0
Minimum Split (s)	34.0	34.0					31.3		10.3	10.3		31.3
Total Split (s)	35.0	35.0					80.0		25.0	25.0		105.0
Total Split (%)	25.0%	25.0%					57.1%		17.9%	17.9%		75%
Maximum Green (s)	26.0	26.0					73.7		18.7	18.7		98.7
Yellow Time (s)	4.0	4.0					4.0		4.0	4.0		4.0
All-Red Time (s)	5.0	5.0					2.3		2.3	2.3		2.3
Lost Time Adjust (s)		0.0					0.0			0.0		
Total Lost Time (s)		9.0					6.3			6.3		
Lead/Lag							Lag		Lead	Lead		
Lead-Lag Optimize?							Yes		Yes	Yes		
Vehicle Extension (s)	2.5	2.5					1.0		3.0	3.0		1.0
Recall Mode	Max	Max					C-Max		None	None		C-Max
Walk Time (s)	7.0	7.0					7.0					7.0
Flash Dont Walk (s)	18.0	18.0					18.0					18.0
Pedestrian Calls (#/hr)	0	0					0					0
Act Effct Green (s)		26.0					76.6			98.7		
Actuated g/C Ratio		0.19					0.55			0.70		
v/c Ratio		0.37					0.30			0.27		
Control Delay		4.1					15.9			7.9		
Queue Delay		0.4					0.0			2.4		
Total Delay		4.4					15.9			10.3		
LOS		A					B			B		
Approach Delay		4.4					15.9			10.3		
Approach LOS		A					B			B		
Queue Length 50th (ft)		4					123			104		
Queue Length 95th (ft)		3					152			101		
Internal Link Dist (ft)		44			520		355			213		
Turn Bay Length (ft)												
Base Capacity (vph)		1142					3429			2444		
Starvation Cap Reductn		310					0			1611		
Spillback Cap Reductn		0					0			0		

Lanes, Volumes, Timings
 6354: Biscayne Blvd & NE 5 ST

03/02/2023

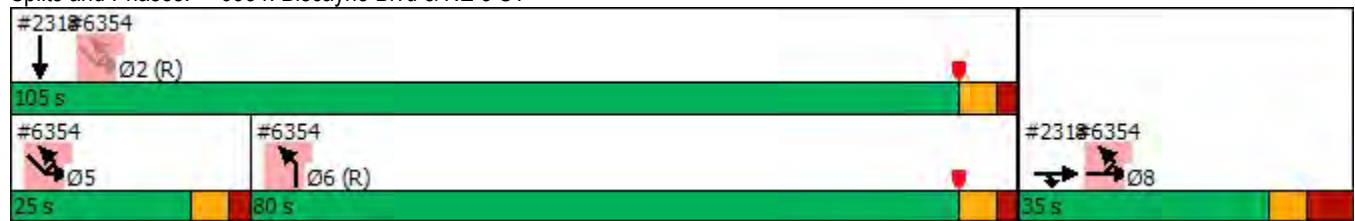


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEU	SEL	SER	Ø2
Storage Cap Reductn		0					0			0		
Reduced v/c Ratio		0.50					0.30			0.80		

Intersection Summary













Cycle Length: 140
 Actuated Cycle Length: 140
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.51
 Intersection Signal Delay: 11.9
 Intersection LOS: B
 Intersection Capacity Utilization 51.5%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 6354: Biscayne Blvd & NE 5 ST



Lanes, Volumes, Timings
 2318: Biscayne Blvd & NE 5 ST

03/02/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗								↑↑↑	
Traffic Volume (vph)	0	231	132	0	0	0	0	0	0	0	778	0
Future Volume (vph)	0	231	132	0	0	0	0	0	0	0	778	0
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00
Frt			0.850									
Flt Protected												
Satd. Flow (prot)	0	4848	1568	0	0	0	0	0	0	0	6285	0
Flt Permitted												
Satd. Flow (perm)	0	4848	1568	0	0	0	0	0	0	0	6285	0
Satd. Flow (RTOR)			165									
Adj. Flow (vph)	0	257	165	0	0	0	0	0	0	0	949	0
Lane Group Flow (vph)	0	257	165	0	0	0	0	0	0	0	949	0
Turn Type		NA	Prot								NA	
Protected Phases		8	8								2	
Permitted Phases												
Detector Phase		8	8									
Switch Phase												
Minimum Initial (s)		7.0	7.0								7.0	
Minimum Split (s)		34.0	34.0								31.3	
Total Split (s)		35.0	35.0								105.0	
Total Split (%)		25.0%	25.0%								75.0%	
Maximum Green (s)		26.0	26.0								98.7	
Yellow Time (s)		4.0	4.0								4.0	
All-Red Time (s)		5.0	5.0								2.3	
Lost Time Adjust (s)		0.0	0.0								0.0	
Total Lost Time (s)		9.0	9.0								6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.5	2.5								1.0	
Recall Mode		Max	Max								C-Max	
Walk Time (s)		7.0	7.0								7.0	
Flash Dont Walk (s)		18.0	18.0								18.0	
Pedestrian Calls (#/hr)		0	0								0	
Act Effct Green (s)		26.0	26.0								98.7	
Actuated g/C Ratio		0.19	0.19								0.70	
v/c Ratio		0.29	0.39								0.21	
Control Delay		50.0	9.6								7.3	
Queue Delay		0.0	0.0								0.6	
Total Delay		50.0	9.6								7.9	
LOS		D	A								A	
Approach Delay		34.2									7.9	
Approach LOS		C									A	
Queue Length 50th (ft)		74	0								79	
Queue Length 95th (ft)		104	41								83	
Internal Link Dist (ft)		400			44			306			228	
Turn Bay Length (ft)												
Base Capacity (vph)		900	425								4430	
Starvation Cap Reductn		0	0								2940	
Spillback Cap Reductn		0	0								0	

Lane Group	Ø5	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Satd. Flow (RTOR)		
Adj. Flow (vph)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	5	6
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	4.0	7.0
Minimum Split (s)	10.3	31.3
Total Split (s)	25.0	80.0
Total Split (%)	18%	57%
Maximum Green (s)	18.7	73.7
Yellow Time (s)	4.0	4.0
All-Red Time (s)	2.3	2.3
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	3.0	1.0
Recall Mode	None	C-Max
Walk Time (s)		7.0
Flash Dont Walk (s)		18.0
Pedestrian Calls (#/hr)		0
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		

Lanes, Volumes, Timings
 2318: Biscayne Blvd & NE 5 ST

03/02/2023

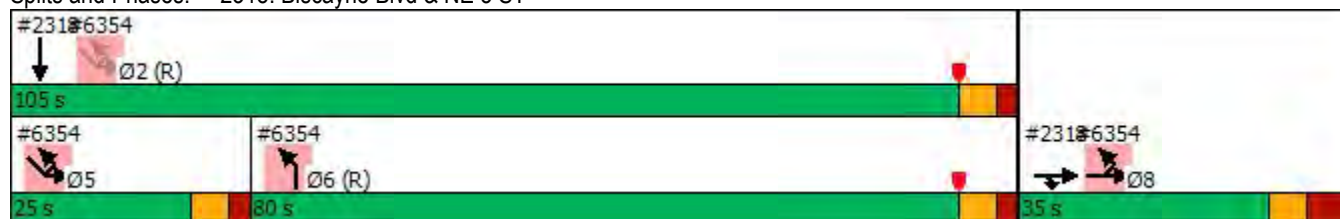


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Storage Cap Reductn		0	0								0	
Reduced v/c Ratio		0.29	0.39								0.64	

Intersection Summary

Cycle Length: 140
 Actuated Cycle Length: 140
 Offset: 12 (9%), Referenced to phase 2:SBT and 6:, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.39
 Intersection Signal Delay: 16.0
 Intersection LOS: B
 Intersection Capacity Utilization 32.2%
 ICU Level of Service A
 Analysis Period (min) 15

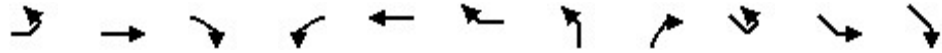
Splits and Phases: 2318: Biscayne Blvd & NE 5 ST



Lane Group	Ø5	Ø6
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Lanes, Volumes, Timings
6354: Biscayne Blvd & NE 5 ST

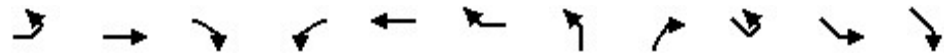
03/02/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEU	SEL	SER	Ø2
Lane Configurations		TTTT					TTTT			TT		
Traffic Volume (vph)	133	101	0	0	0	0	1060	57	8	118	0	
Future Volume (vph)	133	101	0	0	0	0	1060	57	8	118	0	
Lane Util. Factor	0.86	0.86	1.00	1.00	1.00	1.00	0.91	0.86	0.95	0.97	1.00	
Frt							0.991					
Flt Protected		0.972					0.955			0.950		
Satd. Flow (prot)	0	5953	0	0	0	0	6347	0	0	3375	0	
Flt Permitted		0.972					0.955			0.950		
Satd. Flow (perm)	0	5953	0	0	0	0	6347	0	0	3375	0	
Satd. Flow (RTOR)							96					
Adj. Flow (vph)	164	123	0	0	0	0	1178	76	12	144	0	
Lane Group Flow (vph)	0	287	0	0	0	0	1254	0	0	156	0	
Turn Type	Split	NA					Prot		pm+pt	pm+pt		
Protected Phases	8	8					6		5	5		2
Permitted Phases									2	2		
Detector Phase	8	8							5	5		
Switch Phase												
Minimum Initial (s)	7.0	7.0					7.0		4.0	4.0		7.0
Minimum Split (s)	34.0	34.0					31.3		10.3	10.3		31.3
Total Split (s)	35.0	35.0					80.0		25.0	25.0		105.0
Total Split (%)	25.0%	25.0%					57.1%		17.9%	17.9%		75%
Maximum Green (s)	26.0	26.0					73.7		18.7	18.7		98.7
Yellow Time (s)	4.0	4.0					4.0		4.0	4.0		4.0
All-Red Time (s)	5.0	5.0					2.3		2.3	2.3		2.3
Lost Time Adjust (s)		0.0					0.0			0.0		
Total Lost Time (s)		9.0					6.3			6.3		
Lead/Lag							Lag		Lead	Lead		
Lead-Lag Optimize?							Yes		Yes	Yes		
Vehicle Extension (s)	2.5	2.5					1.0		3.0	3.0		1.0
Recall Mode	Max	Max					C-Max		None	None		C-Max
Walk Time (s)	7.0	7.0					7.0					7.0
Flash Dont Walk (s)	18.0	18.0					18.0					18.0
Pedestrian Calls (#/hr)	0	0					0					0
Act Effct Green (s)		26.0					84.9			98.7		
Actuated g/C Ratio		0.19					0.61			0.70		
v/c Ratio		0.26					0.32			0.07		
Control Delay		7.4					12.6			6.5		
Queue Delay		0.8					0.4			0.0		
Total Delay		8.3					13.0			6.5		
LOS		A					B			A		
Approach Delay		8.3					13.0			6.5		
Approach LOS		A					B			A		
Queue Length 50th (ft)		8					133			20		
Queue Length 95th (ft)		9					157			28		
Internal Link Dist (ft)		44			520		355			213		
Turn Bay Length (ft)												
Base Capacity (vph)		1105					3887			2379		
Starvation Cap Reductn		541					1890			0		
Spillback Cap Reductn		0					0			0		

Lanes, Volumes, Timings
6354: Biscayne Blvd & NE 5 ST

03/02/2023

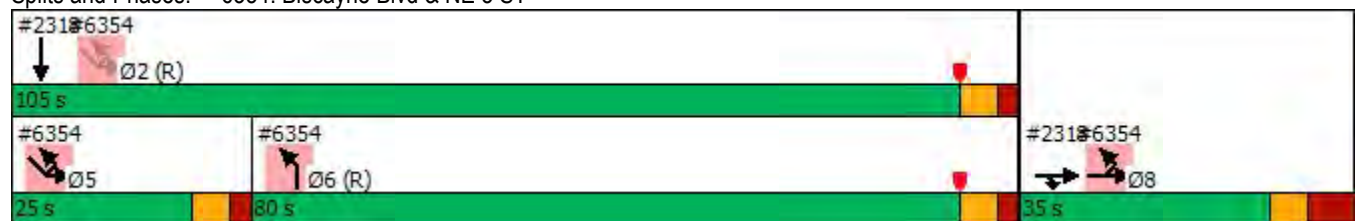


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEU	SEL	SER	Ø2
Storage Cap Reductn		0					0			0		
Reduced v/c Ratio		0.51					0.63			0.07		

Intersection Summary













Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 12 (9%), Referenced to phase 2:SBT and 6:, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.39	
Intersection Signal Delay: 11.6	Intersection LOS: B
Intersection Capacity Utilization 45.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6354: Biscayne Blvd & NE 5 ST



Lanes, Volumes, Timings
2318: Biscayne Blvd & NE 5 ST

03/02/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗								↑↑↑	
Traffic Volume (vph)	0	278	177	0	0	0	0	0	0	0	1204	0
Future Volume (vph)	0	278	177	0	0	0	0	0	0	0	1204	0
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00
Frt			0.850									
Flt Protected												
Satd. Flow (prot)	0	5036	1568	0	0	0	0	0	0	0	6408	0
Flt Permitted												
Satd. Flow (perm)	0	5036	1568	0	0	0	0	0	0	0	6408	0
Satd. Flow (RTOR)			88									
Adj. Flow (vph)	0	348	188	0	0	0	0	0	0	0	1338	0
Lane Group Flow (vph)	0	348	188	0	0	0	0	0	0	0	1338	0
Turn Type		NA	Prot								NA	
Protected Phases		8	8								2	
Permitted Phases												
Detector Phase		8	8									
Switch Phase												
Minimum Initial (s)		7.0	7.0								7.0	
Minimum Split (s)		34.0	34.0								31.3	
Total Split (s)		35.0	35.0								105.0	
Total Split (%)		25.0%	25.0%								75.0%	
Maximum Green (s)		26.0	26.0								98.7	
Yellow Time (s)		4.0	4.0								4.0	
All-Red Time (s)		5.0	5.0								2.3	
Lost Time Adjust (s)		0.0	0.0								0.0	
Total Lost Time (s)		9.0	9.0								6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.5	2.5								1.0	
Recall Mode		Max	Max								C-Max	
Walk Time (s)		7.0	7.0								7.0	
Flash Dont Walk (s)		18.0	18.0								18.0	
Pedestrian Calls (#/hr)		0	0								0	
Act Effct Green (s)		26.0	26.0								98.7	
Actuated g/C Ratio		0.19	0.19								0.70	
v/c Ratio		0.37	0.52								0.30	
Control Delay		51.2	32.5								7.9	
Queue Delay		0.0	0.0								1.0	
Total Delay		51.2	32.5								8.9	
LOS		D	C								A	
Approach Delay		44.6									8.9	
Approach LOS		D									A	
Queue Length 50th (ft)		102	81								120	
Queue Length 95th (ft)		120	163								136	
Internal Link Dist (ft)		400			44			306			228	
Turn Bay Length (ft)												
Base Capacity (vph)		935	362								4517	
Starvation Cap Reductn		0	0								2798	
Spillback Cap Reductn		0	0								0	

Lane Group	Ø5	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Satd. Flow (RTOR)		
Adj. Flow (vph)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	5	6
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	4.0	7.0
Minimum Split (s)	10.3	31.3
Total Split (s)	25.0	80.0
Total Split (%)	18%	57%
Maximum Green (s)	18.7	73.7
Yellow Time (s)	4.0	4.0
All-Red Time (s)	2.3	2.3
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	3.0	1.0
Recall Mode	None	C-Max
Walk Time (s)		7.0
Flash Dont Walk (s)		18.0
Pedestrian Calls (#/hr)		0
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		

Lanes, Volumes, Timings
2318: Biscayne Blvd & NE 5 ST

03/02/2023

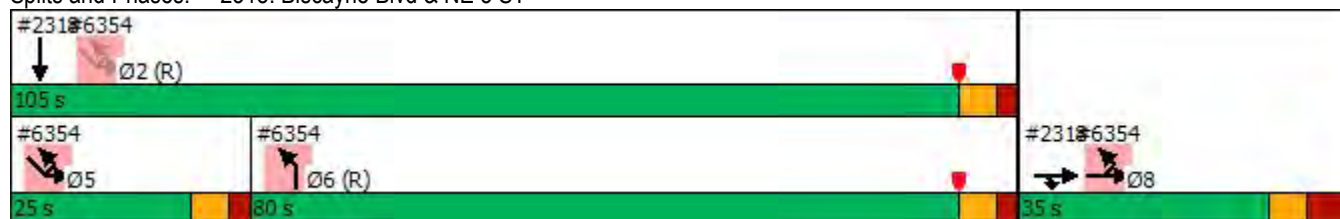


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Storage Cap Reductn		0	0								0	
Reduced v/c Ratio		0.37	0.52								0.78	

Intersection Summary

Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:SBT and 6:, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 19.1	Intersection LOS: B
Intersection Capacity Utilization 41.2%	ICU Level of Service A
Analysis Period (min) 15	

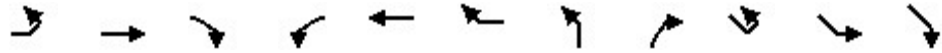
Splits and Phases: 2318: Biscayne Blvd & NE 5 ST



Lane Group	Ø5	Ø6
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Lanes, Volumes, Timings
6354: Biscayne Blvd & NE 5 ST

03/02/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEU	SEL	SER	Ø2
Lane Configurations		4111					1111			11		
Traffic Volume (vph)	223	53	0	0	0	0	1681	51	14	49	0	
Future Volume (vph)	223	53	0	0	0	0	1681	51	14	49	0	
Lane Util. Factor	0.86	0.86	1.00	1.00	1.00	1.00	0.91	0.86	0.95	0.97	1.00	
Frt							0.995					
Flt Protected		0.961					0.954			0.950		
Satd. Flow (prot)	0	6115	0	0	0	0	6488	0	0	3449	0	
Flt Permitted		0.961					0.954			0.950		
Satd. Flow (perm)	0	6115	0	0	0	0	6488	0	0	3449	0	
Satd. Flow (RTOR)							96					
Adj. Flow (vph)	290	64	0	0	0	0	1788	68	20	72	0	
Lane Group Flow (vph)	0	354	0	0	0	0	1856	0	0	92	0	
Turn Type	Split	NA					Prot		pm+pt	pm+pt		
Protected Phases	8	8					6		5	5		2
Permitted Phases									2	2		
Detector Phase	8	8							5	5		
Switch Phase												
Minimum Initial (s)	7.0	7.0					7.0		4.0	4.0		7.0
Minimum Split (s)	34.0	34.0					31.3		10.3	10.3		31.3
Total Split (s)	35.0	35.0					80.0		25.0	25.0		105.0
Total Split (%)	25.0%	25.0%					57.1%		17.9%	17.9%		75%
Maximum Green (s)	26.0	26.0					73.7		18.7	18.7		98.7
Yellow Time (s)	4.0	4.0					4.0		4.0	4.0		4.0
All-Red Time (s)	5.0	5.0					2.3		2.3	2.3		2.3
Lost Time Adjust (s)		0.0					0.0			0.0		
Total Lost Time (s)		9.0					6.3			6.3		
Lead/Lag							Lag		Lead	Lead		
Lead-Lag Optimize?							Yes		Yes	Yes		
Vehicle Extension (s)	2.5	2.5					1.0		3.0	3.0		1.0
Recall Mode	Max	Max					C-Max		None	None		C-Max
Walk Time (s)	7.0	7.0					7.0					7.0
Flash Dont Walk (s)	18.0	18.0					18.0					18.0
Pedestrian Calls (#/hr)	0	0					0					0
Act Effct Green (s)		26.0					85.8			98.7		
Actuated g/C Ratio		0.19					0.61			0.70		
v/c Ratio		0.87dl					0.46			0.04		
Control Delay		3.7					14.2			6.3		
Queue Delay		0.5					1.0			0.0		
Total Delay		4.2					15.2			6.3		
LOS		A					B			A		
Approach Delay		4.2					15.2			6.3		
Approach LOS		A					B			A		
Queue Length 50th (ft)		3					225			11		
Queue Length 95th (ft)		3					254			15		
Internal Link Dist (ft)		44			520		355			213		
Turn Bay Length (ft)												
Base Capacity (vph)		1135					4013			2431		
Starvation Cap Reductn		408					1765			0		
Spillback Cap Reductn		0					0			0		

Lanes, Volumes, Timings
 6354: Biscayne Blvd & NE 5 ST

03/02/2023

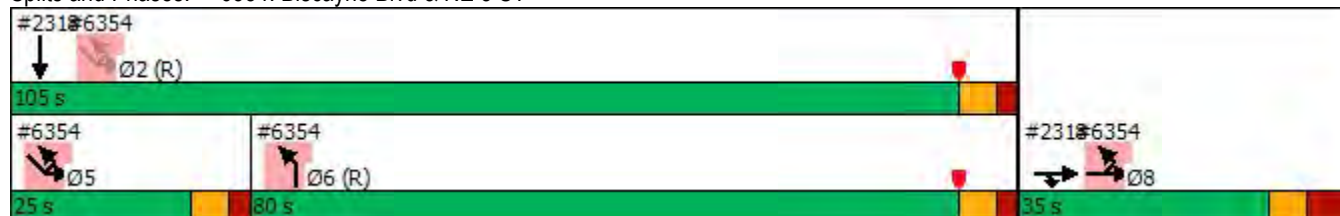


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEU	SEL	SER	Ø2
Storage Cap Reductn		0					0			0		
Reduced v/c Ratio		0.49					0.83			0.04		

Intersection Summary













Cycle Length: 140
 Actuated Cycle Length: 140
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.52
 Intersection Signal Delay: 13.2
 Intersection LOS: B
 Intersection Capacity Utilization 58.5%
 ICU Level of Service B
 Analysis Period (min) 15
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 6354: Biscayne Blvd & NE 5 ST



Lanes, Volumes, Timings
2318: Biscayne Blvd & NE 5 ST

Alternative 1
03/09/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑								↑↑↑	
Traffic Volume (vph)	0	307	157	0	0	0	0	0	0	0	1030	0
Future Volume (vph)	0	307	157	0	0	0	0	0	0	0	1030	0
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00
Fr t			0.850									
Flt Protected												
Satd. Flow (prot)	0	4988	1553	0	0	0	0	0	0	0	6346	0
Flt Permitted												
Satd. Flow (perm)	0	4988	1553	0	0	0	0	0	0	0	6346	0
Satd. Flow (RTOR)			109									
Adj. Flow (vph)	0	409	191	0	0	0	0	0	0	0	1226	0
Lane Group Flow (vph)	0	409	191	0	0	0	0	0	0	0	1226	0
Turn Type		NA	Prot								NA	
Protected Phases		8	8								2	
Permitted Phases												
Detector Phase		8	8									
Switch Phase												
Minimum Initial (s)		7.0	7.0								7.0	
Minimum Split (s)		34.0	34.0								31.3	
Total Split (s)		35.0	35.0								105.0	
Total Split (%)		25.0%	25.0%								75.0%	
Maximum Green (s)		26.0	26.0								98.7	
Yellow Time (s)		4.0	4.0								4.0	
All-Red Time (s)		5.0	5.0								2.3	
Lost Time Adjust (s)		0.0	0.0								0.0	
Total Lost Time (s)		9.0	9.0								6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.5	2.5								1.0	
Recall Mode		Max	Max								C-Max	
Walk Time (s)		7.0	7.0								7.0	
Flash Dont Walk (s)		18.0	18.0								18.0	
Pedestrian Calls (#/hr)		0	0								0	
Act Effect Green (s)		26.0	26.0								98.7	
Actuated g/C Ratio		0.19	0.19								0.70	
v/c Ratio		0.44	0.51								0.27	
Control Delay		52.3	27.1								7.7	
Queue Delay		0.0	0.0								0.9	
Total Delay		52.3	27.1								8.6	
LOS		D	C								A	
Approach Delay		44.3									8.6	
Approach LOS		D									A	
Queue Length 50th (ft)		122	65								108	
Queue Length 95th (ft)		130	122								113	
Internal Link Dist (ft)		400			44			306			228	
Turn Bay Length (ft)												
Base Capacity (vph)		926	377								4473	
Starvation Cap Reductn		0	0								2821	
Spillback Cap Reductn		0	0								0	

Lane Group	Ø5	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Satd. Flow (RTOR)		
Adj. Flow (vph)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	5	6
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	4.0	7.0
Minimum Split (s)	10.3	31.3
Total Split (s)	25.0	80.0
Total Split (%)	18%	57%
Maximum Green (s)	18.7	73.7
Yellow Time (s)	4.0	4.0
All-Red Time (s)	2.3	2.3
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	3.0	1.0
Recall Mode	None	C-Max
Walk Time (s)		7.0
Flash Dont Walk (s)		18.0
Pedestrian Calls (#/hr)		0
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		

Lanes, Volumes, Timings
 2318: Biscayne Blvd & NE 5 ST

Alternative 1
 03/09/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Storage Cap Reductn		0	0								0	
Reduced v/c Ratio		0.44	0.51								0.74	

Intersection Summary

Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:SBT and 6:, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 20.3	Intersection LOS: C
Intersection Capacity Utilization 37.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2318: Biscayne Blvd & NE 5 ST



Lane Group	Ø5	Ø6
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Lanes, Volumes, Timings
6354: Biscayne Blvd & NE 5 ST

Alternative 1
03/09/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEU	SEL	SER	Ø2
Lane Configurations	↘	↑↑↑					↑↑↑			↘		
Traffic Volume (vph)	110	197	0	0	0	0	767	155	2	489	0	
Future Volume (vph)	110	197	0	0	0	0	767	155	2	489	0	
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00	0.91	0.86	0.95	0.97	1.00	
Fr't							0.972					
Flt Protected	0.950						0.961			0.950		
Satd. Flow (prot)	1736	4940	0	0	0	0	6186	0	0	3467	0	
Flt Permitted	0.950						0.961			0.950		
Satd. Flow (perm)	1736	4940	0	0	0	0	6186	0	0	3467	0	
Satd. Flow (RTOR)							96					
Adj. Flow (vph)	115	303	0	0	0	0	843	196	4	661	0	
Lane Group Flow (vph)	115	303	0	0	0	0	1039	0	0	665	0	
Turn Type	Split	NA					Prot		pm+pt	pm+pt		
Protected Phases	8	8					6		5	5		2
Permitted Phases									2	2		
Detector Phase	8	8							5	5		
Switch Phase												
Minimum Initial (s)	7.0	7.0					7.0		4.0	4.0		7.0
Minimum Split (s)	34.0	34.0					31.3		10.3	10.3		31.3
Total Split (s)	35.0	35.0					80.0		25.0	25.0		105.0
Total Split (%)	25.0%	25.0%					57.1%		17.9%	17.9%		75%
Maximum Green (s)	26.0	26.0					73.7		18.7	18.7		98.7
Yellow Time (s)	4.0	4.0					4.0		4.0	4.0		4.0
All-Red Time (s)	5.0	5.0					2.3		2.3	2.3		2.3
Lost Time Adjust (s)	-1.0	0.0					0.0			0.0		
Total Lost Time (s)	8.0	9.0					6.3			6.3		
Lead/Lag							Lag		Lead	Lead		
Lead-Lag Optimize?							Yes		Yes	Yes		
Vehicle Extension (s)	2.5	2.5					1.0		3.0	3.0		1.0
Recall Mode	Max	Max					C-Max		None	None		C-Max
Walk Time (s)	7.0	7.0					7.0					7.0
Flash Dont Walk (s)	18.0	18.0					18.0					18.0
Pedestrian Calls (#/hr)	0	0					0					0
Act Effct Green (s)	27.0	26.0					76.6			98.7		
Actuated g/C Ratio	0.19	0.19					0.55			0.70		
v/c Ratio	0.34	0.33					0.30			0.27		
Control Delay	5.0	4.1					15.9			7.9		
Queue Delay	1.0	0.6					0.0			2.4		
Total Delay	5.9	4.7					15.9			10.3		
LOS	A	A					B			B		
Approach Delay		5.0					15.9			10.3		
Approach LOS		A					B			B		
Queue Length 50th (ft)	3	4					123			104		
Queue Length 95th (ft)	5	3					152			101		
Internal Link Dist (ft)		44			520		355			213		
Turn Bay Length (ft)												
Base Capacity (vph)	334	917					3429			2444		
Starvation Cap Reductn	83	302					0			1611		
Spillback Cap Reductn	0	0					0			0		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEU	SEL	SER	Ø2
Storage Cap Reductn	0	0					0			0		
Reduced v/c Ratio	0.46	0.49					0.30			0.80		

Intersection Summary

Cycle Length: 140
 Actuated Cycle Length: 140
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.51
 Intersection Signal Delay: 12.0
 Intersection LOS: B
 Intersection Capacity Utilization 51.2%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 6354: Biscayne Blvd & NE 5 ST



Lanes, Volumes, Timings
2318: Biscayne Blvd & NE 5 ST

Alternative 2
03/09/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑								↑↑↑	
Traffic Volume (vph)	0	307	157	0	0	0	0	0	0	0	1030	0
Future Volume (vph)	0	307	157	0	0	0	0	0	0	0	1030	0
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00
Fr t			0.850									
Flt Protected												
Satd. Flow (prot)	0	4988	1553	0	0	0	0	0	0	0	6346	0
Flt Permitted												
Satd. Flow (perm)	0	4988	1553	0	0	0	0	0	0	0	6346	0
Satd. Flow (RTOR)			109									
Adj. Flow (vph)	0	409	191	0	0	0	0	0	0	0	1226	0
Lane Group Flow (vph)	0	409	191	0	0	0	0	0	0	0	1226	0
Turn Type		NA	Prot								NA	
Protected Phases		8	8								2	
Permitted Phases												
Detector Phase		8	8									
Switch Phase												
Minimum Initial (s)		7.0	7.0								7.0	
Minimum Split (s)		34.0	34.0								31.3	
Total Split (s)		35.0	35.0								105.0	
Total Split (%)		25.0%	25.0%								75.0%	
Maximum Green (s)		26.0	26.0								98.7	
Yellow Time (s)		4.0	4.0								4.0	
All-Red Time (s)		5.0	5.0								2.3	
Lost Time Adjust (s)		0.0	0.0								0.0	
Total Lost Time (s)		9.0	9.0								6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.5	2.5								1.0	
Recall Mode		Max	Max								C-Max	
Walk Time (s)		7.0	7.0								7.0	
Flash Dont Walk (s)		18.0	18.0								18.0	
Pedestrian Calls (#/hr)		0	0								0	
Act Effect Green (s)		26.0	26.0								98.7	
Actuated g/C Ratio		0.19	0.19								0.70	
v/c Ratio		0.44	0.51								0.27	
Control Delay		52.3	27.1								7.7	
Queue Delay		0.0	0.0								0.9	
Total Delay		52.3	27.1								8.6	
LOS		D	C								A	
Approach Delay		44.3									8.6	
Approach LOS		D									A	
Queue Length 50th (ft)		122	65								108	
Queue Length 95th (ft)		130	122								113	
Internal Link Dist (ft)		400			44			306			228	
Turn Bay Length (ft)												
Base Capacity (vph)		926	377								4473	
Starvation Cap Reductn		0	0								2821	
Spillback Cap Reductn		0	0								0	

Lane Group	Ø5	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Satd. Flow (RTOR)		
Adj. Flow (vph)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	5	6
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	4.0	7.0
Minimum Split (s)	10.3	31.3
Total Split (s)	25.0	80.0
Total Split (%)	18%	57%
Maximum Green (s)	18.7	73.7
Yellow Time (s)	4.0	4.0
All-Red Time (s)	2.3	2.3
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	3.0	1.0
Recall Mode	None	C-Max
Walk Time (s)		7.0
Flash Dont Walk (s)		18.0
Pedestrian Calls (#/hr)		0
Act Effect Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		

Lanes, Volumes, Timings
 2318: Biscayne Blvd & NE 5 ST

Alternative 2
 03/09/2023

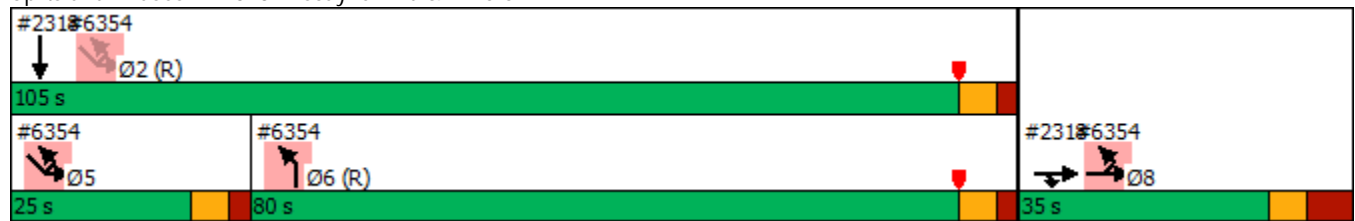


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Storage Cap Reductn		0	0								0	
Reduced v/c Ratio		0.44	0.51								0.74	

Intersection Summary

Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:SBT and 6:, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 20.3	Intersection LOS: C
Intersection Capacity Utilization 37.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2318: Biscayne Blvd & NE 5 ST



Lane Group	Ø5	Ø6
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Lanes, Volumes, Timings
6354: Biscayne Blvd & NE 5 ST

Alternative 2
03/09/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEU	SEL	SER	Ø2
Lane Configurations	↖	↕↕↕					↗↗↗			↖↖		
Traffic Volume (vph)	110	197	0	0	0	0	767	155	2	489	0	
Future Volume (vph)	110	197	0	0	0	0	767	155	2	489	0	
Lane Util. Factor	0.86	0.86	1.00	1.00	1.00	1.00	0.91	0.86	0.95	0.97	1.00	
Fr't							0.972					
Flt Protected		0.986					0.961			0.950		
Satd. Flow (prot)	1571	4615	0	0	0	0	6186	0	0	3467	0	
Flt Permitted		0.986					0.961			0.950		
Satd. Flow (perm)	1571	4615	0	0	0	0	6186	0	0	3467	0	
Satd. Flow (RTOR)							96					
Adj. Flow (vph)	115	303	0	0	0	0	843	196	4	661	0	
Lane Group Flow (vph)	0	418	0	0	0	0	1039	0	0	665	0	
Turn Type	Split	NA					Prot		pm+pt	pm+pt		
Protected Phases	8	8					6		5	5		2
Permitted Phases									2	2		
Detector Phase	8	8							5	5		
Switch Phase												
Minimum Initial (s)	7.0	7.0					7.0		4.0	4.0		7.0
Minimum Split (s)	34.0	34.0					31.3		10.3	10.3		31.3
Total Split (s)	35.0	35.0					80.0		25.0	25.0		105.0
Total Split (%)	25.0%	25.0%					57.1%		17.9%	17.9%		75%
Maximum Green (s)	26.0	26.0					73.7		18.7	18.7		98.7
Yellow Time (s)	4.0	4.0					4.0		4.0	4.0		4.0
All-Red Time (s)	5.0	5.0					2.3		2.3	2.3		2.3
Lost Time Adjust (s)	-1.0	0.0					0.0			0.0		
Total Lost Time (s)	8.0	9.0					6.3			6.3		
Lead/Lag							Lag		Lead	Lead		
Lead-Lag Optimize?							Yes		Yes	Yes		
Vehicle Extension (s)	2.5	2.5					1.0		3.0	3.0		1.0
Recall Mode	Max	Max					C-Max		None	None		C-Max
Walk Time (s)	7.0	7.0					7.0					7.0
Flash Dont Walk (s)	18.0	18.0					18.0					18.0
Pedestrian Calls (#/hr)	0	0					0					0
Act Effct Green (s)		26.0					76.6			98.7		
Actuated g/C Ratio		0.19					0.55			0.70		
v/c Ratio		0.49					0.30			0.27		
Control Delay		5.5					15.9			7.9		
Queue Delay		0.1					0.0			2.4		
Total Delay		5.6					15.9			10.3		
LOS		A					B			B		
Approach Delay		5.6					15.9			10.3		
Approach LOS		A					B			B		
Queue Length 50th (ft)		5					123			104		
Queue Length 95th (ft)		5					152			101		
Internal Link Dist (ft)		44			520		355			213		
Turn Bay Length (ft)												
Base Capacity (vph)		857					3429			2444		
Starvation Cap Reductn		50					0			1611		
Spillback Cap Reductn		0					0			0		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEU	SEL	SER	Ø2
Storage Cap Reductn		0					0			0		
Reduced v/c Ratio		0.52					0.30			0.80		

Intersection Summary

Cycle Length: 140
 Actuated Cycle Length: 140
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.51
 Intersection Signal Delay: 12.1
 Intersection LOS: B
 Intersection Capacity Utilization 51.2%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 6354: Biscayne Blvd & NE 5 ST



Lanes, Volumes, Timings
2318: Biscayne Blvd & NE 5 ST

Alternative 1
03/09/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗								↑↑↑	
Traffic Volume (vph)	0	231	132	0	0	0	0	0	0	0	778	0
Future Volume (vph)	0	231	132	0	0	0	0	0	0	0	778	0
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00
Fr t			0.850									
Flt Protected												
Satd. Flow (prot)	0	4848	1568	0	0	0	0	0	0	0	6285	0
Flt Permitted												
Satd. Flow (perm)	0	4848	1568	0	0	0	0	0	0	0	6285	0
Satd. Flow (RTOR)			165									
Adj. Flow (vph)	0	257	165	0	0	0	0	0	0	0	949	0
Lane Group Flow (vph)	0	257	165	0	0	0	0	0	0	0	949	0
Turn Type		NA	Prot								NA	
Protected Phases		8	8								2	
Permitted Phases												
Detector Phase		8	8									
Switch Phase												
Minimum Initial (s)		7.0	7.0								7.0	
Minimum Split (s)		34.0	34.0								31.3	
Total Split (s)		35.0	35.0								105.0	
Total Split (%)		25.0%	25.0%								75.0%	
Maximum Green (s)		26.0	26.0								98.7	
Yellow Time (s)		4.0	4.0								4.0	
All-Red Time (s)		5.0	5.0								2.3	
Lost Time Adjust (s)		0.0	0.0								0.0	
Total Lost Time (s)		9.0	9.0								6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.5	2.5								1.0	
Recall Mode		Max	Max								C-Max	
Walk Time (s)		7.0	7.0								7.0	
Flash Dont Walk (s)		18.0	18.0								18.0	
Pedestrian Calls (#/hr)		0	0								0	
Act Effect Green (s)		26.0	26.0								98.7	
Actuated g/C Ratio		0.19	0.19								0.70	
v/c Ratio		0.29	0.39								0.21	
Control Delay		50.0	9.6								7.3	
Queue Delay		0.0	0.0								0.6	
Total Delay		50.0	9.6								7.9	
LOS		D	A								A	
Approach Delay		34.2									7.9	
Approach LOS		C									A	
Queue Length 50th (ft)		74	0								79	
Queue Length 95th (ft)		104	41								83	
Internal Link Dist (ft)		400			44			306			228	
Turn Bay Length (ft)												
Base Capacity (vph)		900	425								4430	
Starvation Cap Reductn		0	0								2940	
Spillback Cap Reductn		32	0								0	

Lane Group	Ø5	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Satd. Flow (RTOR)		
Adj. Flow (vph)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	5	6
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	4.0	7.0
Minimum Split (s)	10.3	31.3
Total Split (s)	25.0	80.0
Total Split (%)	18%	57%
Maximum Green (s)	18.7	73.7
Yellow Time (s)	4.0	4.0
All-Red Time (s)	2.3	2.3
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	3.0	1.0
Recall Mode	None	C-Max
Walk Time (s)		7.0
Flash Dont Walk (s)		18.0
Pedestrian Calls (#/hr)		0
Act Effect Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		

Lanes, Volumes, Timings
 2318: Biscayne Blvd & NE 5 ST

Alternative 1
 03/09/2023

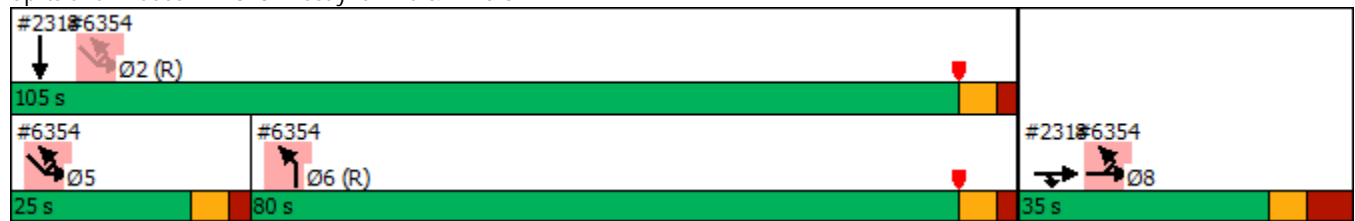


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Storage Cap Reductn		0	0								0	
Reduced v/c Ratio		0.30	0.39								0.64	

Intersection Summary

Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 12 (9%), Referenced to phase 2:SBT and 6:, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 16.0	Intersection LOS: B
Intersection Capacity Utilization 32.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2318: Biscayne Blvd & NE 5 ST



Lane Group	Ø5	Ø6
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Lanes, Volumes, Timings
6354: Biscayne Blvd & NE 5 ST

Alternative 1
03/09/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEU	SEL	SER	Ø2
Lane Configurations	↘	↑↑↑					↑↑↑			↘↘		
Traffic Volume (vph)	133	101	0	0	0	0	1060	57	8	118	0	
Future Volume (vph)	133	101	0	0	0	0	1060	57	8	118	0	
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00	0.91	0.86	0.95	0.97	1.00	
Fr't							0.991					
Flt Protected	0.950						0.955			0.950		
Satd. Flow (prot)	1719	4759	0	0	0	0	6347	0	0	3375	0	
Flt Permitted	0.950						0.955			0.950		
Satd. Flow (perm)	1719	4759	0	0	0	0	6347	0	0	3375	0	
Satd. Flow (RTOR)							96					
Adj. Flow (vph)	164	123	0	0	0	0	1178	76	12	144	0	
Lane Group Flow (vph)	164	123	0	0	0	0	1254	0	0	156	0	
Turn Type	Split	NA					Prot		pm+pt	pm+pt		
Protected Phases	8	8					6		5	5		2
Permitted Phases									2	2		
Detector Phase	8	8							5	5		
Switch Phase												
Minimum Initial (s)	7.0	7.0					7.0		4.0	4.0		7.0
Minimum Split (s)	34.0	34.0					31.3		10.3	10.3		31.3
Total Split (s)	35.0	35.0					80.0		25.0	25.0		105.0
Total Split (%)	25.0%	25.0%					57.1%		17.9%	17.9%		75%
Maximum Green (s)	26.0	26.0					73.7		18.7	18.7		98.7
Yellow Time (s)	4.0	4.0					4.0		4.0	4.0		4.0
All-Red Time (s)	5.0	5.0					2.3		2.3	2.3		2.3
Lost Time Adjust (s)	0.0	0.0					0.0			0.0		
Total Lost Time (s)	9.0	9.0					6.3			6.3		
Lead/Lag							Lag		Lead	Lead		
Lead-Lag Optimize?							Yes		Yes	Yes		
Vehicle Extension (s)	2.5	2.5					1.0		3.0	3.0		1.0
Recall Mode	Max	Max					C-Max		None	None		C-Max
Walk Time (s)	7.0	7.0					7.0					7.0
Flash Dont Walk (s)	18.0	18.0					18.0					18.0
Pedestrian Calls (#/hr)	0	0					0					0
Act Effct Green (s)	26.0	26.0					84.9			98.7		
Actuated g/C Ratio	0.19	0.19					0.61			0.70		
v/c Ratio	0.51	0.14					0.32			0.07		
Control Delay	14.6	7.2					12.6			6.5		
Queue Delay	0.4	1.3					0.4			0.0		
Total Delay	15.1	8.5					13.0			6.5		
LOS	B	A					B			A		
Approach Delay		12.3					13.0			6.5		
Approach LOS		B					B			A		
Queue Length 50th (ft)	16	4					133			20		
Queue Length 95th (ft)	48	6					157			28		
Internal Link Dist (ft)		44			520		355			213		
Turn Bay Length (ft)												
Base Capacity (vph)	319	883					3887			2379		
Starvation Cap Reductn	21	598					1890			0		
Spillback Cap Reductn	0	0					0			0		

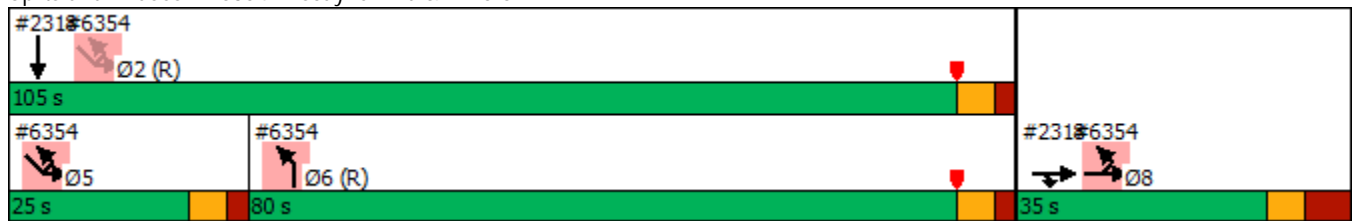


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEU	SEL	SER	Ø2
Storage Cap Reductn	0	0					0			0		
Reduced v/c Ratio	0.55	0.43					0.63			0.07		

Intersection Summary













Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 12 (9%), Referenced to phase 2:SBT and 6:, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 12.3	Intersection LOS: B
Intersection Capacity Utilization 45.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6354: Biscayne Blvd & NE 5 ST



Lanes, Volumes, Timings
2318: Biscayne Blvd & NE 5 ST

Alternative 2
03/09/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗								↑↑↑	
Traffic Volume (vph)	0	231	132	0	0	0	0	0	0	0	778	0
Future Volume (vph)	0	231	132	0	0	0	0	0	0	0	778	0
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00
Frt			0.850									
Flt Protected												
Satd. Flow (prot)	0	4848	1568	0	0	0	0	0	0	0	6285	0
Flt Permitted												
Satd. Flow (perm)	0	4848	1568	0	0	0	0	0	0	0	6285	0
Satd. Flow (RTOR)			165									
Adj. Flow (vph)	0	257	165	0	0	0	0	0	0	0	949	0
Lane Group Flow (vph)	0	257	165	0	0	0	0	0	0	0	949	0
Turn Type		NA	Prot								NA	
Protected Phases		8	8								2	
Permitted Phases												
Detector Phase		8	8									
Switch Phase												
Minimum Initial (s)		7.0	7.0								7.0	
Minimum Split (s)		34.0	34.0								31.3	
Total Split (s)		35.0	35.0								105.0	
Total Split (%)		25.0%	25.0%								75.0%	
Maximum Green (s)		26.0	26.0								98.7	
Yellow Time (s)		4.0	4.0								4.0	
All-Red Time (s)		5.0	5.0								2.3	
Lost Time Adjust (s)		0.0	0.0								0.0	
Total Lost Time (s)		9.0	9.0								6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.5	2.5								1.0	
Recall Mode		Max	Max								C-Max	
Walk Time (s)		7.0	7.0								7.0	
Flash Dont Walk (s)		18.0	18.0								18.0	
Pedestrian Calls (#/hr)		0	0								0	
Act Effect Green (s)		26.0	26.0								98.7	
Actuated g/C Ratio		0.19	0.19								0.70	
v/c Ratio		0.29	0.39								0.21	
Control Delay		50.0	9.6								7.3	
Queue Delay		0.0	0.0								0.6	
Total Delay		50.0	9.6								7.9	
LOS		D	A								A	
Approach Delay		34.2									7.9	
Approach LOS		C									A	
Queue Length 50th (ft)		74	0								79	
Queue Length 95th (ft)		104	41								83	
Internal Link Dist (ft)		400			44			306			228	
Turn Bay Length (ft)												
Base Capacity (vph)		900	425								4430	
Starvation Cap Reductn		0	0								2940	
Spillback Cap Reductn		0	0								0	

Lane Group	Ø5	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Satd. Flow (RTOR)		
Adj. Flow (vph)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	5	6
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	4.0	7.0
Minimum Split (s)	10.3	31.3
Total Split (s)	25.0	80.0
Total Split (%)	18%	57%
Maximum Green (s)	18.7	73.7
Yellow Time (s)	4.0	4.0
All-Red Time (s)	2.3	2.3
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	3.0	1.0
Recall Mode	None	C-Max
Walk Time (s)		7.0
Flash Dont Walk (s)		18.0
Pedestrian Calls (#/hr)		0
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		

Lanes, Volumes, Timings
 2318: Biscayne Blvd & NE 5 ST

Alternative 2
 03/09/2023

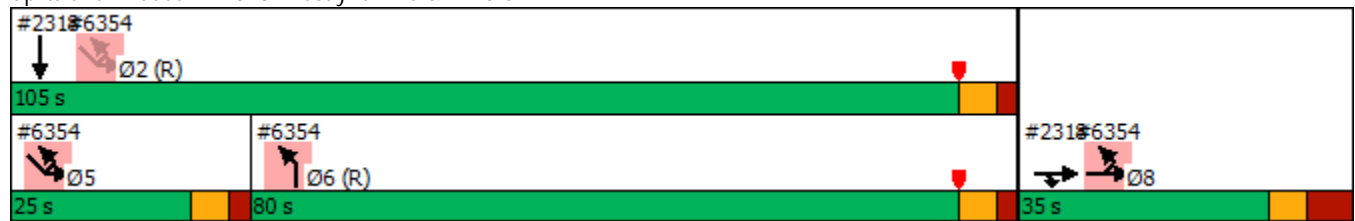


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Storage Cap Reductn		0	0								0	
Reduced v/c Ratio		0.29	0.39								0.64	

Intersection Summary

Cycle Length: 140
 Actuated Cycle Length: 140
 Offset: 12 (9%), Referenced to phase 2:SBT and 6:, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.39
 Intersection Signal Delay: 16.0
 Intersection LOS: B
 Intersection Capacity Utilization 32.2%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 2318: Biscayne Blvd & NE 5 ST



Lane Group	Ø5	Ø6
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Lanes, Volumes, Timings
6354: Biscayne Blvd & NE 5 ST

Alternative 2
03/09/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEU	SEL	SER	Ø2
Lane Configurations	↘	↕↕↕					↕↕↕			↘↘		
Traffic Volume (vph)	133	101	0	0	0	0	1060	57	8	118	0	
Future Volume (vph)	133	101	0	0	0	0	1060	57	8	118	0	
Lane Util. Factor	0.86	0.86	1.00	1.00	1.00	1.00	0.91	0.86	0.95	0.97	1.00	
Fr't							0.991					
Flt Protected		0.972					0.955			0.950		
Satd. Flow (prot)	1556	4465	0	0	0	0	6347	0	0	3375	0	
Flt Permitted		0.972					0.955			0.950		
Satd. Flow (perm)	1556	4465	0	0	0	0	6347	0	0	3375	0	
Satd. Flow (RTOR)							96					
Adj. Flow (vph)	164	123	0	0	0	0	1178	76	12	144	0	
Lane Group Flow (vph)	0	287	0	0	0	0	1254	0	0	156	0	
Turn Type	Split	NA					Prot		pm+pt	pm+pt		
Protected Phases	8	8					6		5	5		2
Permitted Phases									2	2		
Detector Phase	8	8							5	5		
Switch Phase												
Minimum Initial (s)	7.0	7.0					7.0		4.0	4.0		7.0
Minimum Split (s)	34.0	34.0					31.3		10.3	10.3		31.3
Total Split (s)	35.0	35.0					80.0		25.0	25.0		105.0
Total Split (%)	25.0%	25.0%					57.1%		17.9%	17.9%		75%
Maximum Green (s)	26.0	26.0					73.7		18.7	18.7		98.7
Yellow Time (s)	4.0	4.0					4.0		4.0	4.0		4.0
All-Red Time (s)	5.0	5.0					2.3		2.3	2.3		2.3
Lost Time Adjust (s)	0.0	0.0					0.0			0.0		
Total Lost Time (s)	9.0	9.0					6.3			6.3		
Lead/Lag							Lag		Lead	Lead		
Lead-Lag Optimize?							Yes		Yes	Yes		
Vehicle Extension (s)	2.5	2.5					1.0		3.0	3.0		1.0
Recall Mode	Max	Max					C-Max		None	None		C-Max
Walk Time (s)	7.0	7.0					7.0					7.0
Flash Dont Walk (s)	18.0	18.0					18.0					18.0
Pedestrian Calls (#/hr)	0	0					0					0
Act Effct Green (s)		26.0					84.9			98.7		
Actuated g/C Ratio		0.19					0.61			0.70		
v/c Ratio		0.35					0.32			0.07		
Control Delay		8.3					12.6			6.5		
Queue Delay		0.8					0.4			0.0		
Total Delay		9.1					13.0			6.5		
LOS		A					B			A		
Approach Delay		9.1					13.0			6.5		
Approach LOS		A					B			A		
Queue Length 50th (ft)		10					133			20		
Queue Length 95th (ft)		13					157			28		
Internal Link Dist (ft)		44			520		355			213		
Turn Bay Length (ft)												
Base Capacity (vph)		829					3887			2379		
Starvation Cap Reductn		290					1890			0		
Spillback Cap Reductn		0					0			0		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEU	SEL	SER	Ø2
Storage Cap Reductn		0					0			0		
Reduced v/c Ratio		0.53					0.63			0.07		

Intersection Summary

Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 12 (9%), Referenced to phase 2:SBT and 6:, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.39	
Intersection Signal Delay: 11.7	Intersection LOS: B
Intersection Capacity Utilization 43.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6354: Biscayne Blvd & NE 5 ST



Lanes, Volumes, Timings
2318: Biscayne Blvd & NE 5 ST

Alternative 1
03/09/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗								↑↑↑	
Traffic Volume (vph)	0	278	177	0	0	0	0	0	0	0	1204	0
Future Volume (vph)	0	278	177	0	0	0	0	0	0	0	1204	0
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00
Frt			0.850									
Flt Protected												
Satd. Flow (prot)	0	5036	1568	0	0	0	0	0	0	0	6408	0
Flt Permitted												
Satd. Flow (perm)	0	5036	1568	0	0	0	0	0	0	0	6408	0
Satd. Flow (RTOR)			88									
Adj. Flow (vph)	0	348	188	0	0	0	0	0	0	0	1338	0
Lane Group Flow (vph)	0	348	188	0	0	0	0	0	0	0	1338	0
Turn Type		NA	Prot								NA	
Protected Phases		8	8								2	
Permitted Phases												
Detector Phase		8	8									
Switch Phase												
Minimum Initial (s)		7.0	7.0								7.0	
Minimum Split (s)		34.0	34.0								31.3	
Total Split (s)		35.0	35.0								105.0	
Total Split (%)		25.0%	25.0%								75.0%	
Maximum Green (s)		26.0	26.0								98.7	
Yellow Time (s)		4.0	4.0								4.0	
All-Red Time (s)		5.0	5.0								2.3	
Lost Time Adjust (s)		0.0	0.0								0.0	
Total Lost Time (s)		9.0	9.0								6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.5	2.5								1.0	
Recall Mode		Max	Max								C-Max	
Walk Time (s)		7.0	7.0								7.0	
Flash Dont Walk (s)		18.0	18.0								18.0	
Pedestrian Calls (#/hr)		0	0								0	
Act Effect Green (s)		26.0	26.0								98.7	
Actuated g/C Ratio		0.19	0.19								0.70	
v/c Ratio		0.37	0.52								0.30	
Control Delay		51.2	32.5								7.9	
Queue Delay		0.1	0.0								1.0	
Total Delay		51.3	32.5								8.9	
LOS		D	C								A	
Approach Delay		44.7									8.9	
Approach LOS		D									A	
Queue Length 50th (ft)		102	81								120	
Queue Length 95th (ft)		120	163								136	
Internal Link Dist (ft)		400			44			306			228	
Turn Bay Length (ft)												
Base Capacity (vph)		935	362								4517	
Starvation Cap Reductn		0	0								2798	
Spillback Cap Reductn		65	0								0	

Lane Group	Ø5	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Satd. Flow (RTOR)		
Adj. Flow (vph)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	5	6
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	4.0	7.0
Minimum Split (s)	10.3	31.3
Total Split (s)	25.0	80.0
Total Split (%)	18%	57%
Maximum Green (s)	18.7	73.7
Yellow Time (s)	4.0	4.0
All-Red Time (s)	2.3	2.3
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	3.0	1.0
Recall Mode	None	C-Max
Walk Time (s)		7.0
Flash Dont Walk (s)		18.0
Pedestrian Calls (#/hr)		0
Act Effect Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		

Lanes, Volumes, Timings
 2318: Biscayne Blvd & NE 5 ST

Alternative 1
 03/09/2023

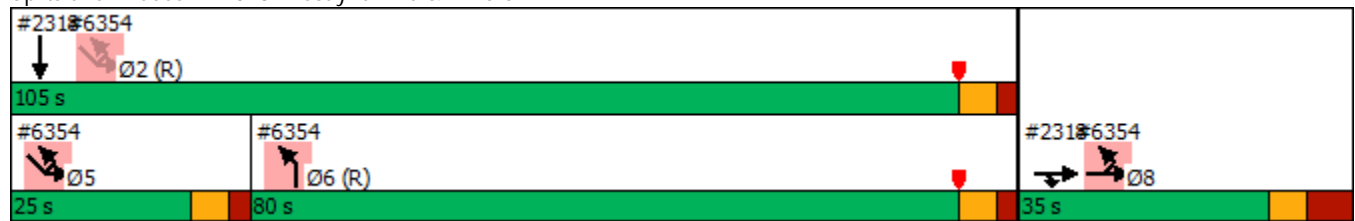


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Storage Cap Reductn		0	0								0	
Reduced v/c Ratio		0.40	0.52								0.78	

Intersection Summary

Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:SBT and 6:, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 19.2	Intersection LOS: B
Intersection Capacity Utilization 41.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2318: Biscayne Blvd & NE 5 ST



Lane Group	Ø5	Ø6
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Lanes, Volumes, Timings
6354: Biscayne Blvd & NE 5 ST

Alternative 1
03/09/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEU	SEL	SER	Ø2
Lane Configurations	↘	↑↑↑					↑↑↑↑			↘↘		
Traffic Volume (vph)	223	53	0	0	0	0	1681	51	14	49	0	
Future Volume (vph)	223	53	0	0	0	0	1681	51	14	49	0	
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00	0.91	0.86	0.95	0.97	1.00	
Frt							0.995					
Flt Protected	0.950						0.954			0.950		
Satd. Flow (prot)	1805	4510	0	0	0	0	6488	0	0	3449	0	
Flt Permitted	0.950						0.954			0.950		
Satd. Flow (perm)	1805	4510	0	0	0	0	6488	0	0	3449	0	
Satd. Flow (RTOR)							96					
Adj. Flow (vph)	290	64	0	0	0	0	1788	68	20	72	0	
Lane Group Flow (vph)	290	64	0	0	0	0	1856	0	0	92	0	
Turn Type	Split	NA					Prot		pm+pt	pm+pt		
Protected Phases	8	8					6		5	5		2
Permitted Phases									2	2		
Detector Phase	8	8							5	5		
Switch Phase												
Minimum Initial (s)	7.0	7.0					7.0		4.0	4.0		7.0
Minimum Split (s)	34.0	34.0					31.3		10.3	10.3		31.3
Total Split (s)	35.0	35.0					80.0		25.0	25.0		105.0
Total Split (%)	25.0%	25.0%					57.1%		17.9%	17.9%		75%
Maximum Green (s)	26.0	26.0					73.7		18.7	18.7		98.7
Yellow Time (s)	4.0	4.0					4.0		4.0	4.0		4.0
All-Red Time (s)	5.0	5.0					2.3		2.3	2.3		2.3
Lost Time Adjust (s)	0.0	0.0					0.0			0.0		
Total Lost Time (s)	9.0	9.0					6.3			6.3		
Lead/Lag							Lag		Lead	Lead		
Lead-Lag Optimize?							Yes		Yes	Yes		
Vehicle Extension (s)	2.5	2.5					1.0		3.0	3.0		1.0
Recall Mode	Max	Max					C-Max		None	None		C-Max
Walk Time (s)	7.0	7.0					7.0					7.0
Flash Dont Walk (s)	18.0	18.0					18.0					18.0
Pedestrian Calls (#/hr)	0	0					0					0
Act Effct Green (s)	26.0	26.0					85.8			98.7		
Actuated g/C Ratio	0.19	0.19					0.61			0.70		
v/c Ratio	0.87	0.08					0.46			0.04		
Control Delay	38.1	3.1					14.2			6.3		
Queue Delay	2.1	1.2					1.0			0.0		
Total Delay	40.2	4.3					15.2			6.3		
LOS	D	A					B			A		
Approach Delay		33.7					15.2			6.3		
Approach LOS		C					B			A		
Queue Length 50th (ft)	150	0					225			11		
Queue Length 95th (ft)	155	1					254			15		
Internal Link Dist (ft)		44			520		355			213		
Turn Bay Length (ft)												
Base Capacity (vph)	335	837					4013			2431		
Starvation Cap Reductn	10	635					1765			0		
Spillback Cap Reductn	0	0					0			0		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEU	SEL	SER	Ø2
Storage Cap Reductn	0	0					0			0		
Reduced v/c Ratio	0.89	0.32					0.83			0.04		

Intersection Summary

Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:SBT and 6:, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 17.7	Intersection LOS: B
Intersection Capacity Utilization 58.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 6354: Biscayne Blvd & NE 5 ST



Lanes, Volumes, Timings
2318: Biscayne Blvd & NE 5 ST

Alternative 2
03/09/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗								↑↑↑	
Traffic Volume (vph)	0	278	177	0	0	0	0	0	0	0	1204	0
Future Volume (vph)	0	278	177	0	0	0	0	0	0	0	1204	0
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00
Frt			0.850									
Flt Protected												
Satd. Flow (prot)	0	5036	1568	0	0	0	0	0	0	0	6408	0
Flt Permitted												
Satd. Flow (perm)	0	5036	1568	0	0	0	0	0	0	0	6408	0
Satd. Flow (RTOR)			88									
Adj. Flow (vph)	0	348	188	0	0	0	0	0	0	0	1338	0
Lane Group Flow (vph)	0	348	188	0	0	0	0	0	0	0	1338	0
Turn Type		NA	Prot								NA	
Protected Phases		8	8								2	
Permitted Phases												
Detector Phase		8	8									
Switch Phase												
Minimum Initial (s)		7.0	7.0								7.0	
Minimum Split (s)		34.0	34.0								31.3	
Total Split (s)		35.0	35.0								105.0	
Total Split (%)		25.0%	25.0%								75.0%	
Maximum Green (s)		26.0	26.0								98.7	
Yellow Time (s)		4.0	4.0								4.0	
All-Red Time (s)		5.0	5.0								2.3	
Lost Time Adjust (s)		0.0	0.0								0.0	
Total Lost Time (s)		9.0	9.0								6.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.5	2.5								1.0	
Recall Mode		Max	Max								C-Max	
Walk Time (s)		7.0	7.0								7.0	
Flash Dont Walk (s)		18.0	18.0								18.0	
Pedestrian Calls (#/hr)		0	0								0	
Act Effect Green (s)		26.0	26.0								98.7	
Actuated g/C Ratio		0.19	0.19								0.70	
v/c Ratio		0.37	0.52								0.30	
Control Delay		51.2	32.5								7.9	
Queue Delay		0.0	0.0								1.0	
Total Delay		51.2	32.5								8.9	
LOS		D	C								A	
Approach Delay		44.6									8.9	
Approach LOS		D									A	
Queue Length 50th (ft)		102	81								120	
Queue Length 95th (ft)		120	163								136	
Internal Link Dist (ft)		400			44			306			228	
Turn Bay Length (ft)												
Base Capacity (vph)		935	362								4517	
Starvation Cap Reductn		0	0								2798	
Spillback Cap Reductn		0	0								0	

Lane Group	Ø5	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Satd. Flow (RTOR)		
Adj. Flow (vph)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	5	6
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	4.0	7.0
Minimum Split (s)	10.3	31.3
Total Split (s)	25.0	80.0
Total Split (%)	18%	57%
Maximum Green (s)	18.7	73.7
Yellow Time (s)	4.0	4.0
All-Red Time (s)	2.3	2.3
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	3.0	1.0
Recall Mode	None	C-Max
Walk Time (s)		7.0
Flash Dont Walk (s)		18.0
Pedestrian Calls (#/hr)		0
Act Effect Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Storage Cap Reductn		0	0								0	
Reduced v/c Ratio		0.37	0.52								0.78	

Intersection Summary

Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:SBT and 6:, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 19.1	Intersection LOS: B
Intersection Capacity Utilization 41.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2318: Biscayne Blvd & NE 5 ST



Lane Group	Ø5	Ø6
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Lanes, Volumes, Timings
6354: Biscayne Blvd & NE 5 ST

Alternative 2
03/09/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEU	SEL	SER	Ø2
Lane Configurations	↘	↕↕↕					↕↕↕↕			↘↘		
Traffic Volume (vph)	223	53	0	0	0	0	1681	51	14	49	0	
Future Volume (vph)	223	53	0	0	0	0	1681	51	14	49	0	
Lane Util. Factor	0.86	0.86	1.00	1.00	1.00	1.00	0.91	0.86	0.95	0.97	1.00	
Fr't							0.995					
Flt Protected		0.961					0.954			0.950		
Satd. Flow (prot)	1634	4586	0	0	0	0	6488	0	0	3449	0	
Flt Permitted		0.961					0.954			0.950		
Satd. Flow (perm)	1634	4586	0	0	0	0	6488	0	0	3449	0	
Satd. Flow (RTOR)							96					
Adj. Flow (vph)	290	64	0	0	0	0	1788	68	20	72	0	
Lane Group Flow (vph)	0	354	0	0	0	0	1856	0	0	92	0	
Turn Type	Split	NA					Prot		pm+pt	pm+pt		
Protected Phases	8	8					6		5	5		2
Permitted Phases									2	2		
Detector Phase	8	8							5	5		
Switch Phase												
Minimum Initial (s)	7.0	7.0					7.0		4.0	4.0		7.0
Minimum Split (s)	34.0	34.0					31.3		10.3	10.3		31.3
Total Split (s)	35.0	35.0					80.0		25.0	25.0		105.0
Total Split (%)	25.0%	25.0%					57.1%		17.9%	17.9%		75%
Maximum Green (s)	26.0	26.0					73.7		18.7	18.7		98.7
Yellow Time (s)	4.0	4.0					4.0		4.0	4.0		4.0
All-Red Time (s)	5.0	5.0					2.3		2.3	2.3		2.3
Lost Time Adjust (s)	0.0	0.0					0.0			0.0		
Total Lost Time (s)	9.0	9.0					6.3			6.3		
Lead/Lag							Lag		Lead	Lead		
Lead-Lag Optimize?							Yes		Yes	Yes		
Vehicle Extension (s)	2.5	2.5					1.0		3.0	3.0		1.0
Recall Mode	Max	Max					C-Max		None	None		C-Max
Walk Time (s)	7.0	7.0					7.0					7.0
Flash Dont Walk (s)	18.0	18.0					18.0					18.0
Pedestrian Calls (#/hr)	0	0					0					0
Act Effct Green (s)		26.0					85.8			98.7		
Actuated g/C Ratio		0.19					0.61			0.70		
v/c Ratio		0.91dl					0.46			0.04		
Control Delay		4.9					14.2			6.3		
Queue Delay		0.3					1.0			0.0		
Total Delay		5.2					15.2			6.3		
LOS		A					B			A		
Approach Delay		5.2					15.2			6.3		
Approach LOS		A					B			A		
Queue Length 50th (ft)		4					225			11		
Queue Length 95th (ft)		5					254			15		
Internal Link Dist (ft)		44			520		355			213		
Turn Bay Length (ft)												
Base Capacity (vph)		851					4013			2431		
Starvation Cap Reductn		151					1765			0		
Spillback Cap Reductn		0					0			0		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEU	SEL	SER	Ø2
Storage Cap Reductn		0					0			0		
Reduced v/c Ratio		0.51					0.83			0.04		

Intersection Summary

Cycle Length: 140
 Actuated Cycle Length: 140
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.52
 Intersection Signal Delay: 13.3
 Intersection LOS: B
 Intersection Capacity Utilization 52.3%
 ICU Level of Service A
 Analysis Period (min) 15
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 6354: Biscayne Blvd & NE 5 ST



APPENDIX D – SIGNAL TIMING AND PHASING INFORMATION

TOD Schedule Report
for 2318: US 1 (SB)&NE 5 St

Print Date:
10/4/2021

Print Time:
2:29 PM

<u>Asset</u>	<u>Intersection</u>	<u>TOD Schedule</u>	<u>Op Mode</u>	<u>Plan #</u>	<u>Cycle</u>	<u>Offset</u>	<u>TOD Setting</u>	<u>Active PhaseBank</u>	<u>Active Maximum</u>
2318	US 1 (SB)&NE 5 St	DOW-2	TOD	N/A	0	0	N/A	0	Max 0

Splits

<u>PH 1</u>	<u>PH 2</u>	<u>PH 3</u>	<u>PH 4</u>	<u>PH 5</u>	<u>PH 6</u>	<u>PH 7</u>	<u>PH 8</u>
-	SBT	-	-	SBL	NBT	-	EBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

<u>Phase</u>	<u>Walk</u>			<u>Don't Walk</u>			<u>Min Initial</u>			<u>Veh Ext</u>			<u>Max Limit</u>			<u>Max 2</u>			<u>Yellow</u>	<u>Red</u>
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3		
1 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 SBT	7	7	7	18	18	18	7	7	7	1	1	1	40	40	40	0	55	55	4	2.3
3 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 SBL	0	0	0	0	0	0	5	5	5	2	2	2	10	10	10	30	30	30	4	2.3
6 NBT	7	7	7	18	18	18	7	7	7	1	1	1	40	40	40	0	55	55	4	2.3
7 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 EBT	7	7	7	18	18	18	10	10	10	2.5	2.5	2.5	25	25	25	50	50	50	4	5

Last In Service Date: unknown

Permitted Phases	
	12345678
Default	-2--56-8
External Permit 0	-----
External Permit 1	-----
External Permit 2	-----

TOD Schedule Report
for 2318: US 1 (SB)&NE 5 St

Print Date:
10/4/2021

Print Time:
2:29 PM

Current TOD Schedule	Plan	Cycle	Green Time								Ring Offset	Offset
			1 -	2 SBT	3 -	4 -	5 SBL	6 NBT	7 -	8 EBT		
3		130	0	89	0	0	19	64	0	26	0	0
4		140	0	99	0	0	19	74	0	26	0	0
6		140	0	99	0	0	19	74	0	26	0	12
10		140	0	99	0	0	19	74	0	26	0	0
13		140	0	99	0	0	19	74	0	26	0	0
14		110	0	67	0	0	17	44	0	28	0	0
17		100	0	57	0	0	20	31	0	28	0	0
18		130	0	89	0	0	19	64	0	26	0	0
19		110	0	75	0	0	18	51	0	20	0	0
20		130	0	89	0	0	25	58	0	26	0	0
21		120	0	71	0	0	16	49	0	34	0	0
22		100	0	65	0	0	14	45	0	20	0	0
25		180	0	134	0	0	25	103	0	31	0	0

Local TOD Schedule		
Time	Plan	DOW
0000	17	M T W Th F
0000	18	Su S
0130	Free	M T W Th F
0230	Free	Su S
0600	3	M T W Th F
0630	18	Su S
0700	4	M T W Th F
0800	19	Su S
0900	6	M T W Th F
1100	20	Su S
1545	10	M T W Th F
1900	13	M T W Th F
1900	21	Su S
2000	14	M T W Th F
2300	17	M T W Th F
2300	22	Su S

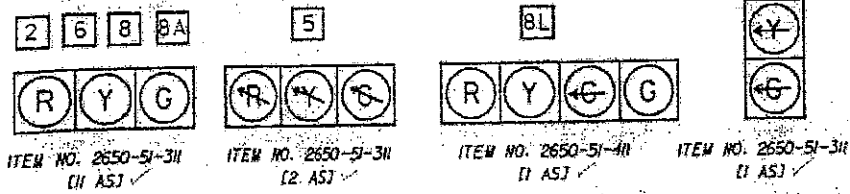
Current Time of Day Function			
Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-----	SuM T W ThF S
0600	PED RECALL	8-----	M T W ThF
2200	PED RECALL	-----	M T W ThF

Local Time of Day Function			
Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-----	SuM T W ThF S
0600	PED RECALL	8-----	M T W ThF
0800	PED RECALL	8-----	Su S
2200	PED RECALL	-----	M T W ThF
2300	PED RECALL	-----	Su S

* Settings
Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

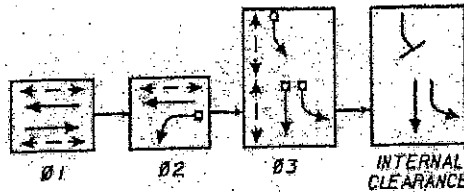
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SIGNAL HEAD DETAILS

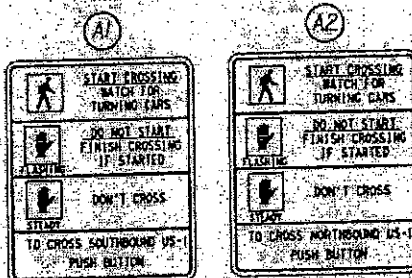
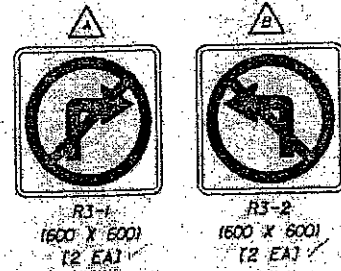
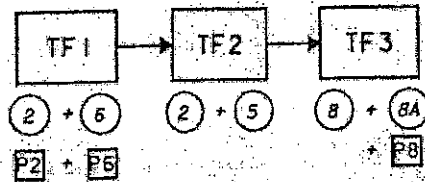


SIGNAL OPERATING PLAN

PHASE MOVEMENT DIAGRAM

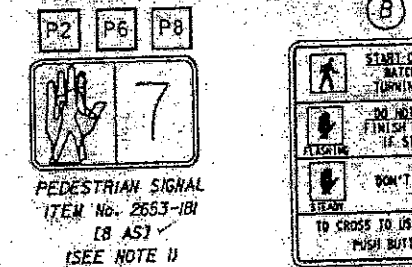


RING DIAGRAM



R10-3B
TO BE INCLUDED IN THE COST OF ITEM No. 2665-II (1 EA) ✓

R10-3B
TO BE INCLUDED IN THE COST OF ITEM No. 2665-II (1 EA) ✓



SIGNALIZATION NOTES

- CONTROLLER OPERATIONS
 - MODEL 170 CONTROLLER ASSEMBLY WITH COORDINATION CAPABILITIES.
 - MAJOR STREET IS S.R. 5 (US-1/BISCAYNE BLVD.) MINOR STREET IS N.E. 5TH STREET/PORT BLVD
 - FLASHING OPERATION TO BE:
 - YELLOW ON S.R. 5 (US-1/BISCAYNE BLVD.), MOVEMENTS (2) + (6).
 - RED ON N.E. 5TH STREET/PORT BLVD MOVEMENTS (5), (8) & (8A).
 - COORDINATION PHASE IS ON PHASE 1, MOVEMENTS (2) + (6).
 - PEDESTRIAN DISPLAY CONCURRENT WITH PHASE 1 & ACTUATED ON PHASE 3.

2. TIMING WILL BE PROVIDED BY MIAMI-DADE COUNTY PUBLIC WORKS DEPARTMENT SIGNALS AND SIGNS DIVISION, 7100 NW 36 ST, TELEPHONE (305) 592-8925.

DETECTORS FOR LOOPS	NO. OF LOOPS	NO. OF DETS.
L-5	2	1
L-8	4	2
L-8A	3	2
L-8L	1	1

REMOVAL ITEMS

- 2690-10 REMOVE TRAFFIC SIGNAL HEAD ASSEMBLY
- 2690-20 REMOVE PEDESTRIAN SIGNAL ASSEMBLY
- 2690-31 REMOVE SIGNAL PEDESTAL
- 2690-33-2 REMOVE POLE (DEEP)
- 2690-50 REMOVE CONTROLLER ASSEMBLY
- 2690-60 REMOVE VEHICLE DETECTOR ASSEMBLY
- 2690-70 REMOVE PEDESTRIAN DETECTOR
- 2690-90 REMOVE CABLING AND CONDUIT
- 2690-100 REMOVE MISCELLANEOUS SIGNAL EQUIPMENT (PULL BOX)

NOTES:

- PAY ITEM NUMBER 2653-1B1 SHALL BE A COUNTDOWN PEDESTRIAN SIGNAL TASSINCO TECHNOLOGIES MODEL PSC 250 OVERLAY/FILLED/FILLED 16" MODULE 8" DIGITS WITH CLASS 3 MESSAGE SIZE (11" x 7") OR MIAMI-DADE COUNTY TS&S DIVISION APPROVED EQUIVALENT.
- BELLSOUTH SERVICE REP. STEVE MASSIE (305) 222-8745.
- FP&L SERVICE REP. MR. J.R. GARCIA (305) 442-5154.

- (1 EA) ✓
- (8 EA) ✓
- (5 EA) ✓
- (14.6 M) ✓
- (1 EA) ✓
- (3 EA) ✓
- (4 EA) ✓
- (1 P) ✓
- (1 P) ✓

DAVID PLUMMER & ASSOCIATES, INC.
1750 PONCE DE LEON BOULEVARD
CORAL GABLES, FLORIDA 33134
CERTIFICATE OF AUTHORIZATION EB 2690
VICTOR LEE P.E. NO. 35233

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION
ROAD NO. SR 5 COUNTY MIAMI-DADE FINANCIAL PROJECT ID 249835-2-52-01

S.R. 5 (US-1/BISCAYNE BLVD.) & N.E. 5TH STREET ID No. 2318 & 6354

SIGNALIZATION PLAN

SHEET NO. T-5

PORT BLVD NE 5 ST
D3-15 (750 X 1350) (3 EA) ✓

BISCAYNE BLVD / US1 JORGE MAS CANOSA BLVD
D3-15 (750 X 2400) (2 EA) ✓

INSTALL MAST ARM ASSEMBLY
ITEM NO. 2700-48-1B (9 EA) ✓

INSTALL MAST ARM ASSEMBLY
STA. 99+96.07, (34.43m LT)
BEARING: N69°21'E
2635-1-II (1 EA) ✓
2649-715-003 (1 EA) ✓
2653-1B1 (2 AS) ✓
2665-II (1 EA) ✓

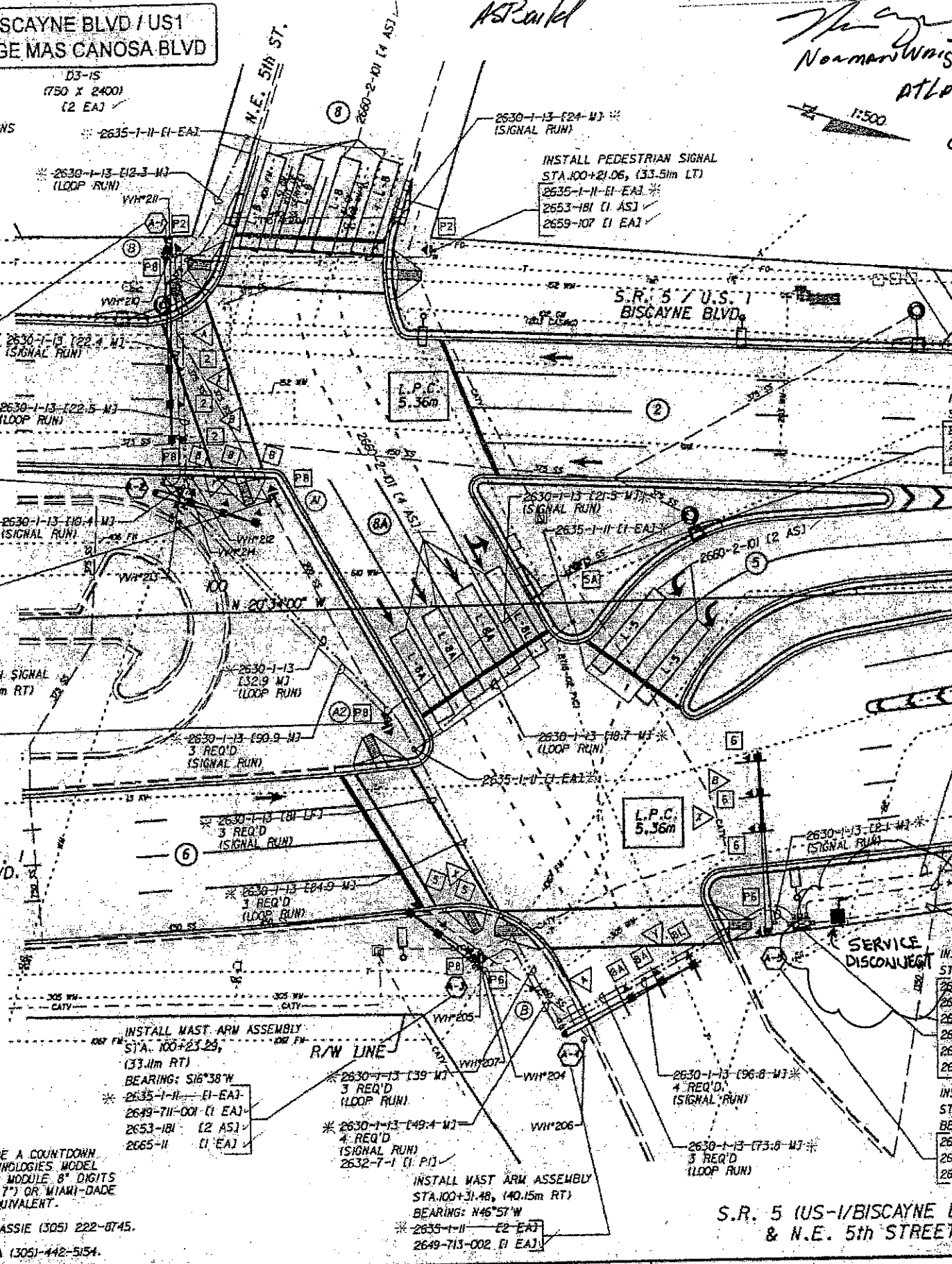
INSTALL MAST ARM ASSEMBLY
STA. 99+94.84, (11.82m LT)
BEARING: N2°16'W
2635-1-II (1 EA) ✓
2649-715-001 (1 EA) ✓

INSTALL PEDESTRIAN SIGNAL
STA. 100+5.80, (10.85m LT)
2635-1-II (1 EA) ✓
2653-1B1 (1 AS) ✓
2659-107 (1 EA) ✓
2665-II (1 EA) ✓

INSTALL PEDESTRIAN SIGNAL
STA. 100+15.47, (10.76m RT)
2635-1-II (1 EA) ✓
2653-1B1 (1 AS) ✓
2659-107 (1 EA) ✓
2665-II (1 EA) ✓

INSTALL MAST ARM ASSEMBLY
STA. 100+23.29, (33.11m RT)
BEARING: S16°38'W
2635-1-II (1 EA) ✓
2649-715-001 (1 EA) ✓
2653-1B1 (2 AS) ✓
2665-II (1 EA) ✓

INSTALL MAST ARM ASSEMBLY
STA. 100+31.48, (40.15m RT)
BEARING: N46°57'W
2635-1-II (1 EA) ✓
2649-715-002 (1 EA) ✓



INSTALL SIGNAL ASSEMBLY
STA. 100+33.13, (13.37m LT)
2635-1-II (1 EA) ✓
2650-51-3H (1 AS) ✓
2659-107 (1 EA) ✓

BELLSOUTH SERVICE POINT EXIST. W.H. AT NE 6 ST
2630-1-13 (50) M) ✓

FP&L SERVICE POINT EXIST. W.H. AT NE 6 ST
2630-1-13 (62) M) ✓
2639-1-23 (1 AS) ✓
2639-2-1 (82) M) ✓

INSTALL CONTROLLER ASSEMBLY
STA. 100+34.06, (31.02m RT)
2635-1-II (1 EA) ✓
2635-1-16 (1 EA) ✓
2660-1-109 (6 EA) ✓
2670-5-120 (1 AS) ✓
2685-120 (1 EA) ✓
2685-124 (1 EA) ✓

INSTALL MAST ARM ASSEMBLY
STA. 100+30.97, (31.12m RT)
BEARING: S57°06'W
2635-1-II (1 EA) ✓
2649-715-003 (1 EA) ✓
2653-1B1 (1 AS) ✓

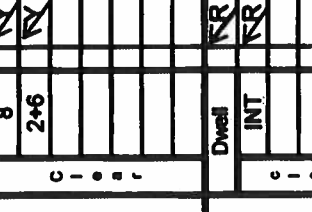
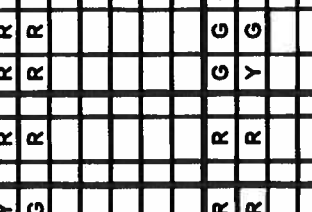
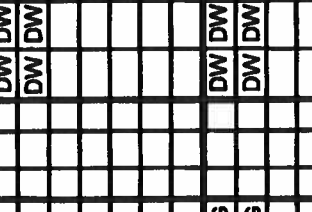
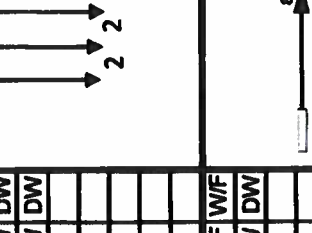
* SEE PAGE T-1 FOR QUANTITIES

Norman Wright
ATLAS TMS 9-19-08
CC-13542

FILE COPY

SIGNAL OPERATING PLAN

Direction		SB		NB		EB			Ped Heads				Movements/Display/Actuation	
Timing Phases	Head No.	5/5A	2	6	8	8A	8L	P2	P6	P8A	P8B	P2		P6
2+6 SB/NB US-1	Dwell	NR	G	G	R	R	R							
	C	NR	G	Y	R	R	R							
	I	NR	G	Y	R	R	R							
	R	NR	Y	Y	R	R	R							
RECALL	Dwell													
	C													
	I													
	R													
2+5 SBL+SBT US-1	Dwell	NG	G	R	R	R	R							
	C	NR	Y	R	R	R	R							
	I	NR	G	R	R	R	R							
	R													
ACTUATED 8 EB NE 5 ST	Dwell	NR	R	R	G	G	<G/G							
	C	NR	R	R	Y	G	<G/G							
	I													
	R													
ACTUATED INTERNAL CLEARANCE	Dwell	NR	R	R	R	R	G	<G/G						
	C	NR	R	R	R	R	Y	Y						
	I													
	R													
Flashing Operation	Dwell													
	C													
	I													
	R													
MIAMI-DADE COUNTY PUBLIC WORK DEPARTMENT												Page 1 of 1		
Drawn	US-1 & NE 5 St													
Checked	Placed in Service													
Date												Asset Number		
Date												2318		



Date: 10/2/2020
 Drawn: Mario L. Hernandez
 Date: 10/15/2020
 Checked: *[Signature]*
 By: *[Signature]*

TOD Schedule Report

for 3241: US 1&NE 6 St

Print Date:

10/4/2021

Print Time:

4:16 PM

<u>Asset</u>	<u>Intersection</u>	<u>TOD Schedule</u>	<u>Op Mode</u>	<u>Plan #</u>	<u>Cycle</u>	<u>Offset</u>	<u>TOD Setting</u>	<u>Active PhaseBank</u>	<u>Active Maximum</u>
3241	US 1&NE 6 St	DOW-2	TOD	[10] PRE-PM PEAK	140	0	N/A	1	Max 2

Splits

<u>PH 1</u>	<u>PH 2</u>	<u>PH 3</u>	<u>PH 4</u>	<u>PH 5</u>	<u>PH 6</u>	<u>PH 7</u>	<u>PH 8</u>
NBL	SBT	-	WBT	-	NBT	-	-
12	65	0	43	0	83	0	0



Active Phase Bank: Phase Bank 1

Phase	<u>Walk</u>			<u>Don't Walk</u>			<u>Min Initial</u>			<u>Veh Ext</u>			<u>Max Limit</u>			<u>Max 2</u>			<u>Yellow</u>	<u>Red</u>
	Phase Bank																			
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3		
1 NBL	0	0	0	0	0	0	5	5	5	2	2	2	12	12	12	18	15	15	4	2.2
2 SBT	7	7	7	14	14	14	7	7	7	1	1	1	30	30	30	0	40	40	4	2.2
3 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 WBT	7	7	7	17	17	17	7	7	7	4	4	4	25	25	25	55	36	36	5	2.9
5 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 NBT	7	7	7	17	17	17	7	7	7	1	1	1	30	30	30	0	40	40	4	2.2
7 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Last In Service Date: unknown

Permitted Phases	
Default	12-4-6--
External Permit 0	-----
External Permit 1	-----
External Permit 2	-----

12345678

TOD Schedule Report

for 3241: US 1&NE 6 St

Print Date:

10/4/2021

Print Time:

4:16 PM

Current TOD Schedule	Plan	Cycle	Green Time								Ring Offset	Offset
			1 NBL	2 SBT	3 -	4 WBT	5 -	6 NBT	7 -	8 -		
1		90	10	34	0	26	0	50	0	0	0	0
3		130	7	76	0	27	0	89	0	0	0	113
4		140	10	83	0	27	0	99	0	0	0	0
5		140	13	80	0	27	0	99	0	0	0	0
6		140	13	70	0	37	0	89	0	0	0	13
10		140	12	65	0	43	0	83	0	0	0	0
13		130	11	61	0	38	0	78	0	0	0	0
14		110	10	53	0	27	0	69	0	0	0	0
17		100	6	48	0	26	0	60	0	0	0	0
18		140	13	80	0	27	0	99	0	0	0	0
19		110	8	55	0	27	0	69	0	0	0	0
20		130	8	76	0	26	0	90	0	0	0	0
21		120	9	51	0	40	0	66	0	0	0	0
22		100	7	47	0	26	0	60	0	0	0	0
25		180	9	112	0	39	0	127	0	0	0	0

Local TOD Schedule		
Time	Plan	DOW
0000	17	M T W Th F
0000	18	Su S
0130	Free	M T W Th F
0230	Free	Su S
0600	3	M T W Th F
0630	18	Su S
0700	4	M T W Th F
0800	19	Su S
0900	6	M T W Th F
1100	20	Su S
1545	10	M T W Th F
1900	13	M T W Th F
1900	21	Su S
2000	14	M T W Th F
2300	17	M T W Th F
2300	22	Su S

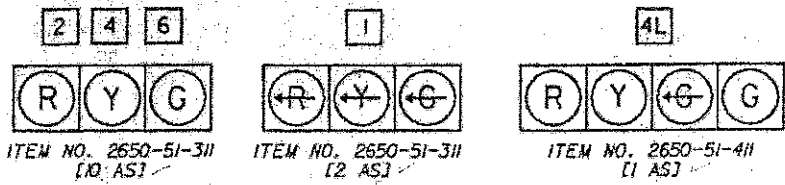
Current Time of Day Function			
Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-----	SuM T W ThF S
0600	PED RECALL	----4--	M T W ThF
1600	VEH MAX RECALL	----4--	M T W ThF
1830	VEH MAX RECALL	-----	M T W ThF
2200	PED RECALL	-----	M T W ThF

Local Time of Day Function			
Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-----	SuM T W ThF S
0600	PED RECALL	----4--	M T W ThF
0800	PED RECALL	----4--	Su S
1600	VEH MAX RECALL	----4--	M T W ThF
1830	VEH MAX RECALL	-----	M T W ThF
2200	PED RECALL	-----	M T W ThF
2300	PED RECALL	-----	Su S

* Settings
Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

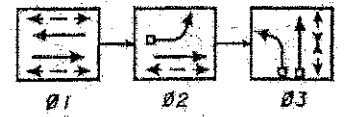
No Calendar Defined/Enabled

SIGNAL HEAD DETAILS

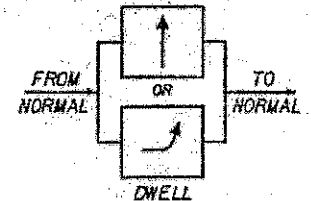


SIGNAL OPERATING PLAN

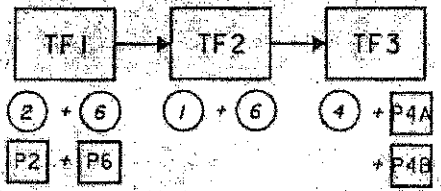
PHASE MOVEMENT DIAGRAM



RAILROAD PRE-EMPTION



RING DIAGRAM



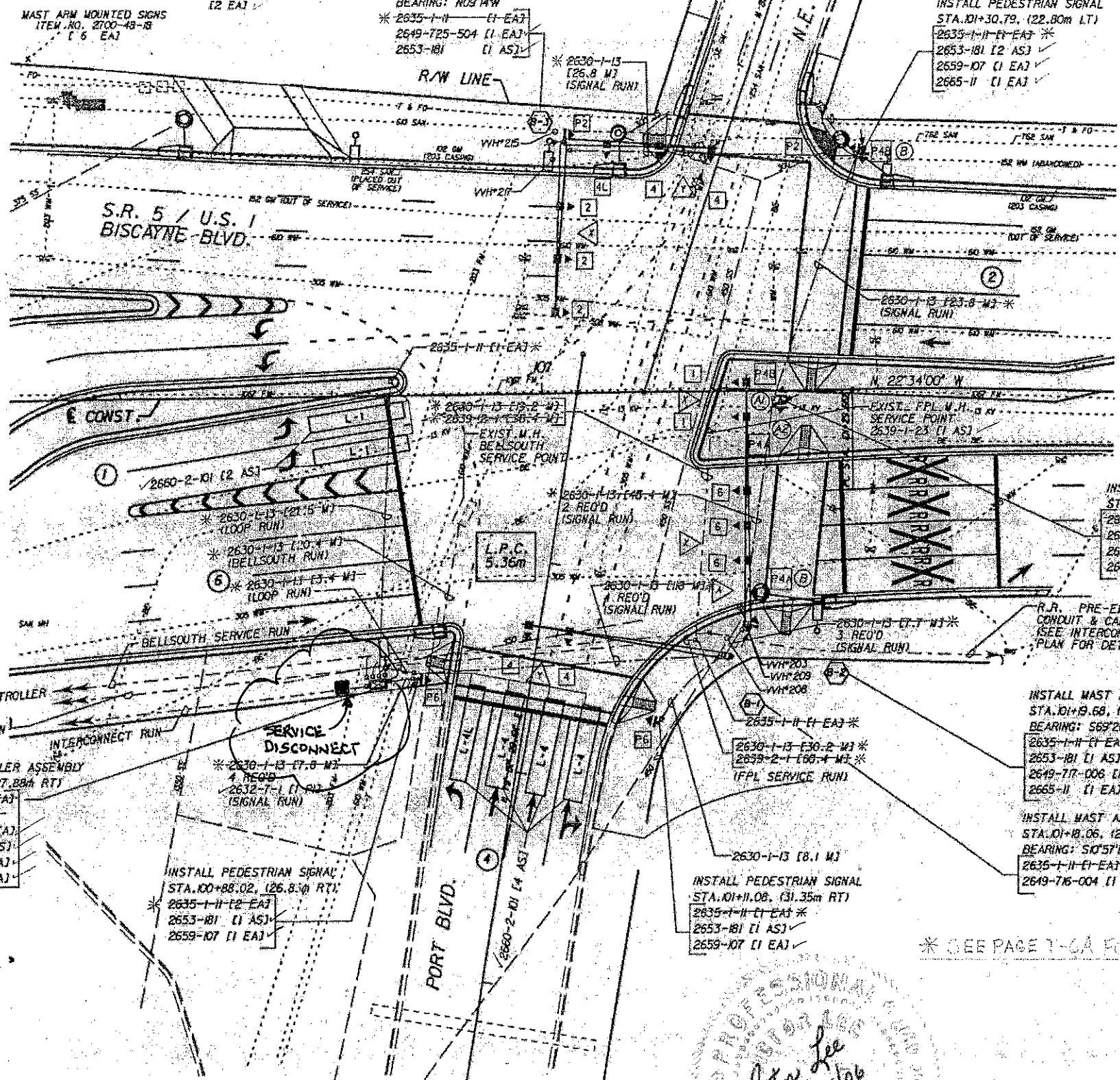
SIGNALIZATION NOTES

- CONTROLLER OPERATIONS**
 - MODEL 170 CONTROLLER ASSEMBLY WITH COORDINATION CAPABILITIES & RAILROAD PRE-EMPTION.
 - MAJOR STREET IS S.R. 5 (US-1/BISCAYNE BLVD.), MINOR STREET IS N.E. 6th STREET
 - FLASHING OPERATION TO BE:
 - YELLOW ON S.R. 5 (US-1/BISCAYNE BLVD.), (MOVEMENTS ② + ⑥).
 - RED ON N.E. 6th STREET (MOVEMENTS ① & ④).
 - COORDINATION PHASE IS ON PHASE 1.
 - PEDESTRIAN DISPLAY CONCURRENT WITH PHASE 1 AND ACTUATED FOR PHASE 3.
- TIMING WILL BE PROVIDED BY MIAMI-DADE COUNTY PUBLIC WORKS DEPARTMENT SIGNALS AND SIGNS DIVISION, 7100 NW 36 ST, TELEPHONE (305) 592-8925.**

DETECTORS FOR LOOPS		
LOOPS	NO. OF LOOPS	NO. OF DETS.
L-1	2	7
L-4	3	2
L-4L	1	1

REMOVAL ITEMS

- 2690-10 REMOVE TRAFFIC SIGNAL HEAD ASSEMBLY (8 EA)
- 2690-20 REMOVE PEDESTRIAN SIGNAL ASSEMBLY (6 EA)
- 2690-31 REMOVE SIGNAL PEDESTAL (3 EA)
- 2690-33 REMOVE POLE (DEEP DIRECT BURIAL) (6-4 M) (1 EA)
- 2690-50 REMOVE CONTROLLER ASSEMBLY (1 EA)
- 2690-60 REMOVE VEHICLE DETECTOR ASSEMBLY (4 EA)
- 2690-80 REMOVE SPAN WIRE ASSEMBLY (2 EA)
- 2690-90 REMOVE CABLING AND CONDUIT (1 P)
- 2690-100 REMOVE MISCELLANEOUS SIGNAL EQUIPMENT (PULL BOX) (1 P)



Norman Wright
 ATLPs TMS 9-19-08
 CC-13542

* SEE PAGE T-6A FOR QUANTITIES

S.R. 5 (US-1/BISCAYNE BLVD.) & N.E. 6th STREET ID No. 3241

DAVID PLUMMER & ASSOCIATES, INC. 1750 PONCE DE LEON BOULEVARD CORAL GABLES, FLORIDA 33134 CERTIFICATE OF AUTHORIZATION EB 2690 VICTOR LEE P.E. NO. 35233		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROAD NO. COUNTY FINANCIAL PROJECT ID SR 5 MIAMI-DADE 249835-2-52-01		SHEET NO. T-6
---	--	---	--	------------------

REVISIONS			
DATE	BY	DESCRIPTION	DATE
04-12-05	VL	REVISE BEARING ON MAST ARM B-3	
02-08-06	VL	REVISE MAST ARM B-1.	
05-05-06	VL	REVISE SOP DIAGRAMS, R10-3B SIGNS.	

SIGNAL OPERATING PLAN

Timing Phases	Direction Head No.	NB		SB		WB		Ped Heads				Movements/Display/Actuation	
		1	6	2	4L	1	4L	P2	P6	P1/A	P1/B		
2+6 NBT+SBT US-1	Dwell	<R	G	G	R	R							
	1+6	<R	G	Y	R	R							
	4	<R	Y	Y	R	R							
	PREM	<R	Y	G	R	R							
1+6 NBL+NBT US-1	Dwell	<G	G	R	R	R							
	4	<Y	Y	R	R	R							
	2+6	<Y	G	K	K	K							
	PREM	<Y	Y	G	R	R							
ACTUATED 4 WBT NE 6 ST	Dwell	<R	K	K	G	<G							
	2+6	<G	R	R	Y	Y							
	PREM	<R	R	G	Y	Y							
ACTUATED	Dwell												
Hashing Operation		<FR	FY	FY	FR	FR						Page 1 of 2	
Drawn		MIAMI-DADE COUNTY PUBLIC WORK DEPARTMENT											
Mario L. Hernandez		US-1 & NE 6 St											
Checked		Date		Date		Date		Date		Date		Asset Number	
		10/15/2020		10/15/2020		10/15/2020		10/15/2020		10/15/2020		3241	
		Placed in Service		By		By		By		By		By	

SIGNAL OPERATING PLAN

Timing Phases	Direction Head No.	NB		SB		WB		Ped Heads				Movements/Display/Actuation
		1	0	2	4	4L	P2	P0	P4A	P4B		
PREMPTION CLEARANCE SBT	Dwell	<R	R	G	R	R		DW	DW	DW	DW	
	DWELL	<R	R	Y	R	R		DW	DW	DW	DW	
US-1 ACTUATED	Dwell	<G	R	R	R	R		DW	DW	DW	DW	
	4	<Y	R	R	R	R		DW	DW	DW	DW	
PREMPTION DW/FI NBLT(1) US-1	Dwell	<R	R	R	R	R		DW	DW	DW	DW	
	4	<Y	R	R	R	R		DW	DW	DW	DW	
WBT(4) NE & ST	Dwell	<R	R	R	R	R		DW	DW	DW	DW	
	1	<R	R	R	R	R		DW	DW	DW	DW	
ACTUATED PREMPTION RECOVERY TO NORMAL OPERATION	Dwell	<R	G	G	R	R		W/F	W/F	DW	DW	
	1+6	<R	G	Y	R	R		DW	W/F	DW	DW	
	Dwell	<R	Y	Y	R	R		DW	DW	DW	DW	
	2+6	<R	G	G	R	R		DW	W/F	DW	DW	
Fishing Operation	Dwell	<FR	FY	FY	FR	FR						
		<FR	FY	FY	FR	FR						

MIAMI-DADE COUNTY PUBLIC WORK DEPARTMENT

Drawn
Mario L. Hernandez

Date
10/6/2020

US-1 & NE 6 St

Checked
M.L.H.

Placed in Service

Date
10/15/2020

Phasing No.

By

9

Asset Number

3241

APPENDIX E – DETAILED COST ESTIMATE FOR ALTERNATIVE 2

Cost Estimate With MA Replacement		Location: SR 5/Biscayne Boulevard at NE 5 Street			
		Roadway ID:		87061000	
		Date:		5/19/2023	
		Produced By:	LG/MF	QA/QC By:	KC
Pay Item	Description	Unit Measured	Avg. Unit Cost	Quantity	Total
0110 1 1	CLEARING & GRUBBING	LS	\$ 5,000.00	1.00	\$5,000.00
0327 70 6	MILLING EXIST ASPH PAVT,1 1/2" AVG DEPTH	SY	\$ 3.67	380.00	\$1,394.60
0337 7 83	ASPH CONC FC, TRAFFIC C, FC-12.5, PG 76-22	TN	\$ 173.79	34.49	\$5,993.15
0520 1 10	CONCRETE CURB & GUTTER, TYPE F	LF	\$ 36.41	120.00	\$4,369.20
0522 1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	SY	\$ 56.36	100.00	\$5,636.00
0526 1 2	PAVERS, ARCHITECTURAL, SIDEWALK	SY	\$ 713.03	108.00	\$77,007.24
0570 1 2	PERFORMANCE TURF, SOD	SY	\$ 4.04	30.00	\$121.20
0632 7 1	SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, F&I	PI	\$ 9,229.98	1.00	\$9,229.98
0635 2 11	PULL & SPLICE BOX, F&I, 13" x 24" (Mast-arm)	EA	\$ 1,254.50	4.00	\$5,018.00
0649 21 15	STEEL MAST ARM ASSEMBLY, F&I, SINGLE ARM 70'	EA	\$ 64,097.60	1.00	\$64,097.60
0649 26 3	STEEL MAST ARM ASSEMBLY, REMOVE	EA	\$ 3,585.64	1.00	\$3,585.64
0650 1 14	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL ALUMINUM, 3 SECTION, 1 WAY	AS	\$ 1,341.76	4.00	\$5,367.04
0670 5140	TRAF CNTL ASSEM,F&I - MODEL 2070	AS	\$ 38,550.00	1.00	\$ 38,550.00
0700 5 21	INTERNAL ILLUM SIGN, F&I OM, UP TO 12 SF	EA	\$ 3,838.60	1.00	\$3,838.60
0700 1 11	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF	AS	\$ 444.10	4.00	\$1,776.40
0700 1 60	SINGLE POST SIGN, REMOVE	AS	\$ 28.75	1.00	\$28.75
0700 2 60	MULTI- POST SIGN, REMOVE	AS	\$ 732.62	1.00	\$732.62
0700 3201	SIGN PANEL, F&I, OM, UP TO 12 SF	AS	\$ 1,020.30	1.00	\$1,020.30
0710 90	PAINTED PAVEMENT MARKINGS, FINAL SURFACE	LS	\$ 5,000.00	1.00	\$5,000.00
0711 11123	THERMOPLASTIC, STD, WHITE, SOLID, 12"	LF	\$ 2.67	84.50	\$225.62
0711 11125	THERMOPLASTIC, STD, WHITE, SOLID, 24"	LF	\$ 4.91	75.00	\$368.25
0711 11141	THERMOPLASTIC, STANDARD, WHITE, 2-4 DOTTED GUIDELINE/ 6-10 GAP EXTENSION, 6"	GM	\$ 1,961.87	0.10	\$196.19
0711 11160	THERMOPLASTIC, STD, WHITE, MESSAGE	EA	\$ 137.62	3.00	\$412.86
0711 11170	THERMOPLASTIC, STD, WHITE, ARROW	EA	\$ 96.01	6.00	\$576.06
0711 15101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	GM	\$ 5,410.11	0.10	\$541.01
0711 16101	THERMOPLASTIC, STD-OTH, WHITE, 6"	GM	\$ 5,512.47	0.10	\$523.68
0711 16131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	GM	\$ 1,551.00	0.10	\$155.10
0711 16201	THERMOPLASTIC, STD-OTH, YELLOW, 6"	GM	\$ 5,295.05	0.10	\$529.51
Roadway					\$ 99,521.39
Signing					\$ 3,558.07
Markings					\$ 8,528.27
Signalization					\$ 129,686.86
Pre-Total					\$ 241,294.59
20% Maintenance of Traffic (MOT)					\$ 48,258.92
10% Mobilization					\$ 24,129.46
32% Preliminary Engineering					\$ 77,214.27
18% Construction Engineering & Inspection					\$ 43,433.03
Project Contingency (Small Project)					\$ 25,000.00
Grand-Total					\$ 459,330.26

Cost Estimate Without MA Replacement		Location: SR 5/Biscayne Boulevard at NE 5 Street			
		Roadway ID: 87061000		Date: 5/19/2023	
Produced By: LG/MF		QA/QC By: KC			
Pay Item	Description	Unit Measured	Avg. Unit Cost	Quantity	Total
0110 1 1	CLEARING & GRUBBING	LS	\$ 5,000.00	1.00	\$5,000.00
0327 70 6	MILLING EXIST ASPH PAVT,1 1/2" AVG DEPTH	SY	\$ 3.67	380.00	\$1,394.60
0337 7 83	ASPH CONC FC, TRAFFIC C, FC-12.5, PG 76-22	TN	\$ 173.79	34.49	\$5,993.15
0520 1 10	CONCRETE CURB & GUTTER, TYPE F	LF	\$ 36.41	90.00	\$3,276.90
0526 1 2	PAVERS, ARCHITECTURAL, SIDEWALK	SY	\$ 713.03	108.00	\$77,007.24
0570 1 2	PERFORMANCE TURF, SOD	SY	\$ 4.04	30.00	\$121.20
0700 1 11	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF	AS	\$ 444.10	4.00	\$1,776.40
0700 1 60	SINGLE POST SIGN, REMOVE	AS	\$ 28.75	1.00	\$28.75
0700 2 60	MULTI- POST SIGN, REMOVE	AS	\$ 732.62	1.00	\$732.62
0711 11123	THERMOPLASTIC, STD, WHITE, SOLID, 12"	LF	\$ 2.67	84.50	\$225.62
0711 11125	THERMOPLASTIC, STD, WHITE, SOLID, 24"	LF	\$ 4.91	75.00	\$368.25
0711 11141	THERMOPLASTIC, STANDARD, WHITE, 2-4 DOTTED GUIDELINE/ 6-10 GAP EXTENSION, 6"	GM	\$ 1,961.87	0.041	\$80.44
0711 11160	THERMOPLASTIC, STD, WHITE, MESSAGE	EA	\$ 137.62	3.00	\$412.86
0711 11170	THERMOPLASTIC, STD, WHITE, ARROW	EA	\$ 96.01	6.00	\$576.06
0711 15101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	GM	\$ 5,410.11	0.09	\$475.43
0711 16101	THERMOPLASTIC, STD-OTH, WHITE, 6"	GM	\$ 5,512.47	0.095	\$523.68
0711 16131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	GM	\$ 1,551.00	0.030	\$46.53
0711 16201	THERMOPLASTIC, STD-OTH, YELLOW, 6"	GM	\$ 5,295.05	0.028	\$148.26
Roadway					\$ 92,793.09
Signing					\$ 2,537.77
Markings					\$ 2,857.13
Pre-Total					\$ 98,187.99
20% Maintenance of Traffic (MOT)					\$ 19,637.60
10% Mobilization					\$ 9,818.80
32% Preliminary Engineering					\$ 31,420.16
18% Construction Engineering & Inspection					\$ 17,673.84
Project Contingency (Small Project)					\$ 20,000.00
Grand-Total					\$ 196,738.38

APPENDIX F – DETAILED BENEFIT/COST ANALYSIS FOR ALTERNATIVE 2

CONCEPTUAL ALTERNATIVE 2 - ASSUMING EB MAST ARM REPLACEMENT

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
SAFETY OFFICE ANNUAL BENEFIT COST ANALYSIS

1 SUBMITTED BY **CH Perez & Associates** WPA NO. **N/A** SAFETY PRIORITY
 2 DATE SUBMITTED **6/8/2023** ENVIRONMENTAL STUDY
 3 PROJECT NO. **FM: 250650-5-32-01 - TWO 75** SKID (I.D.) **N/A**
 4 ALTERNATIVE NO. **I** SN **NA** SPEED **30**
 6 DISTRICT **VI** COUNTY **MIAMI-DADE** SECTION **87061000** STATE ROAD **SR 886 at SR 5** U.S. ROAD
 BEGINNING MILE POST **0.776** ENDING MILE POST **0** LENGTH **0.776** miles NODE

8 DESCRIPTION OF LOCATION/FACILITY TYPE **SR 886/Port Boulevard at NE 5 Street**
 9 CAUSE OF CRASH PROBLEMS (LIST AND DISCUSS)
**Rear End
Sideswipe**

10 PROPOSED IMPROVEMENTS (LIST AND DISCUSS)
Convert the eastbound lane configuration to an exclusive left-turn lane, a shared left-turn/through lane, and two through lanes.
 • Modify arrow pavement markings on the eastbound approach.
 • Add a message pavement marking for the proposed exclusive eastbound left-turn lane.
 • Provide guide pavement markings for eastbound left-turn vehicles.
 • Provide two (2) lane use signs facing eastbound vehicles, one on each side of NE 5th Street, between SR 5 northbound and southbound signals.
 • Replace the lane use sign facing eastbound vehicles at the SR 5 southbound signal.
 • Build bulb-out on the northeast corner of the intersection.

							14 CRASH INFORMATION FOR FACILITY	
	2018	2019	2020	2021	2022	AVG.		
11 NO. OF CRASHES	17	18	7	17	25	16.8	COST/CRASH	\$ 123,598
12 NO. CRASHES POTENTIALLY REDUCED	1.5	1.5	0.6	1.5	2.1	1.4	CRASH CLEANUP	\$ 100
							INTEREST RATE	4%

13

TYPE OF CRASH	NUMBER OF CRASHES (5-year)	CRASHES TO BE REDUCED
Rear End	22	0.48
Head On	0	0.00
Angle	8	0.00
Left Turn	1	0.00
Right Turn	1	0.00
Sideswipe	46	6.72
Backed Into	0	0.00
Coll. w/ Parked Car	1	0.00
Coll. w/ Pedestrian	3	0.00
Coll. w/ Bicycle	2	0.00
Fixed Object	0	0.00
Ran Off Road	0	0.00
Overturned	0	0.00
Other	0	0.00
Total Crashes	84	7.20
Crashes Per Year	16.80	1.44
Wet/Slippery	17	0.00
Night Time	51	0.00

15 ANNUAL COST OF IMPROVEMENTS

TYPE	COST	LIFE	CRF	ANNUAL COST
A. R-O-W	\$ -	0	0.0000	\$ -
B. P.E.C.E.I.	\$ 145,647	15	0.0899	\$ 13,099.68
C. STRUCTURE	\$ -	16	0.0858	\$ -
D. ROADWAY	\$ 171,910	20	0.0736	\$ 12,649.42
E. SIGNING/PAVEMENT	\$ 12,086	15	0.0899	\$ 1,087.06
F. SIGNALS	\$ 129,687	15	0.0899	\$ 11,664.18
G. SUBTOTAL	\$ 459,330			\$ 38,500.34
H. CHANGE IN MAINTENANCE				\$ -
I. CRASH CLEANUP				\$ (145.71)
J. TOTAL				\$ 38,354.63

16 BENEFITS

A. CRASH REDUCTION	1.46 crash @	\$ 123,598	\$ 180,099.94
B. DELAY SAVINGS	0.00 veh-hrs @	\$ -	\$ -
SUB TOTAL ANNUAL BENEFIT			\$ 180,099.94
C. OTHER BENEFIT	0	\$ -	\$ -
D. TOTAL ANNUAL BENEFIT			\$ 180,099.94

17

NET BENEFIT/COST	\$ 180,099.94	\$ 38,354.63	4.7
SAFETY BENEFIT/COST	\$ 180,099.94	\$ 38,354.63	4.7

PREPARED BY **LG** APPROVED BY **KC** DATE **06/08/2023**

COMMENTS/CRASH REDUCTION METHOD:
FHWA, FDOT

HIGH CRASH LISTINGS:
-

Project Name	SR 886/Port Boulevard at NE 5 Street	Year #	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Current Year	2023	Calendar Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Project Completion	2025	Estimated Cost	\$459,330														
Project Life	15	Estimated Benefits		180,100	180,100	180,100	180,100	180,100	180,100	180,100	180,100	180,100	180,100	180,100	180,100	180,100	180,100
Project Category		Calculation															
Discount Rate	0.04	Discount Factor	1.000	0.962	0.925	0.889	0.855	0.822	0.790	0.760	0.731	0.703	0.676	0.650	0.625	0.601	0.577
Project Ends	2039	Discounted Cost	-459,330	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Estimated Reduction in Crashes = 1.44 crashes/year; Total Annual benefit = \$180,100; Cost Per Crash \$123,598		Discounted Benefits	0	173,173	166,513	160,108	153,950	148,029	142,336	136,861	131,597	126,536	121,669	116,989	112,490	108,163	104,003
		NPV	1,443,087.54														

CONCEPTUAL ALTERNATIVE 2 - WITH NO MAST ARM REPLACEMENT

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
SAFETY OFFICE ANNUAL BENEFIT COST ANALYSIS

1 SUBMITTED BY **CH Perez & Associates** WPA NO. **N/A** SAFETY PRIORITY
 2 DATE SUBMITTED **5/19/2023** ENVIRONMENTAL STUDY
 3 PROJECT NO. **FM: 250650-5-32-01 - TWO 75** SKID (I.D.) **N/A**
 4 ALTERNATIVE NO. **I** SN **NA** SPEED **30**
 6 DISTRICT **VI** COUNTY **MIAMI-DADE** SECTION **87061000** STATE ROAD **SR 886 at SR 5** U.S. ROAD
 BEGINNING MILE POST **0.776** ENDING MILE POST **0** LENGTH **0.776** miles NODE

8 DESCRIPTION OF LOCATION/FACILITY TYPE **SR 886/Port Boulevard at NE 5 Street**

9 CAUSE OF CRASH PROBLEMS (LIST AND DISCUSS)
Rear End Sideswipe

10 PROPOSED IMPROVEMENTS (LIST AND DISCUSS)
Convert the eastbound lane configuration to an exclusive left-turn lane, a shared left-turn/through lane, and two through lanes.

- Modify arrow pavement markings on the eastbound approach.
- Add a message pavement marking for the proposed exclusive eastbound left-turn lane.
- Provide guide pavement markings for eastbound left-turn vehicles.
- Provide two (2) lane use signs facing eastbound vehicles, one on each side of NE 5th Street, between SR 5 northbound and southbound signals.
- Replace the lane use sign facing eastbound vehicles at the SR 5 southbound signal.
- Build bulb-out on the northeast corner of the intersection.

							14 CRASH INFORMATION FOR FACILITY	
	2018	2019	2020	2021	2022	AVG.		
11 NO. OF CRASHES	17	18	7	17	25	16.8	COST/CRASH	\$ 123,406
12 NO. CRASHES POTENTIALLY REDUCED	1.5	1.5	0.6	1.5	2.1	1.4	CRASH CLEANUP	\$ 100
							INTEREST RATE	4%

13

TYPE OF CRASH	NUMBER OF CRASHES (5-year)	CRASHES TO BE REDUCED
Rear End	22	0.48
Head On	0	0.00
Angle	8	0.00
Left Turn	1	0.00
Right Turn	1	0.00
Sideswipe	46	6.72
Backed Into	0	0.00
Coll. w/ Parked Car	1	0.00
Coll. w/ Pedestrian	3	0.00
Coll. w/ Bicycle	2	0.00
Fixed Object	0	0.00
Ran Off Road	0	0.00
Overturned	0	0.00
Other	0	0.00
Total Crashes	84	7.20
Crashes Per Year	16.80	1.44
Wet/Slippery	17	0.00
Night Time	51	0.00

15

ANNUAL COST OF IMPROVEMENTS				
TYPE	COST	LIFE	CRF	ANNUAL COST
A. R-O-W	\$ -	0	0.0000	\$ -
B. P.E.C.E.I.	\$ 69,094	15	0.0899	\$ 6,214.39
C. STRUCTURE	\$ -	16	0.0858	\$ -
D. ROADWAY	\$ 122,249	20	0.0736	\$ 8,995.33
E. SIGNING/PAVEMENT	\$ 5,395	15	0.0899	\$ 485.22
F. SIGNALS	\$ -	15	0.0899	\$ -
G. SUBTOTAL	\$ 196,738			\$ 15,694.94
H. CHANGE IN MAINTENANCE				\$ -
I. CRASH CLEANUP				\$ (145.71)
J. TOTAL				\$ 15,549.23

16

BENEFITS			
A. CRASH REDUCTION	1.46 crash @	\$ 123,406	\$ 179,820.17
B. DELAY SAVINGS	0.00 veh-hrs @	\$ -	\$ -
SUB TOTAL ANNUAL BENEFIT			\$ 179,820.17
C. OTHER BENEFIT	0	\$ -	\$ -
D. TOTAL ANNUAL BENEFIT			\$ 179,820.17

17

NET BENEFIT/COST	\$ 179,820.17	\$ 15,549.23	11.6
SAFETY BENEFIT/COST	\$ 179,820.17	\$ 15,549.23	11.6

PREPARED BY **LG** APPROVED BY **KC** DATE **05/19/2023**

COMMENTS/CRASH REDUCTION METHOD:
 FHWA, FDOT

HIGH CRASH LISTINGS:
 -

Project Name	SR 886/Port Boulevard at NE 5 Street	Year #	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Current Year	2023	Calendar Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Project Completion	2025	Estimated Cost	\$196,738														
Project Life	15	Estimated Benefits		179,820	179,820	179,820	179,820	179,820	179,820	179,820	179,820	179,820	179,820	179,820	179,820	179,820	179,820
Project Category		Calculation															
Discount Rate	0.04	Discount Factor	1.000	0.962	0.925	0.889	0.855	0.822	0.790	0.760	0.731	0.703	0.676	0.650	0.625	0.601	0.577
Project Ends	2039	Discounted Cost	-196,738	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Estimated Reduction in Crashes = 1.44 crashes/year; Total Annual benefit = \$179,820; Cost Per Crash \$123,406		Discounted Benefits	0	172,904	166,254	159,859	153,711	147,799	142,114	136,649	131,393	126,339	121,480	116,808	112,315	107,995	103,842
		NPV	1,702,724.18														

APPENDIX G – ERC COMMENTS AND RESPONSES

Submittal Report

Financial Project: 250650-5-32-01 Submittal Type: SAFETY REPORT
Submittal Phase: OTHER Submittal Staff Type: CONSULTANT
Received Date: 5/19/2023 Response Due Date: 6/9/2023
Grace Period: 0 District: SIXTH
Status: OPEN Create Date: 5/19/2023
Create User Id: RD652LC Last Update: 5/22/2023
Last Update User Id: RD652FH

Description:

250650-5: TWO 75 - Crash Update for 3R - SR 886 - Biscayne Blvd to Port Miami Blvd - DRAFT 5
Group: PRELIMINARY ENGINEERING Phase Review Type: Safety Study
Status: Submitted
Phase Initiation Date: 5/22/2023
Comments Due Date: 6/2/2023 Days Allowed for Review: 15
Review Meeting: 6/12/2023 5:00 PM to 5:00 PM @ No review meeting needed
Field Meeting: 6/12/2023 5:00 PM to 5:00 PM @ No field meeting needed
Plans Format: Electronic
Comments: Please allow the consultant, Keffler Castro (kcastro@chperz.com), to respond directly to the comments.

Threads:

Name	Assignment	Due Date	Status	Comments
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Alejandro Gomez	LEAD REVIEWER	6/2/2023	ACTIVE	0
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Name	Assignment	Due Date	Status	Comments
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Alejandro Uribe	REVIEWER	6/2/2023	ACTIVE	0
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Name	Assignment	Due Date	Status	Comments
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ALFREDO LEON	REVIEWER	6/2/2023	ACTIVE	1
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No	Status	Current Holder	Reference	Categories
19	COMMENT AGREED WITH			MAINTENANCE

Created By	Created On	Version	Delegate For
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ALFREDO LEON	6/1/2023	1	
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No comments

Keffler Castro	6/2/2023	1	
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Comment Agreed & Closed

Name	Assignment	Due Date	Status	Comments
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Alina Fernandez	LEAD REVIEWER	6/2/2023	ACTIVE	0
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Name	Assignment	Due Date	Status	Comments
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Ana Calleja	LEAD REVIEWER	6/2/2023	ACTIVE	0
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Name	Assignment	Due Date	Status	Comments
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Ana Sandoval	REVIEWER	6/2/2023	ACTIVE	0*
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Name	Assignment	Due Date	Status	Comments
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Angela Hernandez	REVIEWER	6/2/2023	ACTIVE	0
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Name	Assignment	Due Date	Status	Comments
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Antonette Adams	LEAD REVIEWER	6/2/2023	ACTIVE	0
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Name	Assignment	Due Date	Status	Comments
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Arturo Gomez	REVIEWER	6/2/2023	ACTIVE	0
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Name	Assignment	Due Date	Status	Comments
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Barbara King Russell	REVIEWER	6/2/2023	ACTIVE	0
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Name	Assignment	Due Date	Status	Comments
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Branden Young	REVIEWER	6/2/2023	ACTIVE	3
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No	Status	Current Holder	Reference	Categories
1	COMMENT AGREED WITH		General Comment	CULTURAL RESOURCES

Created By	Created On	Version	Delegate For
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Branden Young	5/24/2023	1	
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The preliminary cultural review identified archaeological and historical resources within the area recommended for improvement. Therefore, if the improvement types and locations remain consistent with those recommended in this scoping report, the Planning and Environmental Management Office (PLEMO) will need to conduct a cultural evaluation. The results of the evaluation would need to be coordinated with the State Historic Preservation Officer (SHPO). The SHPO will have 30 days from receipt of the resultant report for review.

Keffler Castro	5/25/2023	1	
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Comment Agreed & Closed

No	Status	Current Holder	Reference	Categories
2	COMMENT AGREED WITH		General Comment	CULTURAL RESOURCES

Created By	Created On	Version	Delegate For
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Branden Young	5/24/2023	1	
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Please be aware that potentially historic buildings are located in the vicinity of the recommended improvements. During design, the Planning and Environmental Management Office (PLEMO) will revisit the proposed improvements in relation to these resources to ensure no historic properties are affected by the recommended improvements.

Keffler Castro	5/25/2023	1	
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Comment Agreed & Closed

No	Status	Current Holder	Reference	Categories
3	COMMENT AGREED WITH		Contact Information	CULTURAL RESOURCES

Created By	Created On	Version	Delegate For
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Branden Young	5/24/2023	1	
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Contact Information: If you have any questions or require clarification for these comments, please contact Branden S. Young at branden.young@dot.state.fl.us or Max Adriel Imberman at 813-330-9111/ max.imberman@dot.state.us.

Keffler Castro	5/25/2023	1	
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We will. Thanks,

Name	Assignment	Due Date	Status	Comments
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Carlos Benitez	REVIEWER	6/2/2023	ACTIVE	0
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Name	Assignment	Due Date	Status	Comments
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CARLOS CEJAS	REVIEWER	6/2/2023	ACTIVE	0
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Name	Assignment	Due Date	Status	Comments
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Carlos Perez	REVIEWER	6/2/2023	ACTIVE	0
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Name	Assignment	Due Date	Status	Comments
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Carlos Perez	REVIEWER	6/2/2023	ACTIVE	0*
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Name	Assignment	Due Date	Status	Comments
Cheryl Callender	REVIEWER	6/2/2023	ACTIVE	1
No	Status	Current Holder	Reference	Categories
21	COMMENT AGREED WITH		Landscape Review	LANDSCAPING
Created By	Created On	Version	Delegate For	
Cheryl Callender	6/1/2023	1		No comment.
Keffler Castro	6/2/2023	1		Comment Agreed & Closed

Name	Assignment	Due Date	Status	Comments
Christopher Tavella	REVIEWER	6/2/2023	ACTIVE	0*

Name	Assignment	Due Date	Status	Comments
Cristina Morales	IN-HOUSE PROJECT MANAGER	6/2/2023	ACTIVE	0

Name	Assignment	Due Date	Status	Comments
Daniel Chomin-Virden	REVIEWER	6/2/2023	ACTIVE	0*

Name	Assignment	Due Date	Status	Comments
Derek Frantz	REVIEWER	6/2/2023	ACTIVE	2

No	Status	Current Holder	Reference	Categories
25	COMMENT AGREED WITH			CONTAMINATION
Created By	Created On	Version	Delegate For	
Derek Frantz	6/2/2023	1		The following comment is based on the review of the Safety Study. A contamination impact review utilizing the FDOT District VI Contamination Screening Tool was performed for the project corridor. The Contamination Screening Tool contains Geographic Information System layers depicting contaminated sites identified by the Florida Department of Environmental Protection and Miami Dade County Department of Regulatory Economic Resources. Based on said review, two known contaminated sites have been identified within a 500-ft radius of the project corridor for both alternatives 1 & 2 presented within the study. However, there are no drainage features, subsurface excavation, and/or dewatering in proximity of the known contaminated sites, therefore, no contamination impacts are anticipated.
Keffler Castro	6/2/2023	1		Comment Agreed & Closed

No	Status	Current Holder	Reference	Categories
26	COMMENT AGREED WITH		Contact Information	CONTAMINATION
Created By	Created On	Version	Delegate For	
Derek Frantz	6/2/2023	1		If you have any questions, please contact me at Derek.Frantz@dot.state.fl.us or 813-523-7930.
Keffler Castro	6/2/2023	1		Comment Agreed & Closed

Name	Assignment	Due Date	Status	Comments
Diana Peralta	REVIEWER	6/2/2023	ACTIVE	0

Name	Assignment	Due Date	Status	Comments
Dionne Richardson	LEAD REVIEWER	6/2/2023	ACTIVE	0*

Name	Assignment	Due Date	Status	Comments
Elisa Azcona	REVIEWER	6/2/2023	ACTIVE	0

Name	Assignment	Due Date	Status	Comments
Felipe Gonzalez	REVIEWER	6/2/2023	ACTIVE	0

Name	Assignment	Due Date	Status	Comments
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Felix Hernandez	LEAD REVIEWER	6/2/2023	ACTIVE	0
Name	Assignment	Due Date	Status	Comments
Guillermo Gomez	REVIEWER	6/2/2023	ACTIVE	0
Name	Assignment	Due Date	Status	Comments
Gustavo Firpi	REVIEWER	6/2/2023	ACTIVE	0*
Name	Assignment	Due Date	Status	Comments
Hailing Zhang	LEAD REVIEWER	6/2/2023	ACTIVE	0
Name	Assignment	Due Date	Status	Comments
Hector Hartmann	LEAD REVIEWER	6/2/2023	ACTIVE	1
No	Status	Current Holder	Reference	Categories
5	COMMENT AGREED WITH			RAILROAD
	Created By	Created On	Version	Delegate For
	Hector Hartmann	5/25/2023	1	LEILA MOUSSEAU
	There is a Railroad Crossing No. 272960-A (FEC) east of Biscayne Blvd. (MP 0.091). Project WILL have Rail Involvement. Coordination will be required with FEC throughout the project. (Comment created by Leila Franzoi for Hector Hartmann).			
	Keffler Castro	5/25/2023	1	
	Agree. Thanks			
Name	Assignment	Due Date	Status	Comments
Heidi Solaun	LEAD REVIEWER	6/2/2023	ACTIVE	0
Name	Assignment	Due Date	Status	Comments
James Spinks	REVIEWER	6/2/2023	ACTIVE	1
No	Status	Current Holder	Reference	Categories
20	RESPONSE SUBMITTED	James Spinks	6 - Benefit / Cost	SAFETY
	Created By	Created On	Version	Delegate For
	James Spinks	6/1/2023	1	JAMES SPINKS
	Although it is stated that "Given the high demand for eastbound left-turn vehicles during the PM peak period and the anticipated low impact of Alternative 1 improvements to reduce crashes, a Benefit/Cost analysis (B/C) was performed only for Alternative 2 (Preferred alternative).", Alternative 1 should still be shown to be a lesser alternative. It appears that we have a "Preferred", without performing the analysis.			
	Keffler Castro	6/2/2023	1	
	Agree. Given the high volume of LT vehicles (way more than though traffic) and conditions observed during the field review (left-turns from the inside through lane) we assumed that. However, the Department requested the operational analysis to validate our assumption.			
Name	Assignment	Due Date	Status	Comments
Javier Hurtado	REVIEWER	6/2/2023	ACTIVE	0
Name	Assignment	Due Date	Status	Comments
Javier Rodriguez	LEAD REVIEWER	6/2/2023	ACTIVE	0
Name	Assignment	Due Date	Status	Comments
Jessica Josselyn	REVIEWER	6/2/2023	ACTIVE	0

Name	Assignment	Due Date	Status	Comments
JESSICA JOSSELYN	REVIEWER	6/2/2023	ACTIVE	1
No	Status	Current Holder	Reference	Categories
24	COMMENT AGREED WITH			OTHER
Created By	Created On	Version	Delegate For	
JESSICA JOSSELYN	6/2/2023	1		
<p>The Planning Office is conducting Project-level Context Classification (PLCC) reviews as projects are conducted. The purpose of these reviews is to re-evaluate at a more granular level the original systemwide Context Classification (CC) assignments. A PLCC review was previously completed for this segment, and it was determined that the PLCC is C6 – Urban Core.</p> <p>No comments/actions needed.</p>				
Keffler Castro	6/2/2023	1		
Comment Agreed & Closed				

Name	Assignment	Due Date	Status	Comments
Jinyan Lu	LEAD REVIEWER	6/2/2023	ACTIVE	0

Name	Assignment	Due Date	Status	Comments
Joaquin De la Cruz	LEAD REVIEWER	6/2/2023	ACTIVE	0

Name	Assignment	Due Date	Status	Comments
JOHN MCWILLIAMS	REVIEWER	6/2/2023	ACTIVE	0*

Name	Assignment	Due Date	Status	Comments
Judy Solaun-Gonzalez	LEAD REVIEWER	6/2/2023	ACTIVE	0

Name	Assignment	Due Date	Status	Comments
Keffler Castro	CONSULTANT PROJECT MANAGER	6/9/2023	ACTIVE	0

Name	Assignment	Due Date	Status	Comments
Ken Jeffries	LEAD REVIEWER	6/2/2023	ACTIVE	0

Name	Assignment	Due Date	Status	Comments
Kirenia Borbolla	LEAD REVIEWER	6/2/2023	ACTIVE	0

Name	Assignment	Due Date	Status	Comments
Krish K Dial	REVIEWER	6/2/2023	ACTIVE	0

Name	Assignment	Due Date	Status	Comments
KRISTI SAVIO	REVIEWER	6/2/2023	ACTIVE	8

No	Status	Current Holder	Reference	Categories
6	COMMENT AGREED WITH		General	ENVIRONMENTAL MANAGEMENT OFF.
Created By	Created On	Version	Delegate For	
KRISTI SAVIO	5/30/2023	1		
<p>This safety study has been reviewed by the Environment Section and has been determined that this project will need to be revisited during design once the full scope of work and funding information is available. This information is needed to confirm the appropriate Class of Action and to determine the appropriate scope of coordination with local, state, and/or federal agencies.</p>				
Keffler Castro	5/31/2023	1		
Comment Agreed & Closed				

No	Status	Current Holder	Reference	Categories
7	COMMENT AGREED WITH		General	ENVIRONMENTAL MANAGEMENT OFF.
	Created By	Created On	Version	Delegate For
	KRISTI SAVIO	5/30/2023	1	
	The Project Manager must provide the Environment Section with the opportunity to perform an environmental impact review once design plans have been developed. If warranted, an Environmental Certification will be prepared upon the completion of the environmental impact review.			
	Keffler Castro	5/31/2023	1	
	Comment Agreed & Closed			

No	Status	Current Holder	Reference	Categories
8	COMMENT AGREED WITH		General	ENVIRONMENTAL MANAGEMENT OFF.
	Created By	Created On	Version	Delegate For
	KRISTI SAVIO	5/30/2023	1	
	The project corridor is within the Consultation Area for the Florida bonneted bat which is listed as an endangered species. Please be aware that if any tree and/or bridge impacts are proposed as part of this project, a species survey may be warranted to determine if roosting or foraging habitat exists. Coordination with U.S. Fish and Wildlife Service may be required.			
	Keffler Castro	5/31/2023	1	
	Comment Agreed & Closed			

No	Status	Current Holder	Reference	Categories
9	COMMENT AGREED WITH		General	ENVIRONMENTAL MANAGEMENT OFF.
	Created By	Created On	Version	Delegate For
	KRISTI SAVIO	5/30/2023	1	
	Please be aware that the project corridor is within the Consultation Area and designated Critical Habitat of the West Indian manatee which is a federally listed species and coordination with U.S. Fish and Wildlife Service may be required.			
	Keffler Castro	5/31/2023	1	
	Comment Agreed & Closed			

No	Status	Current Holder	Reference	Categories
10	COMMENT AGREED WITH		General	ENVIRONMENTAL MANAGEMENT OFF.
	Created By	Created On	Version	Delegate For
	KRISTI SAVIO	5/30/2023	1	
	Please be aware that the project corridor is within the consultation area of the Everglades snail kite, Piping plover, Atlantic coast plants, and the American crocodile, and is also within potential habitat for the Eastern indigo snake. These are federally listed species and coordination with U.S. Fish and Wildlife Service may be required.			
	Keffler Castro	5/31/2023	1	
	Comment Agreed & Closed			

No	Status	Current Holder	Reference	Categories
11	COMMENT AGREED WITH		General	ENVIRONMENTAL MANAGEMENT OFF.
	Created By	Created On	Version	Delegate For
	KRISTI SAVIO	5/30/2023	1	
	The project corridor is adjacent to the Biscayne Bay Aquatic Preserve, which is designated as an Outstanding Florida Water (OFW). Should any future work be proposed within or immediately adjacent to Biscayne Bay, coordination with federal, state, and local permitting agencies may be required.			
	Keffler Castro	5/31/2023	1	
	Comment Agreed & Closed			

No	Status	Current Holder	Reference	Categories
12	COMMENT AGREED WITH		General	ENVIRONMENTAL MANAGEMENT OFF.
	Created By	Created On	Version	Delegate For
	KRISTI SAVIO	5/30/2023	1	
	This project is adjacent to the Seafarers Park, the M-Path trail, and the Atlantic trail. If any future work is proposed within the park and trails, coordination with the Florida Department of Transportation's Office of Environmental Management (OEM) may be required.			
	Keffler Castro	5/31/2023	1	

Comment Agreed & Closed

No	Status	Current Holder	Reference	Categories
13	COMMENT AGREED WITH		General	ENVIRONMENTAL MANAGEMENT OFF.

Created By	Created On	Version	Delegate For
KRISTI SAVIO	5/30/2023	1	

Should you have any questions or require clarification regarding these environmental comments, please contact Kristi Savio at 813-636-2604/
kristi.savio@rsandh.com.

Keffler Castro	5/31/2023	1	
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Agree. We will. Thanks,

Name	Assignment	Due Date	Status	Comments
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Kylie Shivers	LEAD REVIEWER	6/2/2023	ACTIVE	0
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Name	Assignment	Due Date	Status	Comments
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Leonard Salazar	LEAD REVIEWER	6/2/2023	ACTIVE	0
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Name	Assignment	Due Date	Status	Comments
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Leonardo Francis	REVIEWER	6/2/2023	ACTIVE	0*
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Name	Assignment	Due Date	Status	Comments
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Luis Lopez	REVIEWER	6/2/2023	ACTIVE	0
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Name	Assignment	Due Date	Status	Comments
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Marc Rodriguez	REVIEWER	6/2/2023	ACTIVE	0
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Name	Assignment	Due Date	Status	Comments
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Marvin Guillen	REVIEWER	6/2/2023	ACTIVE	0
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Name	Assignment	Due Date	Status	Comments
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Matthew Gisondi	LEAD REVIEWER	6/2/2023	ACTIVE	0
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Name	Assignment	Due Date	Status	Comments
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Mauricio Gomez	LEAD REVIEWER	6/2/2023	ACTIVE	0
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Name	Assignment	Due Date	Status	Comments
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Maurilio Reyes	LEAD REVIEWER	6/2/2023	ACTIVE	0
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Name	Assignment	Due Date	Status	Comments
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Max Imberman	REVIEWER	6/2/2023	ACTIVE	1
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No	Status	Current Holder	Reference	Categories
4	COMMENT AGREED WITH		General Comment	CULTURAL RESOURCES

Created By	Created On	Version	Delegate For
Max Imberman	5/24/2023	1	

My cultural resources comments are contained within the comments submitted by Branden Young.

Keffler Castro	5/25/2023	1	
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Agree. Thanks,

Name	Assignment	Due Date	Status	Comments
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Megan Echols	LEAD REVIEWER	6/2/2023	ACTIVE	0*
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Name	Assignment	Due Date	Status	Comments
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Mikhail Dubrovsky	LEAD REVIEWER	6/2/2023	ACTIVE	0
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Name	Assignment	Due Date	Status	Comments
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NICHOLAS DANU	LEAD REVIEWER	6/2/2023	ACTIVE	0
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Name	Assignment	Due Date	Status	Comments
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Pablo Orozco	LEAD REVIEWER	6/2/2023	ACTIVE	0
Name	Assignment	Due Date	Status	Comments
Patrick Marchant	LEAD REVIEWER	6/2/2023	ACTIVE	0
Name	Assignment	Due Date	Status	Comments
Phani Allu	REVIEWER	6/2/2023	ACTIVE	5
No	Status	Current Holder	Reference	Categories
14	COMMENT AGREED WITH			TRAFFIC OPERATIONS
Created By	Created On	Version	Delegate For	
Phani Allu	6/1/2023	1		
	Page 14, Section 4: For Alternatives 1 and 2, please indicate the approach where modifications are proposed. The description in the second bullet indicates that modifications are proposed for eastbound approach.			
Keffler Castro	6/2/2023	1		
	Agree. we will			
No	Status	Current Holder	Reference	Categories
15	RESPONSE ACCEPTED			TRAFFIC OPERATIONS
Created By	Created On	Version	Delegate For	
Phani Allu	6/1/2023	1		
	Page 17, Section 5: Please consider including the time of day and signal operating plans for the study intersections.			
Keffler Castro	6/2/2023	1		
	We'll consider your recommendation.			
Phani Allu	6/2/2023	1		
	Response Accepted & Comment Closed			
No	Status	Current Holder	Reference	Categories
16	COMMENT AGREED WITH			TRAFFIC OPERATIONS
Created By	Created On	Version	Delegate For	
Phani Allu	6/1/2023	1		
	Page 17, Section 5 (Appendix C): Please consider including Queues output sheets from Synchro.			
Keffler Castro	6/2/2023	1		
	Comment Agreed & Closed			
No	Status	Current Holder	Reference	Categories
17	COMMENT AGREED WITH			TRAFFIC OPERATIONS
Created By	Created On	Version	Delegate For	
Phani Allu	6/1/2023	1		
	Page 19, B/C Calculation (Appendix E): US 1/Biscayne Blvd is an 8-lane divided roadway in the vicinity of NE 5 Street and NE 6 Street. The cost per crash used in B/C analysis (Appendix E) appears to be for a 4-5 lane divided roadway. Please verify and revise using appropriate cost per crash.			
Keffler Castro	6/2/2023	1		
	Comment Agreed & Closed			
No	Status	Current Holder	Reference	Categories
18	COMMENT AGREED WITH			TRAFFIC OPERATIONS
Created By	Created On	Version	Delegate For	
Phani Allu	6/1/2023	1		
	Page 19, B/C Calculation (Appendix E): Th NPV calculations do not appear to be correct. The project completion is shown as 2025, however, discounted benefits are not shown for 2025. Please verify and revise NPV calculations accordingly.			
Keffler Castro	6/2/2023	1		
	Comment Agreed & Closed			
Name	Assignment	Due Date	Status	Comments

Raymond Valido	LEAD REVIEWER	6/2/2023	ACTIVE	0*
Name	Assignment	Due Date	Status	Comments
Shereen Yee Fong	LEAD REVIEWER	6/2/2023	ACTIVE	0*
Name	Assignment	Due Date	Status	Comments
Simon Gutierrez	REVIEWER	6/2/2023	ACTIVE	0
Name	Assignment	Due Date	Status	Comments
Simon Prilutsky	REVIEWER	6/2/2023	ACTIVE	0
Name	Assignment	Due Date	Status	Comments
Stefan Escanes	REVIEWER	6/2/2023	ACTIVE	0
Name	Assignment	Due Date	Status	Comments
Steven Criag James	LEAD REVIEWER	6/2/2023	ACTIVE	0
Name	Assignment	Due Date	Status	Comments
X Antonio Negrin	LEAD REVIEWER	6/2/2023	ACTIVE	0*
Name	Assignment	Due Date	Status	Comments
Xiomara Nunez	LEAD REVIEWER	6/2/2023	ACTIVE	0
Name	Assignment	Due Date	Status	Comments
YEVGENY (EUGENE) SHERMAN	REVIEWER	6/2/2023	ACTIVE	2

No	Status	Current Holder	Reference	Categories
22	COMMENT AGREED WITH		General	ADA
	Created By	Created On	Version	Delegate For
	YEVGENY (EUGENE) SHERMAN	6/2/2023	1	
	<p>1. ADA related issues have been reflected in the comment provided for the Scoping Report prepared for the project with FM 443913-1 along SR 886 / Port Boulevard from east of Biscayne Blvd. to Port Miami. Note that the Scoping Report calls for replacing the deficient curb ramp at the south end of the proposed high emphasis crosswalk shown on Fig. 4.2.</p> <p>2. It is understood that this is a safety study and only requires ADA deficiencies to be addressed when directly associated to the proposed safety improvements. It is recommended to include a section in the report stating, "During design, the engineer shall perform an inventory identifying ADA deficiencies and provide findings to the ADA Coordinator. This serve as coordination between Traffic Ops and PLEMO, to identify the possibility of the ADA related scope to be included via separate funding."</p>			
	Keffler Castro	6/2/2023	1	
	Comment Agreed & Closed			

No	Status	Current Holder	Reference	Categories
23	COMMENT AGREED WITH		Fig. 4.1 and 4.2	ADA
	Created By	Created On	Version	Delegate For
	YEVGENY (EUGENE) SHERMAN	6/2/2023	1	
	Check designation for the proposed Lane Control Signs. R10-15a is designated for "Turning Vehicles Stop to Peds".			
	Keffler Castro	6/2/2023	1	
	Comment Agreed & Closed			